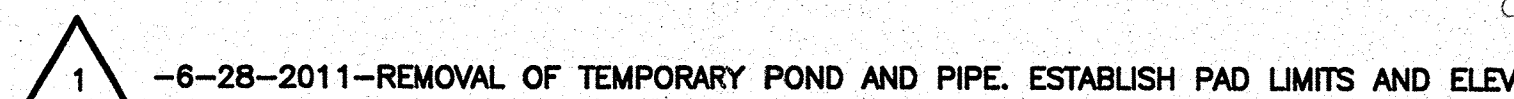


EXISTING UTILITIES ARE NOT SHOWN.
IT SHALL BE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR TO CONDUCT ALL
NECESSARY FIELD INVESTIGATIONS PRIOR
TO ANY EXCAVATION TO DETERMINE THE
ACTUAL LOCATION OF UTILITIES & OTHER
IMPROVEMENTS.



TACK COAT AS REQUIRED BY THE
ENGINEER BETWEEN ALL
ASPHALT/AGGREGATE MATERIAL LIFTS.

1~1.5" ASPHALT CONCRETE TYPICAL FINISH
COURSE PLACED AFTER ALL MANHOLES, VALVES,
COVERS/RINGS ARE SET TO GRADE. 1500 LBS.
1500 LBS. STABILITY TYPE B GRADATION.

TACK COAT AS REQUIRED BY THE
ENGINEER BETWEEN ALL
ASPHALT/AGGREGATE MATERIAL LIFTS.

1.5" ASPHALT CONCRETE, 1800 LBS. γ
STABILITY TYPE A GRADATION

1~1.5" ASPHALT CONCRETE TYPICAL FINISH
COURSE PLACED AFTER ALL MANHOLES, VALVES,
COVERS/RINGS ARE SET TO GRADE. 1500 LBS.
1500 LBS. STABILITY TYPE B GRADATION.

TACK COAT AS REQUIRED BY THE
ENGINEER BETWEEN ALL
ASPHALT/AGGREGATE MATERIAL LIFTS
~1.5" ASPHALT CONCRETE, 1800 LBS.-
STABILITY TYPE A GRADATION

1~1.5" ASPHALT CONCRETE TYPICAL FINISH
COURSE PLACED AFTER ALL MANHOLES, VALVES,
COVERS/RINGS ARE SET TO GRADE. 1500 LBS.
1500 LBS. STABILITY TYPE B GRADATION.

FINISH SURFACE OF SUBGRADE SHALL BE MOISTURE CONTROLLED AT COMPACTION MOISTURE RANGE, OR PRIME COAT APPLIED AS REQUIRED BY THE ENGINEER UNTIL NEXT/FINAL SURFACE IS COMPLETED. SUBGRADE PREPARATION SHALL BE PERFORMED PER SUBSURFACE R/W UTILITIES CONSTRUCTION IS COMPLETED. —

1' SUBGRADE SOIL, R-VALUE>50, PLACED IN 2-6" COMPACTED LIFTS. 95% MIN. COMPACTION, AT OPT. MOISTURE $\pm$ 2.0%, ASTM D1557, OR OPT. MOISTURE, TO 4%, ASTM D698 75% OR 100% COMPACTION, PASSING THE NO. 200 SIEVE. SOIL NOT HAVING THE MIN. R-VALUE OF 50, SHALL BE REMOVED TO A DEPTH OF 2 FEET AND REPLACED BY THE CONTRACTOR WITH SUITABLE MATERIAL OR A PAVEMENT SHALL BE DESIGNED TO ACCOMMODATE THE EXISTING R-VALUE PER C.G.A. STANDARD SPECIFICATIONS.

FINISH SURFACE OF SUBGRADE SHALL BE MOISTURE CONTROLLED AT COMPACTION MOISTURE RANGE, OR PRIME COAT APPLIED AS REQUIRED BY THE ENGINEER UNTIL NEXT/FINAL SURFACE IS COMPLETED. SUBGRADE PREPARATION SHALL BE PERFORMED AFTER ALL SUBSURFACE R/W UTILITIES CONSTRUCTION IS COMPLETED.

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FINISH SURFACE OF SUBGRADE SHALL BE MOISTURE CONTROLLED, AT COMPACTION MOISTURE RANGE, OR PRIME COAT APPLIED AS REQUIRED BY THE ENGINEER UNTIL NEXT/FINAL SURFACE IS COMPLETED.

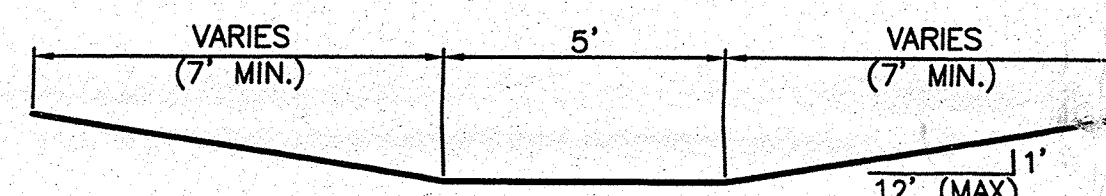
SUBGRADE PREPARATION SHALL BE PERFORMED AFTER ALL SUBSURFACE R/W UTILITIES CONSTRUCTION IS COMPLETED.

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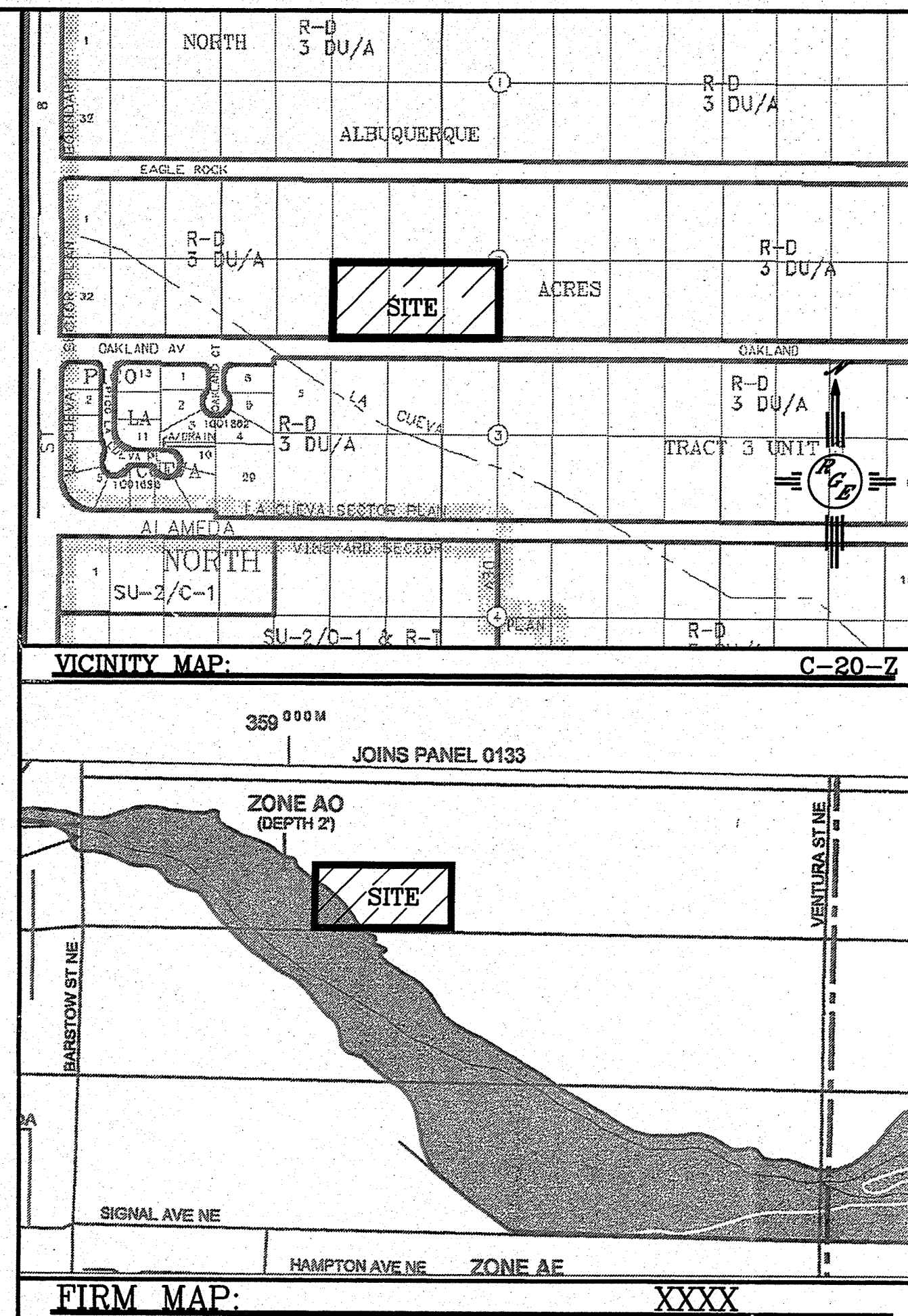
C.Q.A. STANDARD SPECIFICATIONS

OAKLAND TEMPORARY PAVING SECTION (NO CURB)
NTS

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.



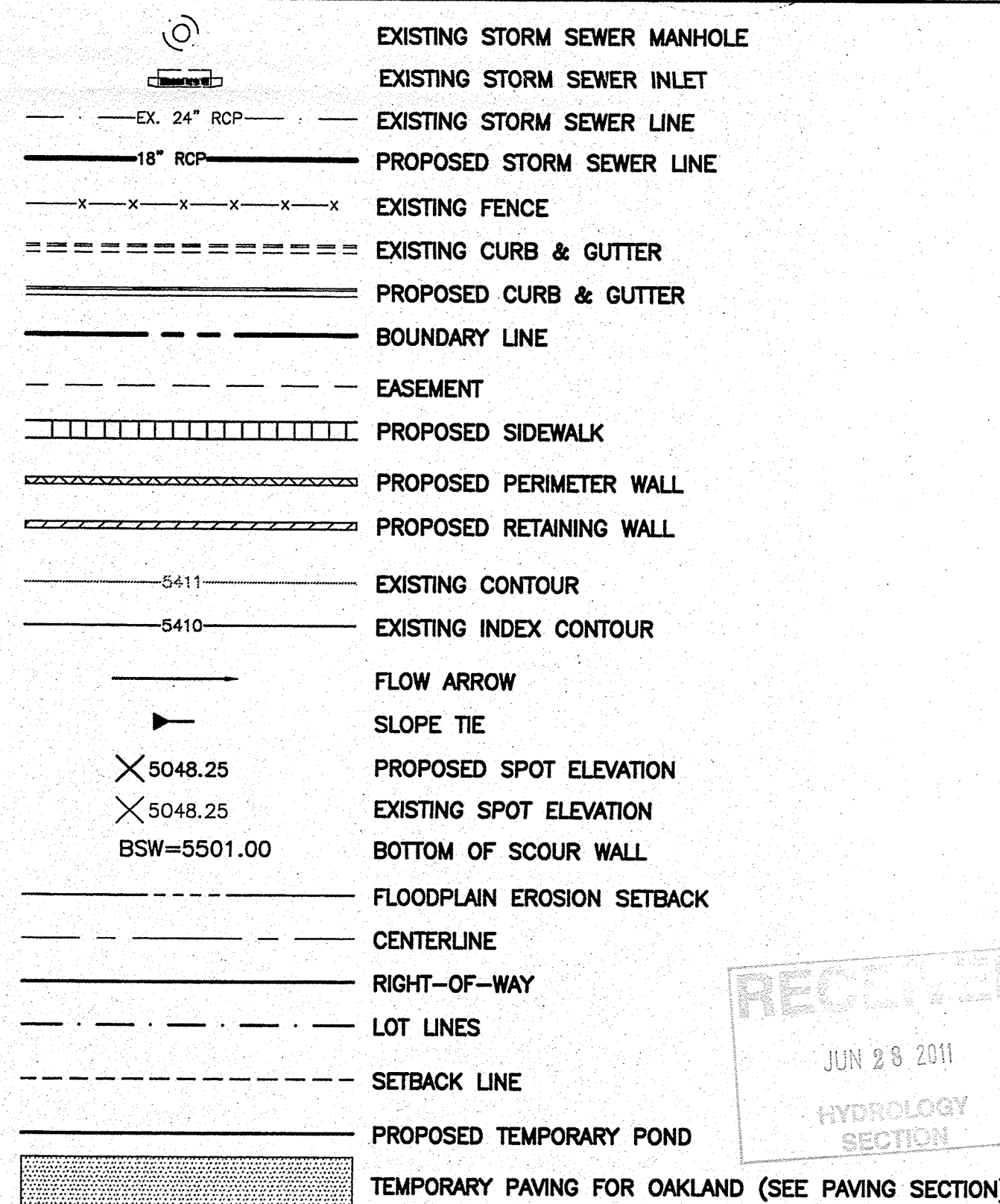
SECTION D-D



LEGAL DESCRIPTION:

LOTS 27, 26, 25, NORTH ALBUQUERQUE ACRES, BLOCK 2

LEGEND



ROUGH GRADING APPROVAL

ENGINEER
SEAL

DATE _____

OAKLAND HEIGHTS
SUBDIVISION
GRADING AND
DRAINAGE PLAN



*Rio Grande
Engineering*

3500 COMANCHE ROAD NE
BUILDING E, SUITE 5
ALBUQUERQUE, NM 87107
(505) 872-0999

DRAWN
BY

WCWJ
DATE

6-08-04

2436-GRB-5-24-04E

SHEET #

3 OF 9

JOB #
2436

CAUTION:

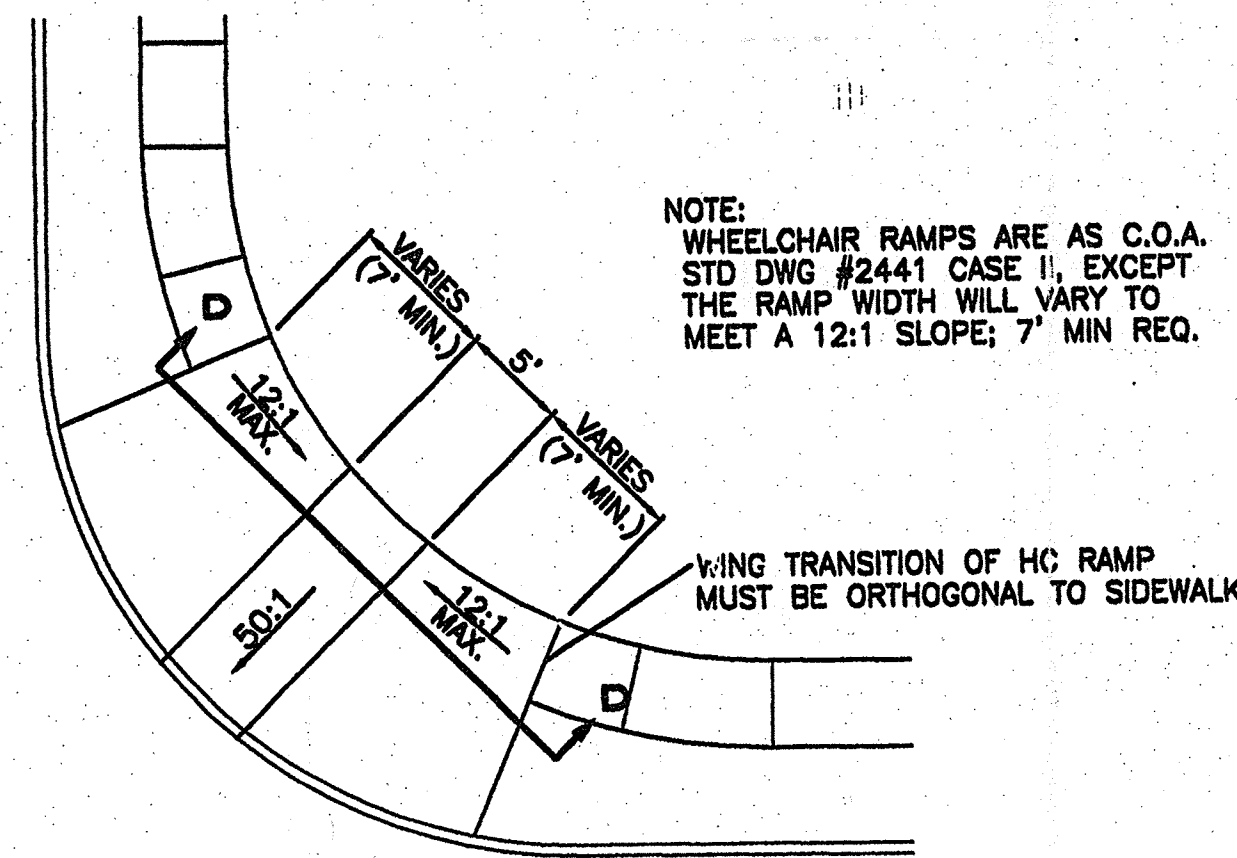
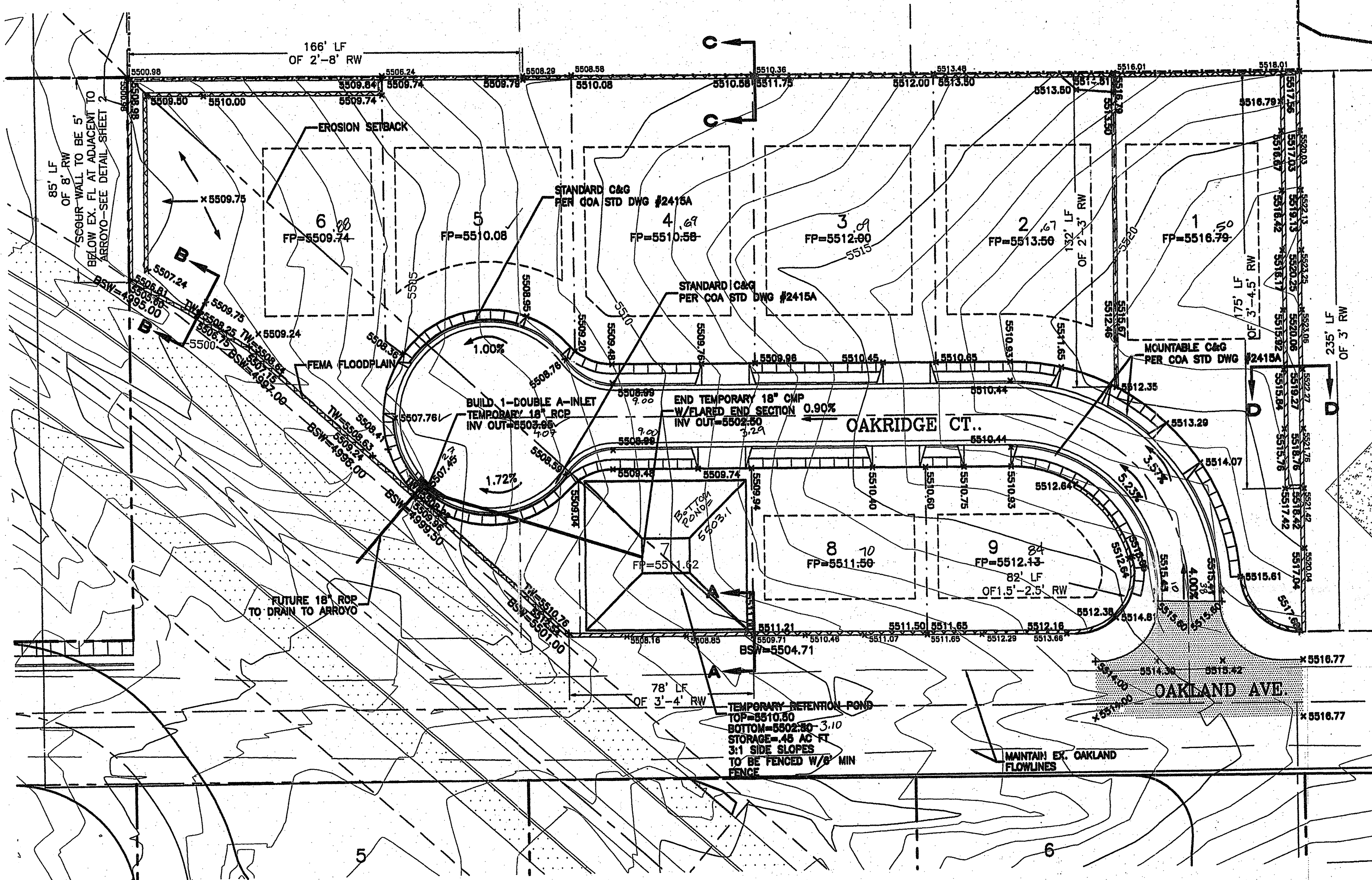
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NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL CURB AND GUTTER TO BE MOUNTABLE PER COA STD DWG #2415A UNLESS OTHERWISE NOTED.
3. ALL INTERIOR REAR YARD SCREEN WALLS (WHERE THE WALL IS INSIDE OF RETAINING WALL) SHALL HAVE EVERY FOURTH BLOCK TURNED FOR DRAINAGE.
4. ALL DRIVEPADS SHALL BE BUILT WHERE SHOWN.
5. ALL SPOT ELEVATIONS SHOWN ALONG OUTSIDE OF WALL WITHIN FEMA FLOODPLAIN ARE BOTTOM OF WALL AFTER CONSTRUCTION OF IMPROVED LA CUEVA ARROYO.

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
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SECTION D-D

DRAINAGE CERTIFICATION WITH SURVEY WORK BY OTHER 12/12/01

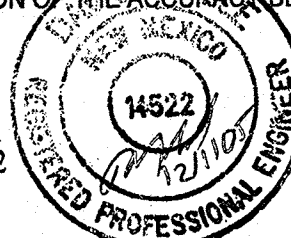
DRAINAGE CERTIFICATION

I, DAVID SOULE, NMPE 14522, OF THE FIRM RIO GRANDE ENGINEERING, HERBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 6-07-04. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY PHILLIP TURNER, NMPS 10204, OF THE FIRM TERRAMETRICS INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 11/05/05 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR RELEASE OF FINANCIAL GUARANTEE.

THE PROPOSED LA CUEVA CHANNEL HAS NOT BEEN CONSTRUCTED.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF THE ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

DAVID SOULE, NMPE 14522

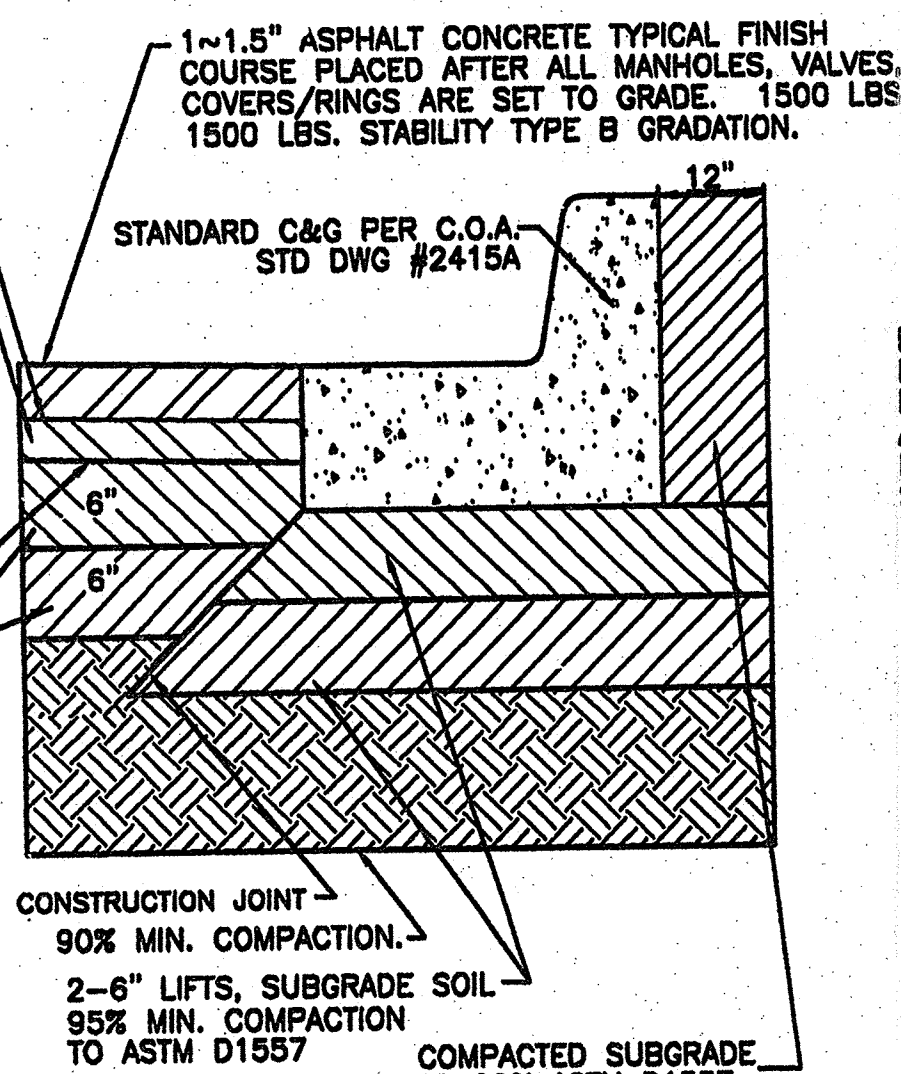


TACK COAT AS REQUIRED BY THE ENGINEER BETWEEN ALL ASPHALT/AGGREGATE MATERIAL LIFTS.

1-1.5" ASPHALT CONCRETE, 1800 LBS. STABILITY, TYPE A GRADATION.

FINISH SURFACE OF SUBGRADE SHALL BE MOISTURE CONTROLLED AT COMPACTION MOISTURE RANGE, OR PRIME COAT APPLIED AS REQUIRED BY THE ENGINEER UNTIL NEXT/FINAL SURFACE IS COMPLETED. SUBGRADE PREPARATION SHALL BE PERFORMED AFTER ALL SUBSURFACE R/W UTILITIES CONSTRUCTION IS COMPLETED.

1' SUBGRADE SOIL, R-VALUE > 50. PLACED IN 2-6" COMPACTED LIFTS. 95% MIN. COMPACTION, AT OPT. MOISTURE ± 2.0%, ASTM D1557, OR OPT. MOISTURE, TO +4%, ASTM D698 FOR SOIL W/35% OR MORE MATERIAL PASSING THE NO. 200 SIEVE. SOIL NOT HAVING THE MIN. R-VALUE OF 50, SHALL BE REMOVED TO A DEPTH OF 2 FEET AND REPLACED BY THE CONTRACTOR WITH SUITABLE MATERIAL OR A PAVEMENT SHALL BE DESIGNED ACCORDING TO THE EXISTING R-VALUE PER C.O.A. STANDARD SPECIFICATIONS.



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1-1.5" ASPHALT CONCRETE TYPICAL FINISH COURSE PLACED AFTER ALL MANHOLES, VALVES, COVERS/RINGS ARE SET TO GRADE. 1500 LBS. STABILITY TYPE B GRADATION.

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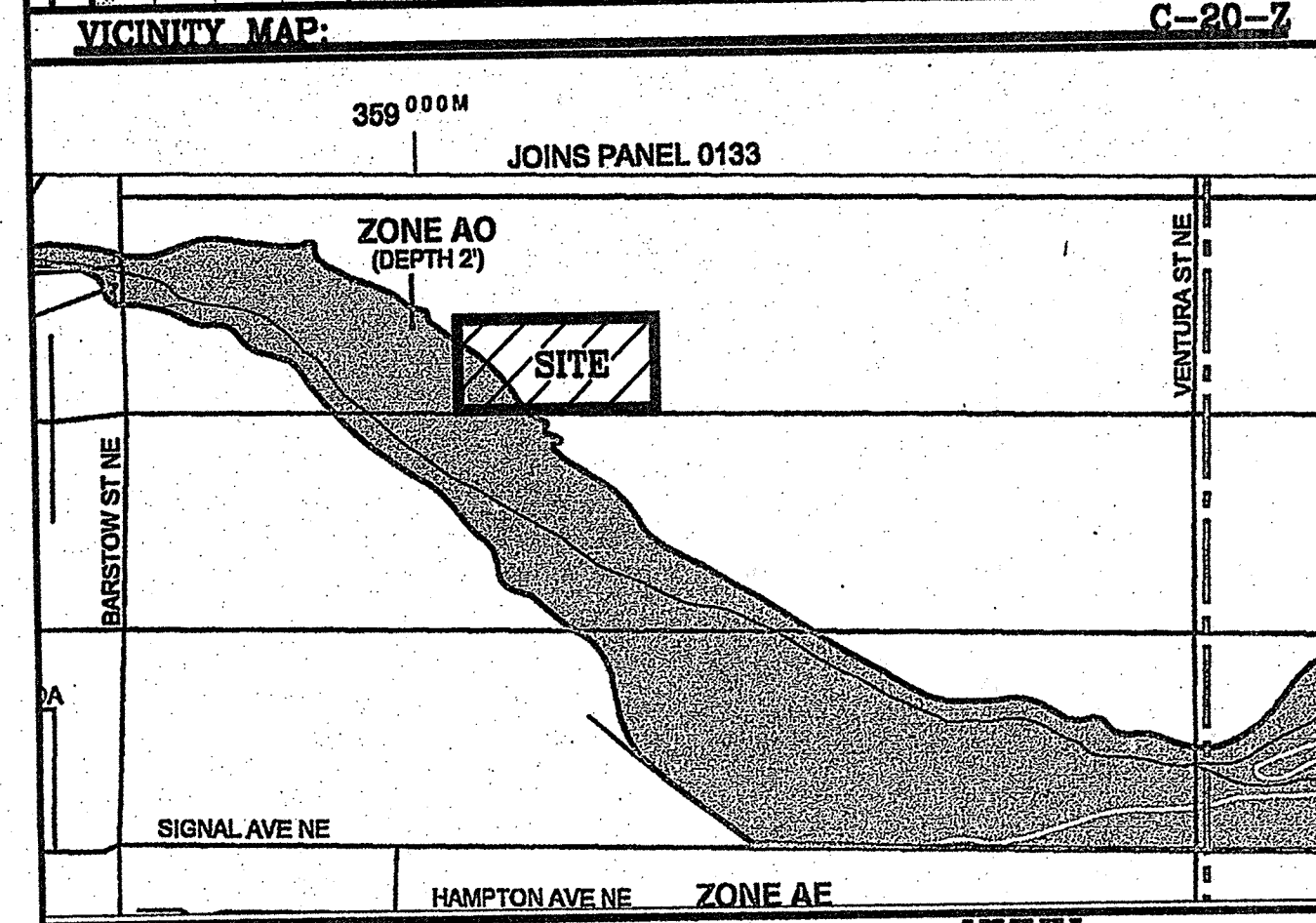
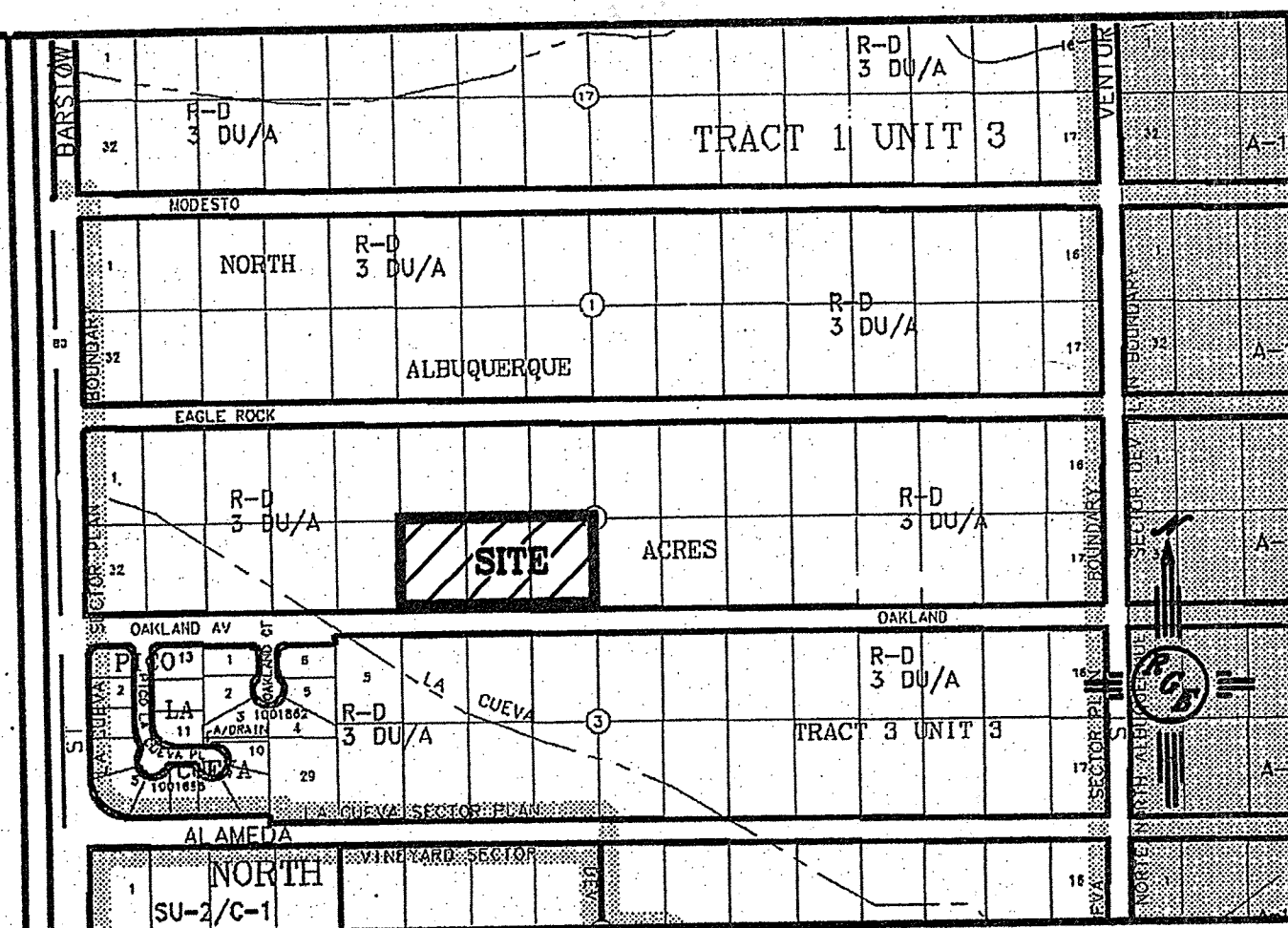
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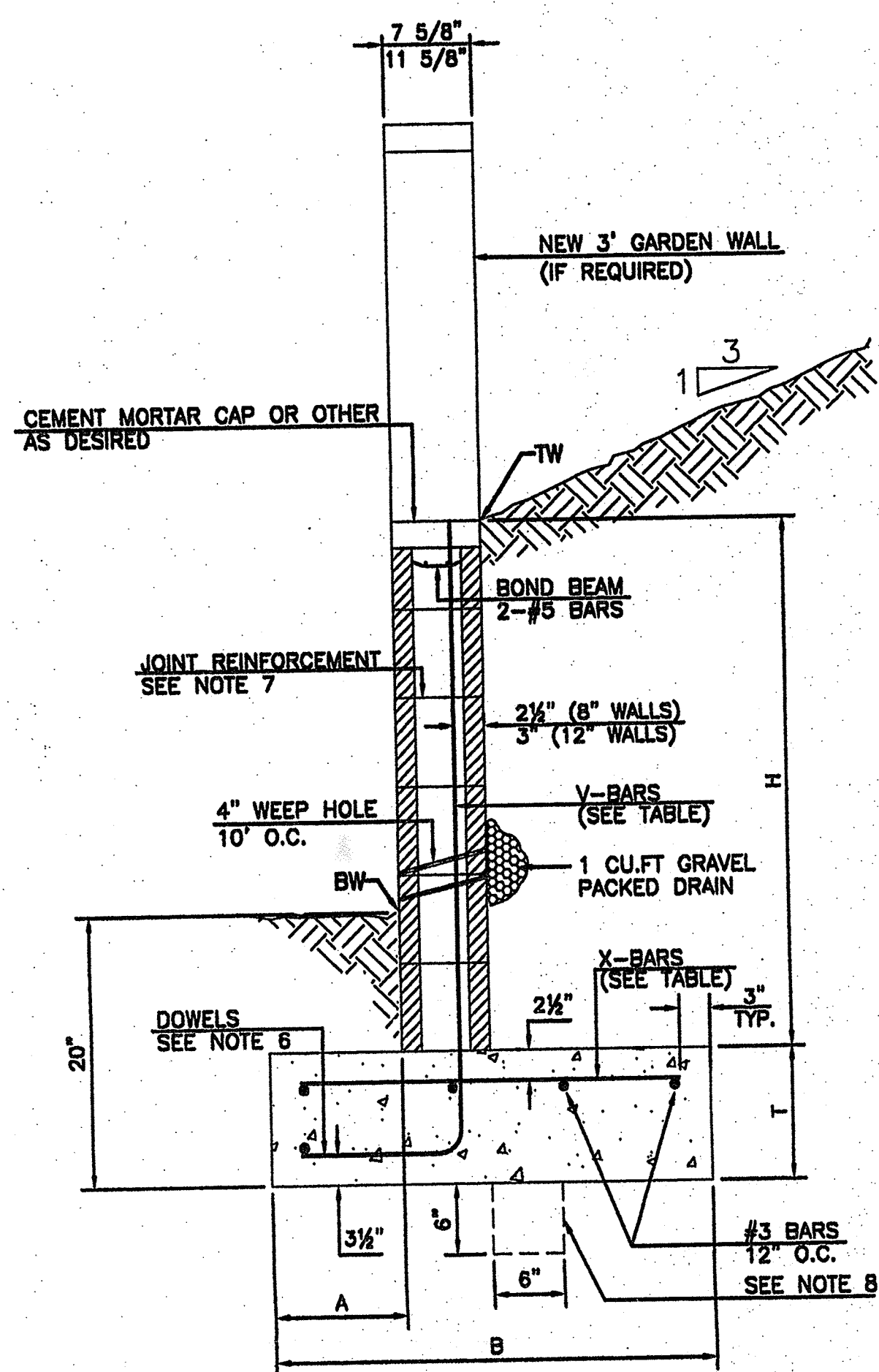
LEGAL DESCRIPTION:

LOTS 27, 28, 25, NORTH ALBUQUERQUE ACRES, BLOCK 2

LEGEND

- EXISTING STORM SEWER MANHOLE
- EXISTING STORM SEWER INLET
- EXISTING STORM SEWER LINE
- PROPOSED STORM SEWER LINE
- EXISTING FENCE
- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- PROPOSED SIDEWALK
- PROPOSED PERIMETER WALL
- PROPOSED RETAINING WALL
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- FLOW ARROW
- SLOPE TIE
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- BOTTOM OF SCOUR WALL
- FLOODPLAIN EROSION SETBACK
- CENTERLINE
- RIGHT-OF-WAY
- LOT LINES
- SETBACK LINE
- PROPOSED TEMPORARY POND
- TEMPORARY PAVING FOR OAKLAND (SEE PAVING SECTION)

ROUGH GRADING APPROVAL		DATE
ENGINEER'S SEAL	DRAWN BY WCHJ	
DATE	6-08-04	
OAKLAND HEIGHTS SUBDIVISION GRADING AND DRAINAGE PLAN		2438-GRB-5-24-04BX
SHEET # 3 OF 9		JOB # 2436
DAVID SOULE P.E. #14522		



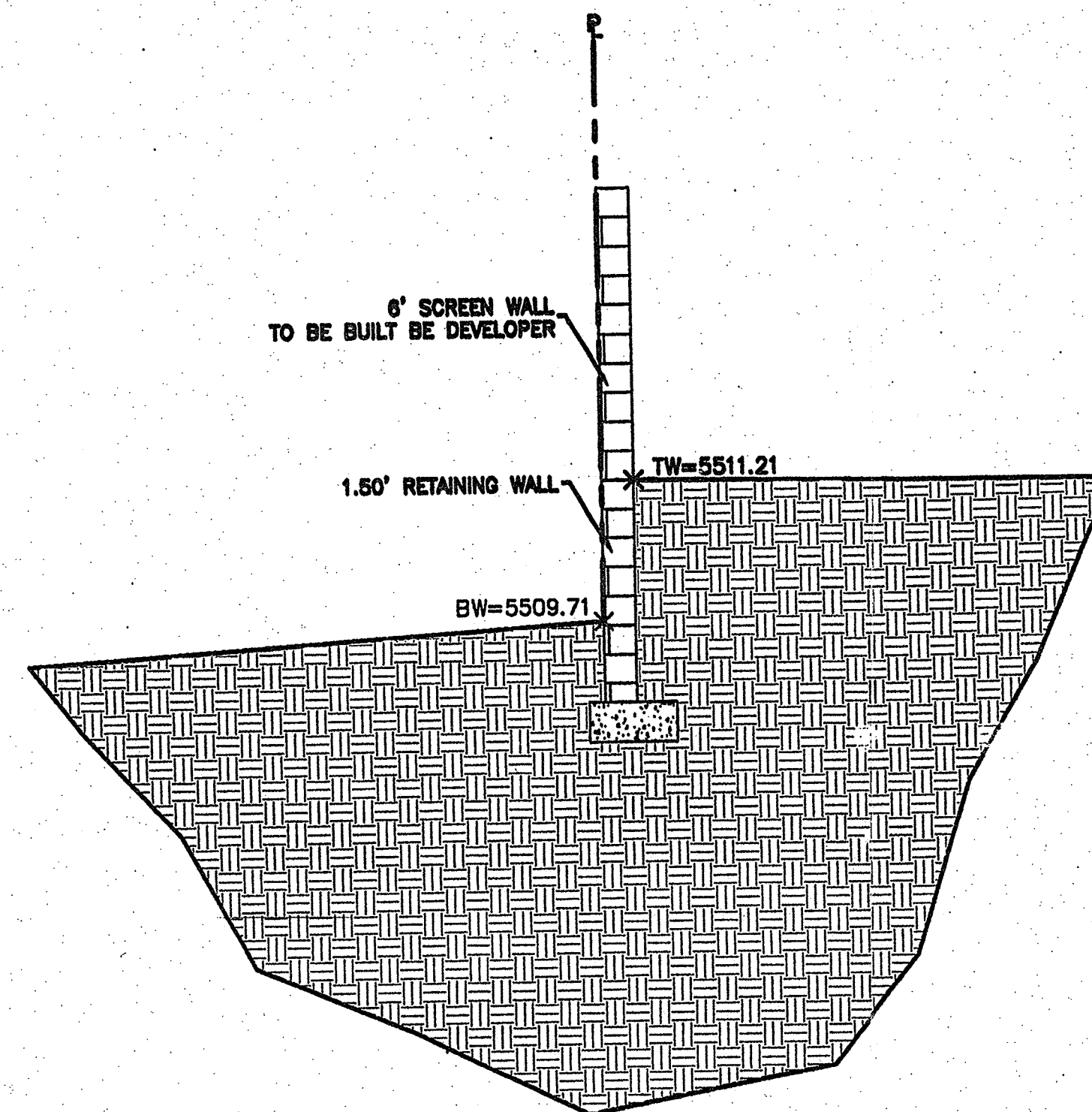
RETAINING WALL DETAIL
NTS

8 INCH REINFORCED CONCRETE MASONRY WALL					
H	A	B	T	V-BARS	X-BARS
ft.-in.	in.	ft.-in.	in.		
3'-4"	8"	2'-4"	9"	#4 @32" O.C.	#4 @34" O.C.
4'-0"	10"	2'-9"	9"	#4 @32" O.C.	#4 @36" O.C.
4'-8"	12"	3'-4"	10"	#4 @24" O.C.	#4 @24" O.C.
5'-4"	14"	3'-8"	10"	#4 @16" O.C.	#4 @16" O.C.
6'-0"	16"	4'-2"	12"	#4 @16" O.C.	#4 @16" O.C.

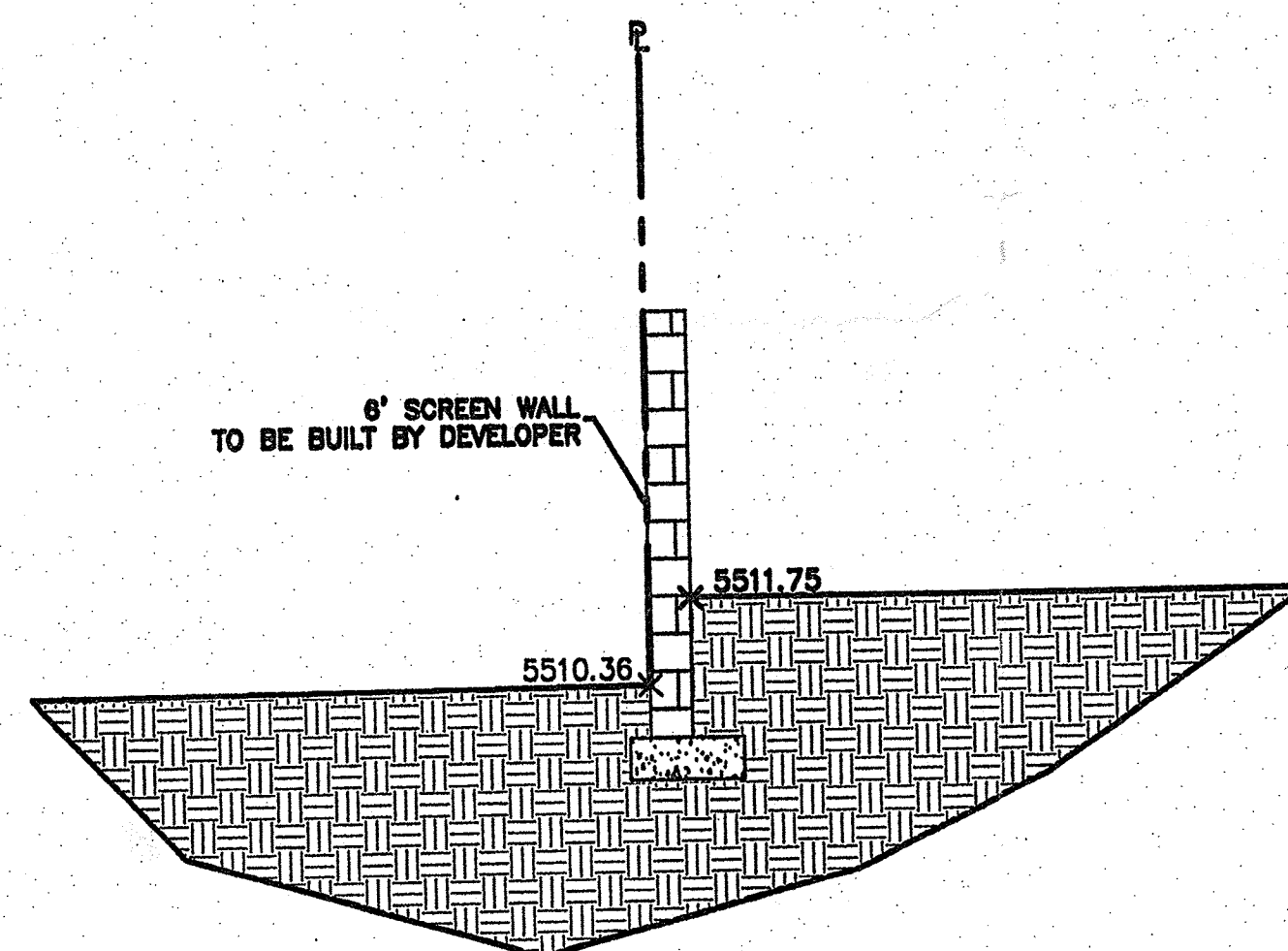
12 INCH REINFORCED CONCRETE MASONRY WALL					
H	A	B	T	V-BARS	X-BARS
ft.-in.	in.	ft.-in.	in.		
5'-4"	14"	3'-8"	10"	#4 @24" O.C.	#3 @24" O.C.
6'-0"	15"	4'-2"	12"	#4 @16" O.C.	#4 @30" O.C.
6'-8"	16"	4'-6"	12"	#6 @24" O.C.	#4 @22" O.C.
7'-4"	18"	4'-10"	12"	#5 @16" O.C.	#5 @26" O.C.
8'-0"	20"	5'-4"	12"	#7 @24" O.C.	#5 @21" O.C.

GENERAL NOTES:

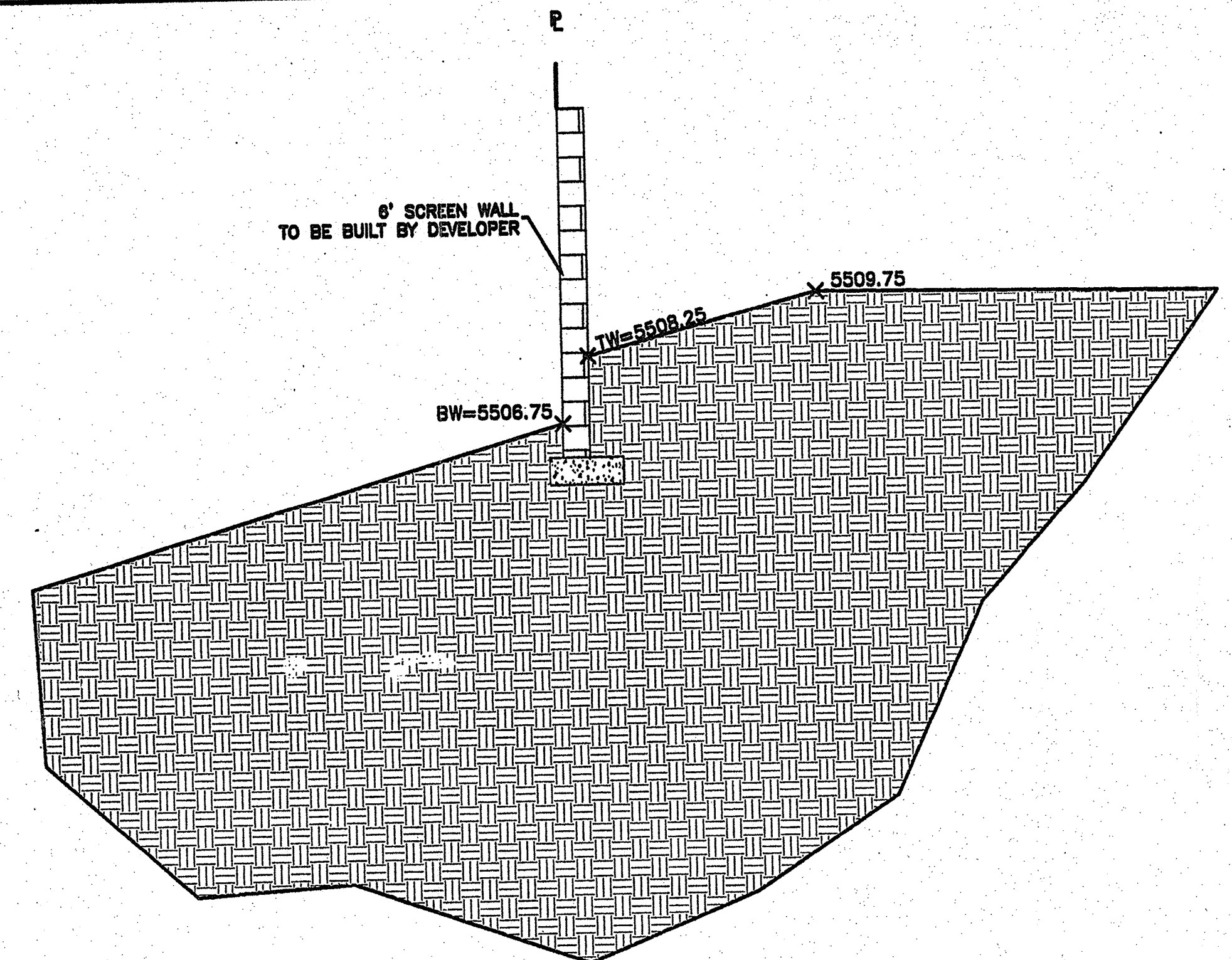
1. ALL CONCRETE IS TO BE 4000 PSI @ 28 DAYS.
2. MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM D 1557 FOR A DEPTH OF 12" MOISTURE CONTENT IS TO BE $\pm 2.0\%$.
3. BACKFILL AGAINST WALLS IS TO BE HAND-PLACED AND COMPACTED.
4. ALL BARS ARE TO BE GRADE 60, ASTM 615.
5. TRUSS TYPE DWR-O-WALL EVERY OTHER COURSE.
6. DOWELS SHALL BE AT LEAST EQUAL IN SIZE AND SPACING TO V-BARS, SHALL PROJECT A MINIMUM OF 30 BAR DIA INTO THE FILLED BLOCK CORES, AND SHALL EXTEND TO THE TOE OF THE FOOTING.
7. JOINT REINFORCEMENT CONSISTING OF 9GA. LONGITUDINAL WIRE AND 3/16" CROSS RODS SHALL BE PROVIDED AT 8" CENTERS VERTICALLY.
8. PROVIDE KEY FOR 8" AND 12" WALLS WHERE H EXCEEDS 6'-0"
9. USE EITHER EXPANSION JOINTS ON 20' CENTERS OR PILASTERS EVERY 16'.



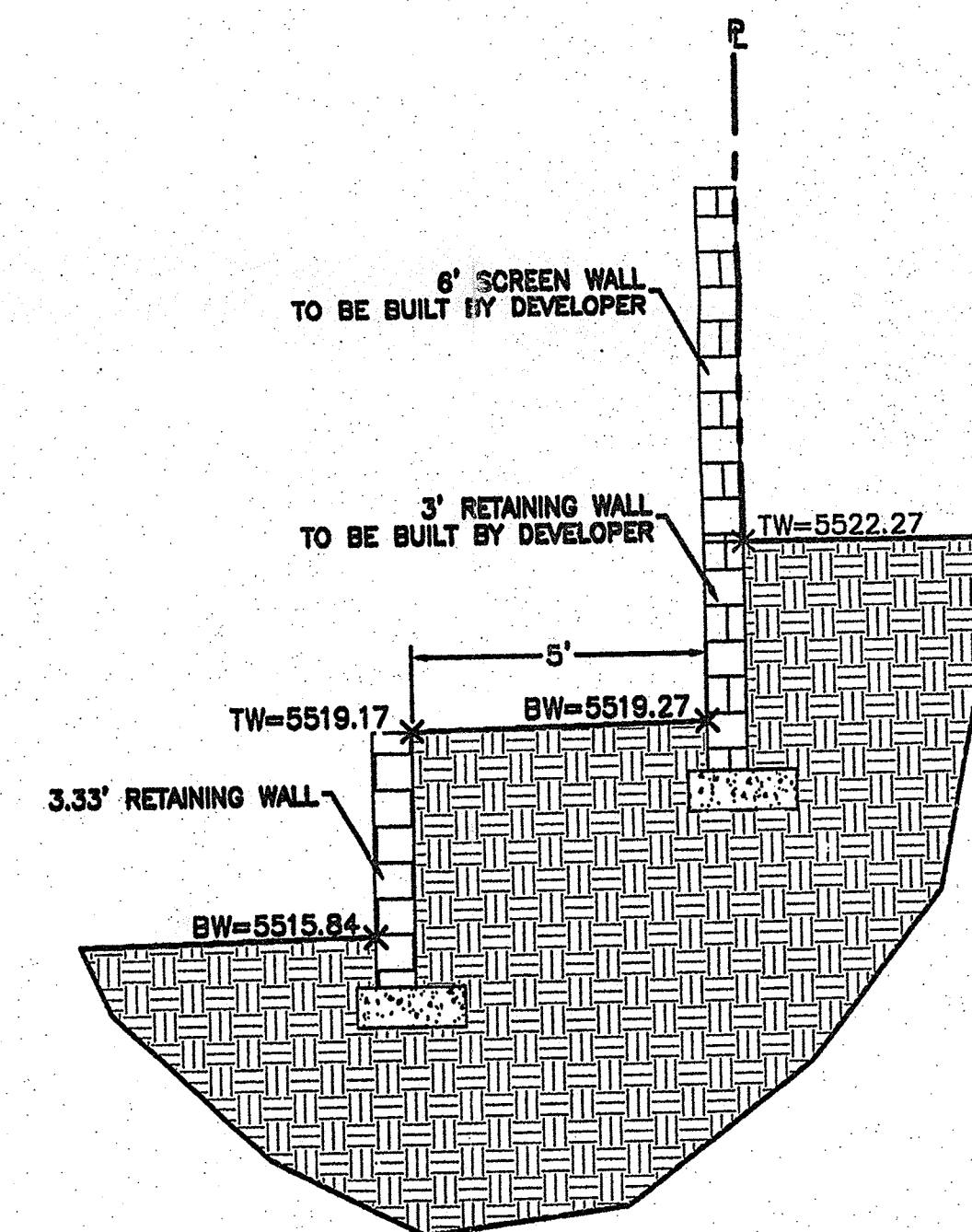
SECTION A-A
NTS



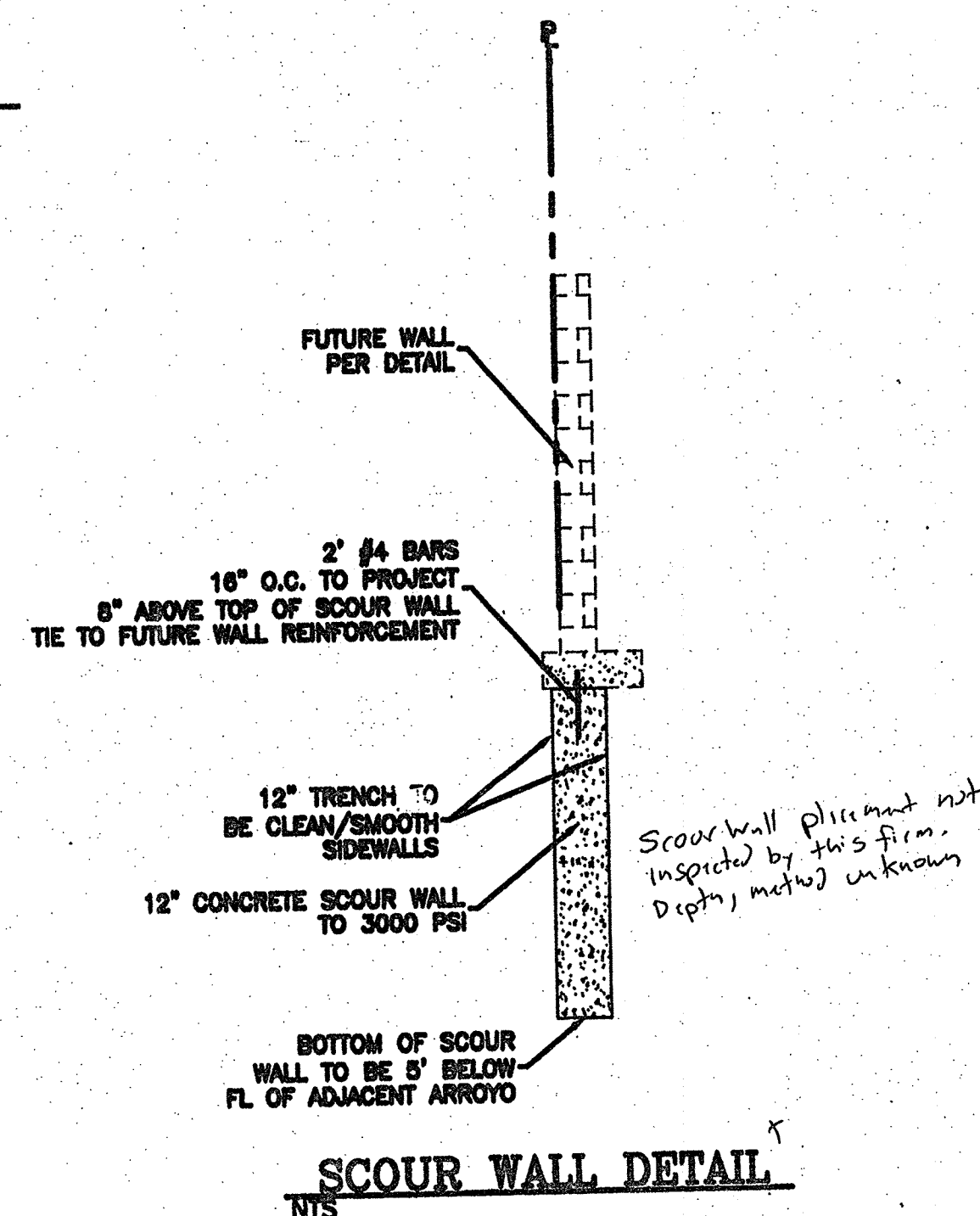
SECTION C-C
NTS



SECTION B-B
NTS



SECTION D-D
NTS



RECEIVED
DEC 20 2005
HYDROLOGY SECTION

ENGINEER'S SEAL DAVID SOULE P.E. #14522	VILLA DE LA CHAMISA GRADING AND DRAINAGE DETAILS Rio Grande Engineering 3300 CONANCHO ROAD NE BUILDING E, SUITE 9 ALBUQUERQUE, NM 87107 (505) 872-0888	DRAWN BY WCIWJ
		DATE 6-08-04
		2436-GRB-5-24-04BK
		SHEET # 3A OF 9
		JOB # 2436

744081