

CONSTRUCTION PLAN APPROVAL

Division	Date	Comments
Construction Inspection	11.8.95	Marked
Development Regulation	11.9.95	
Engineering	11.14.95	
Environmental Health	10/24/95	SEEK CENTRAL IN
Waste Management	11/15/95	SEEK SODAL SWMS
Traffic & Emergency Services	11/21/95	PER MEMO FROM C. SPAN

**General Conditions**

Approval of these plans does not relieve the developer from meeting all requirements of the Lake County Land Development Regulations, standards and specifications.

Contact the Public Services Department at (904) 343-6655 at least 24 hours prior to starting work.

Open cuts of pavement are not allowed unless specifically approved by Lake County.

*Don Grillet*  
 Don GRILLET  
 Florida Registration No. 50888  
 26749

This certification represents official Lake County approval and in no way assures or certifies the accuracy or completeness of the design.

# CONSTRUCTION PLANS

## THE VISTAS PHASE 4

### LAKE COUNTY, FLORIDA

24 HOURS NOTICE BEFORE START  
 343-9655 - PUBLIC WORKS DEPT.

ALL SLOPES 3% OR OVER MUST BE SODDED  
 FROM EDGE OF PAVEMENT TO R/W

**NO RECYCLED ASPHALT**

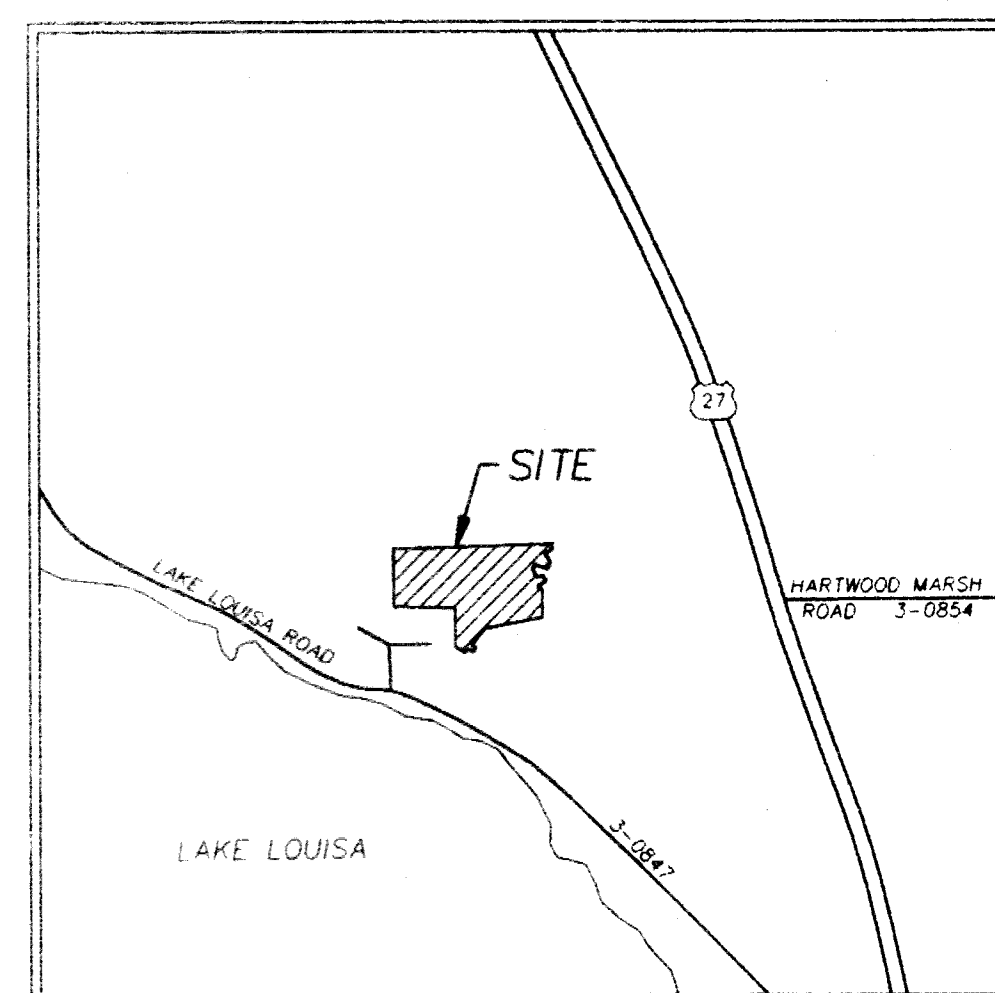
APPROVED \_\_\_\_\_  
 DATE \_\_\_\_\_

PROJECT PLANS PREPARED FOR:  
 FRANKLIN D. LONGENBACH  
 P.O. BOX 307  
 BROADHEADSVILLE, PA. 18322  
 (717) 992-7488

24 HOURS NOTICE BEFORE START  
 343-9655 - PUBLIC WORKS DEPT.

ALL SLOPES 3% OR OVER MUST BE SODDED  
 FROM EDGE OF PAVEMENT TO R/W

**NO RECYCLED ASPHALT**



LOCATION MAP  
 SCALE 1"=2000'

SCHEDULE OF SHEETS

1. COVER SHEET
2. PRELIMINARY PLAT
3. PLAN AND PROFILE - VISTA DEL SOL CIRCLE
4. PLAN AND PROFILE - VISTA DEL SOL CIRCLE
5. PLAN AND PROFILE - CALLE DE ORA COURT
6. PLAN AND PROFILE - PALO COURT AND VERDE COURT
7. UTILITY - WATER PLAN
8. WATER DETAILS
9. STORMWATER DRAINAGE
10. DETAILS

W C WICKS  
 S CONSULTING  
 SERVICES, INC.

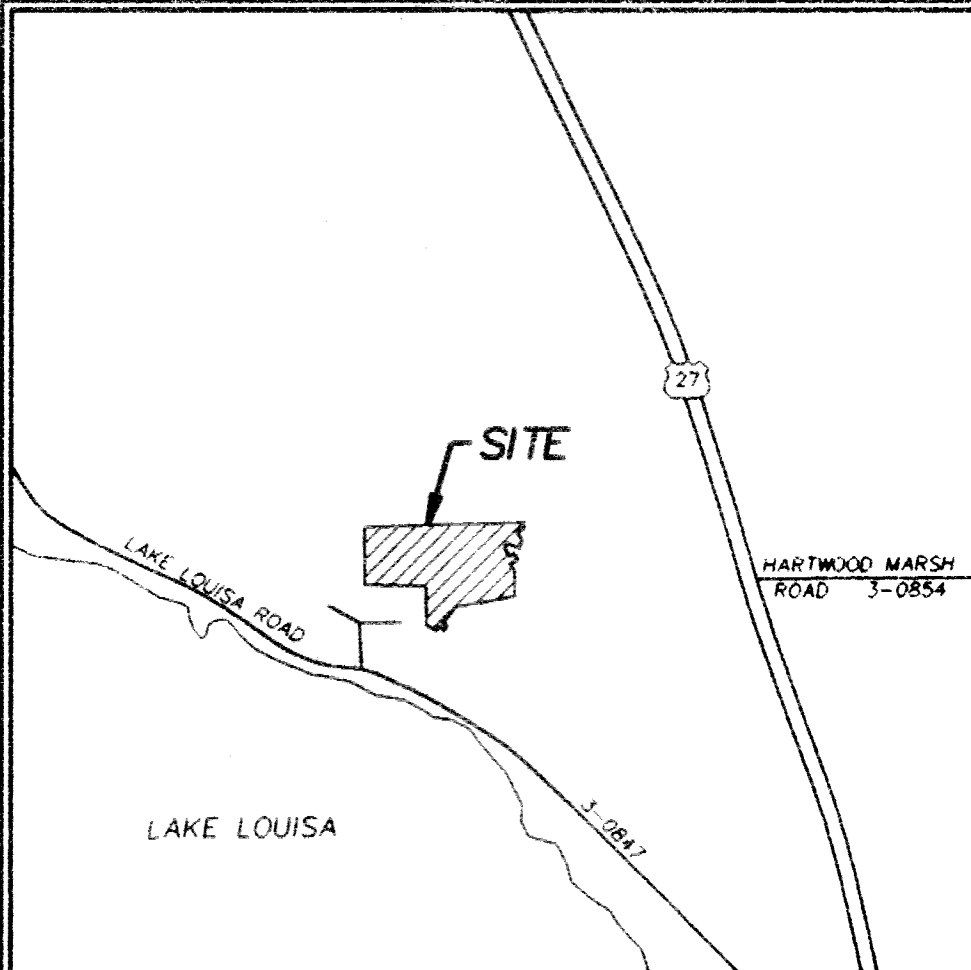
(904) 343-8667 107 West Main Street Tavares, Florida 32778-3809  
 Environmental, Sanitary & Water & Resources Engineering

*Don Grillet*  
 11/28/95



DESCRIPTION

FROM THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 8, TOWNSHIP 23 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA. RUN THENCE NORTH 01°40'30" WEST, 660.16 FEET ALONG THE EAST LINE OF THE NORTHWEST 1/4 OF SAID SECTION 8. THENCE SOUTH 88°31'23" WEST, 305.89 FEET ALONG THE NORTH LINE OF THE SOUTH 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 8 TO THE POINT OF BEGINNING. CONTINUE THENCE ALONG THE NORTH LINE OF THE SOUTH 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 8 SOUTH 88°31'23" WEST, 167.81 FEET TO THE POINT OF BEGINNING OF THE NORTHWEST 1/4 OF SAID SECTION 8. THENCE SOUTH 01°31'25" EAST, 659.85 FEET; THENCE NORTH 88°32'05" EAST, 658.57 FEET; THENCE SOUTH 01°31'25" EAST, 242.38 FEET; THENCE NORTH 88°28'35" EAST, 13.43 FEET; THENCE SOUTH 35°23'54" EAST, 155.15 FEET; THENCE SOUTH 60°08'37" EAST, 22.01 FEET; THENCE NORTH 49°53'55" EAST, 149.56 FEET TO A POINT ON A CURVE CONCAVE TO THE NORTHEAST HAVING A CENTRAL ANGLE OF 47°0'30" AND A RADIUS OF 333.00 FEET, THENCE ALONG THE ARC OF SAID CURVE 24.27 FEET TO THE POINT OF TANGENCY. THENCE SOUTH 44°10'52" EAST, 46.16 FEET; THENCE NORTH 45°49'08" EAST 66.00 FEET; THENCE SOUTH 44°10'52" WEST, 46.16 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE TO THE NORTHEAST HAVING A CENTRAL ANGLE OF 13°36'07" AND A RADIUS OF 267.00 FEET, THENCE ALONG THE ARC OF SAID CURVE 63.39 FEET; THENCE NORTH 61°41'39" EAST, 172.26 FEET; THENCE NORTH 75°11'48" EAST, 438.09 FEET; THENCE NORTH 86°56'55" EAST, 157.18 FEET; THENCE NORTH 01°40'30" WEST, 216.00 FEET; THENCE NORTH 50°54'39" WEST, 58.39 FEET; THENCE NORTH 43°25'26" EAST, 122.32 FEET; THENCE NORTH 46°34'31" WEST, 66.00 FEET; THENCE SOUTH 43°25'26" WEST, 91.27 FEET; THENCE NORTH 61°55'31" WEST, 93.01 FEET; THENCE NORTH 14°03'47" EAST, 98.63 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST HAVING A CENTRAL ANGLE OF 25°58'19" AND A RADIUS OF 267.00 FEET, THENCE SOUTHEAST ALONG THE ARC OF SAID CURVE 121.03 FEET; THENCE NORTH 29°33'25" EAST, 66.00 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST HAVING A CENTRAL ANGLE OF 9°04'44" AND A RADIUS OF 333.00 FEET, THENCE ALONG THE ARC OF SAID CURVE 52.77 FEET; THENCE NORTH 20°28'40" EAST, 120.33 FEET; THENCE NORTH 06°13'04" EAST, 44.95 FEET TO THE NORTH LINE OF THE SOUTH 1/4 OF THE NORTHWEST 1/4 OF SECTION 8, TOWNSHIP 23 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA AND THE POINT OF BEGINNING.



LOCATION MAP  
SCALE: 1"=2000'

PRELIMINARY PLAT  
THE VISTAS  
PHASE 4

Drawn	JIS	REVISION	DATE
Checked	DLC		
Date	3-16-95		
Scale	1"=60'		
File No.	12293-02		

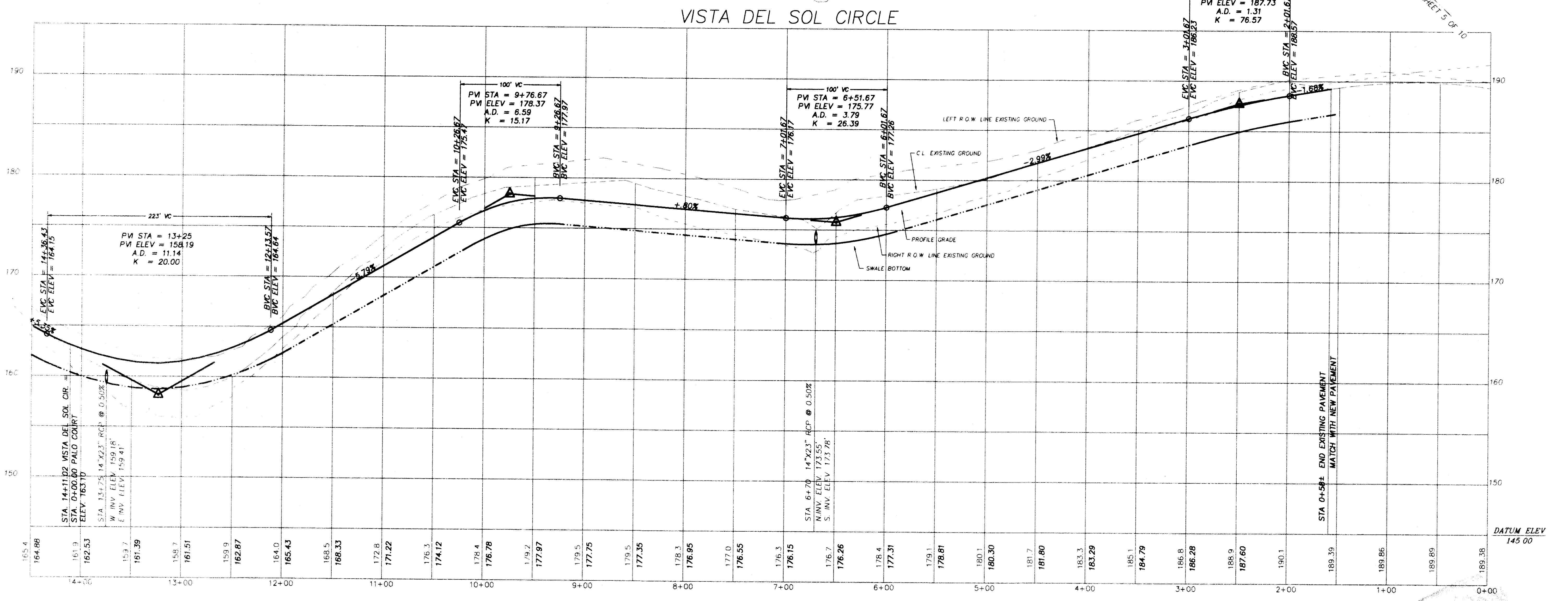
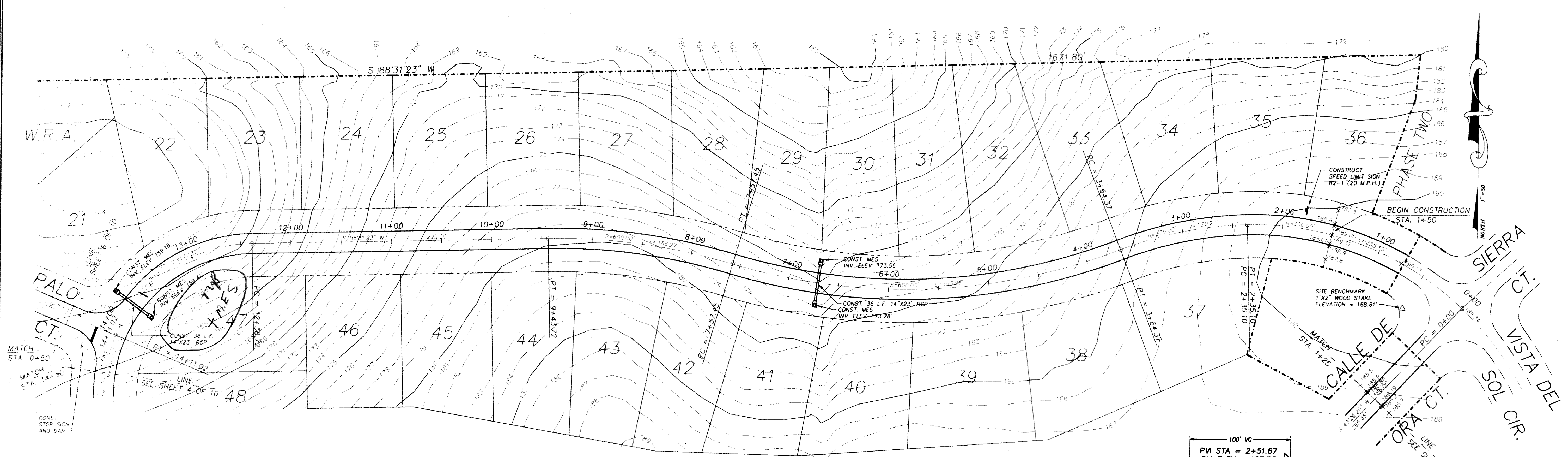
Sheet 2 of 10

DAVID L. LONGENBACH  
DATE: 7-18-95  
FL REG. NO. 4-954

WICKS CONSULTING SERVICES, INC.  
FRANKLIN D. LONGENBACH  
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PRELIMINARY PLAT  
THE VISTAS  
PHASE 4



VISTA DEL SOL CIRCLE

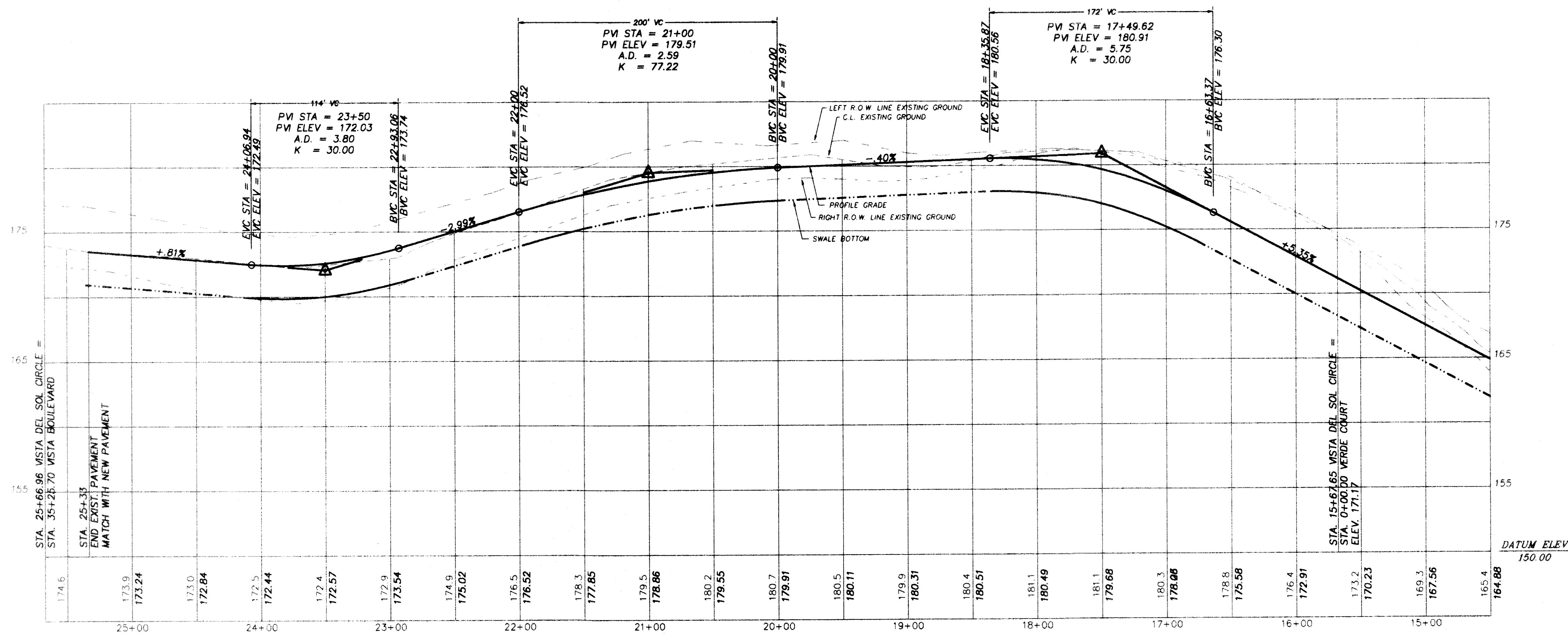
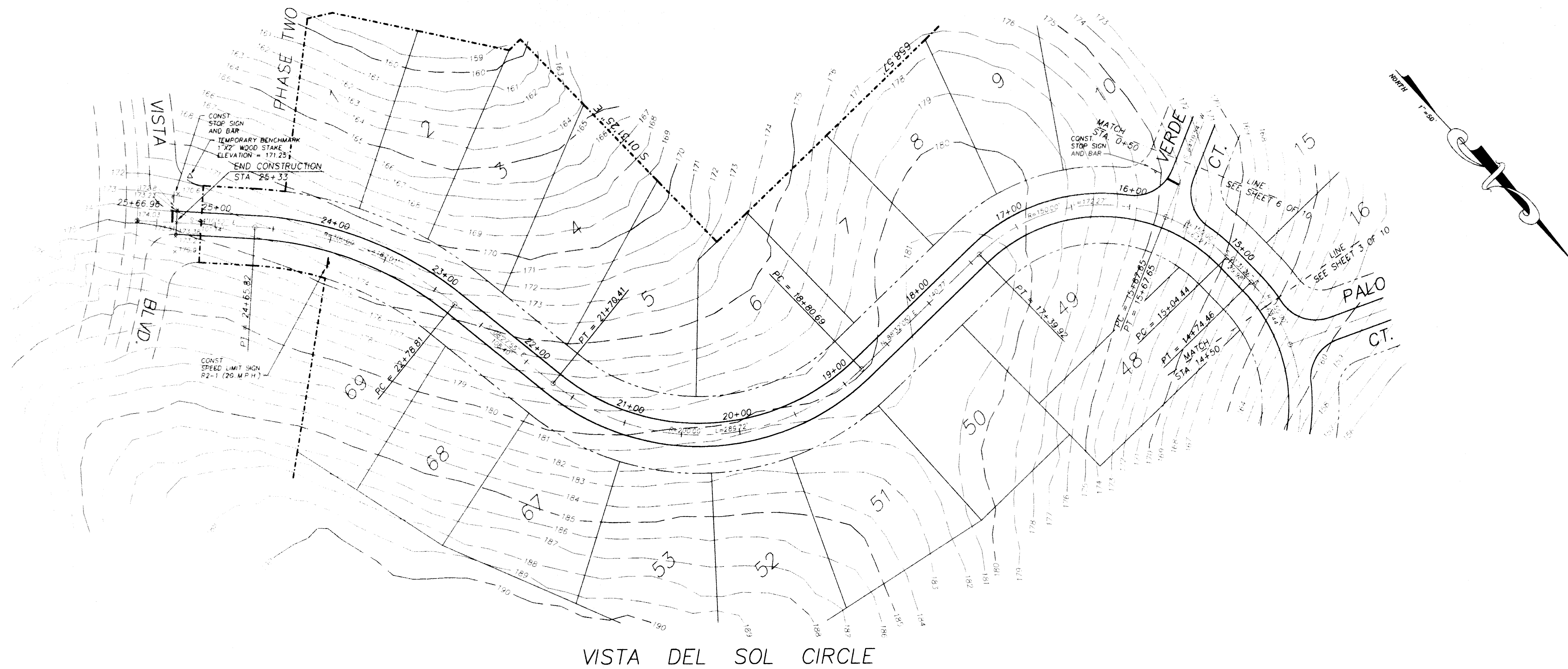
SCALE: HORIZ. 1"=50'  
 VERT. 1"=5'  
 DAVID L. CLUTTS, P.E.  
 DATE 9-18-95  
 FL. REG. NO. 47684

W C WICKS CONSULTING SERVICES, INC.  
 (Incorporated in the State of Florida)  
 1001 E. University Ave., Suite 200, Tallahassee, Florida 32310-1000

FRANKLIN D. LONGENBACH  
 P.O. BOX 507  
 BROADHEADSVILLE, PA. 18322  
 (717) 992-7488

PLAN AND PROFILE  
 VISTA DEL SOL CIRCLE  
 THE VISTAS  
 PHASE 4

Drawn: JS	REVISION: _____	DATE: _____
Checked: D/LC		
Date: 3-21-95		
Scale: HORIZ. 1"=50'		
VERT. 1"=5'		
File No.: 12293-03		
Sheet: 3 Of 10		



VISTA DEL SOL CIRCLE

SCALE: HORIZ 1"=50'  
VERT. 1"=5'

DAVID L. CLUTTS, P.E.  
DATE: 7-18-95  
FL. REG. NO. 47684

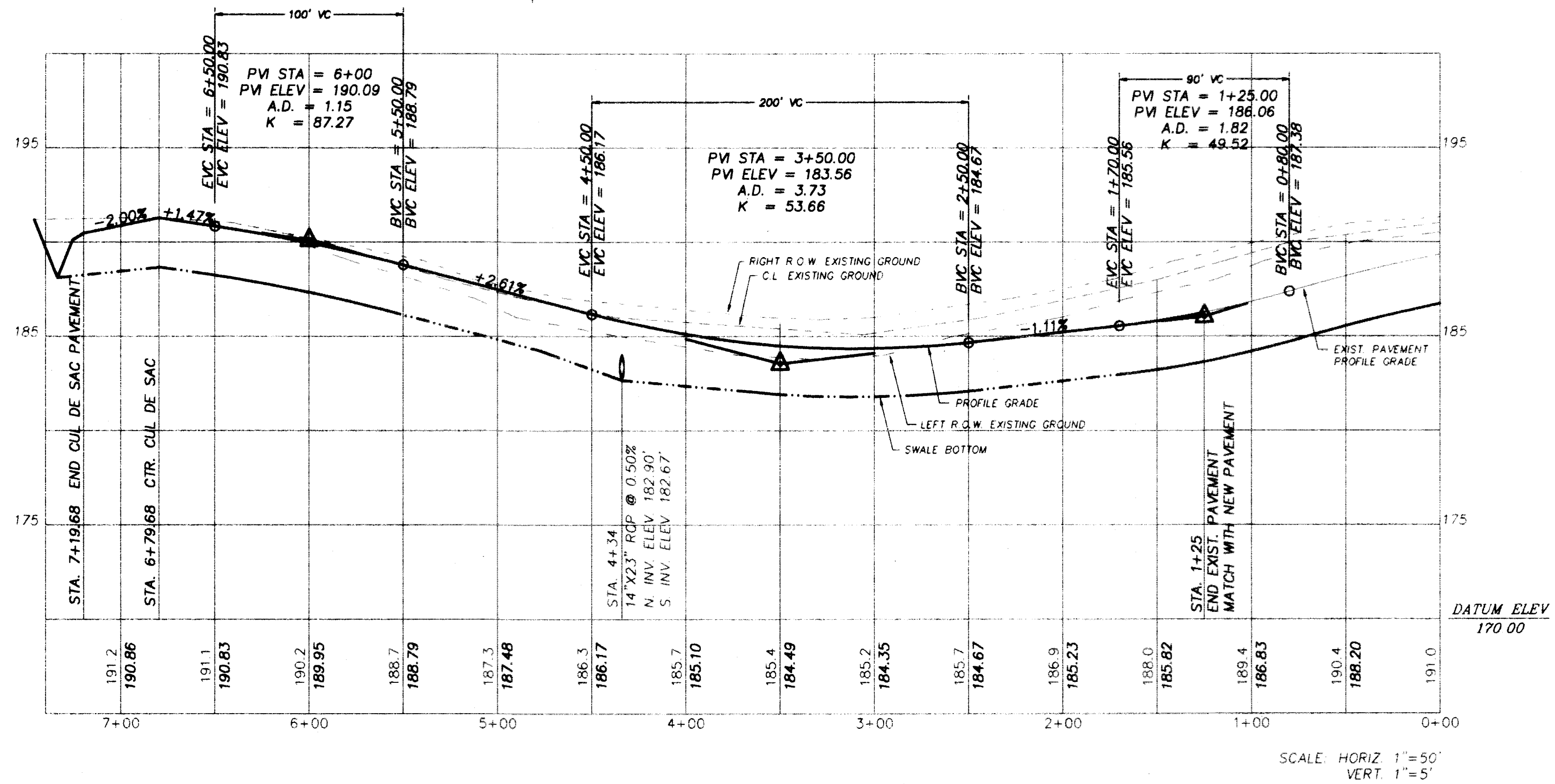
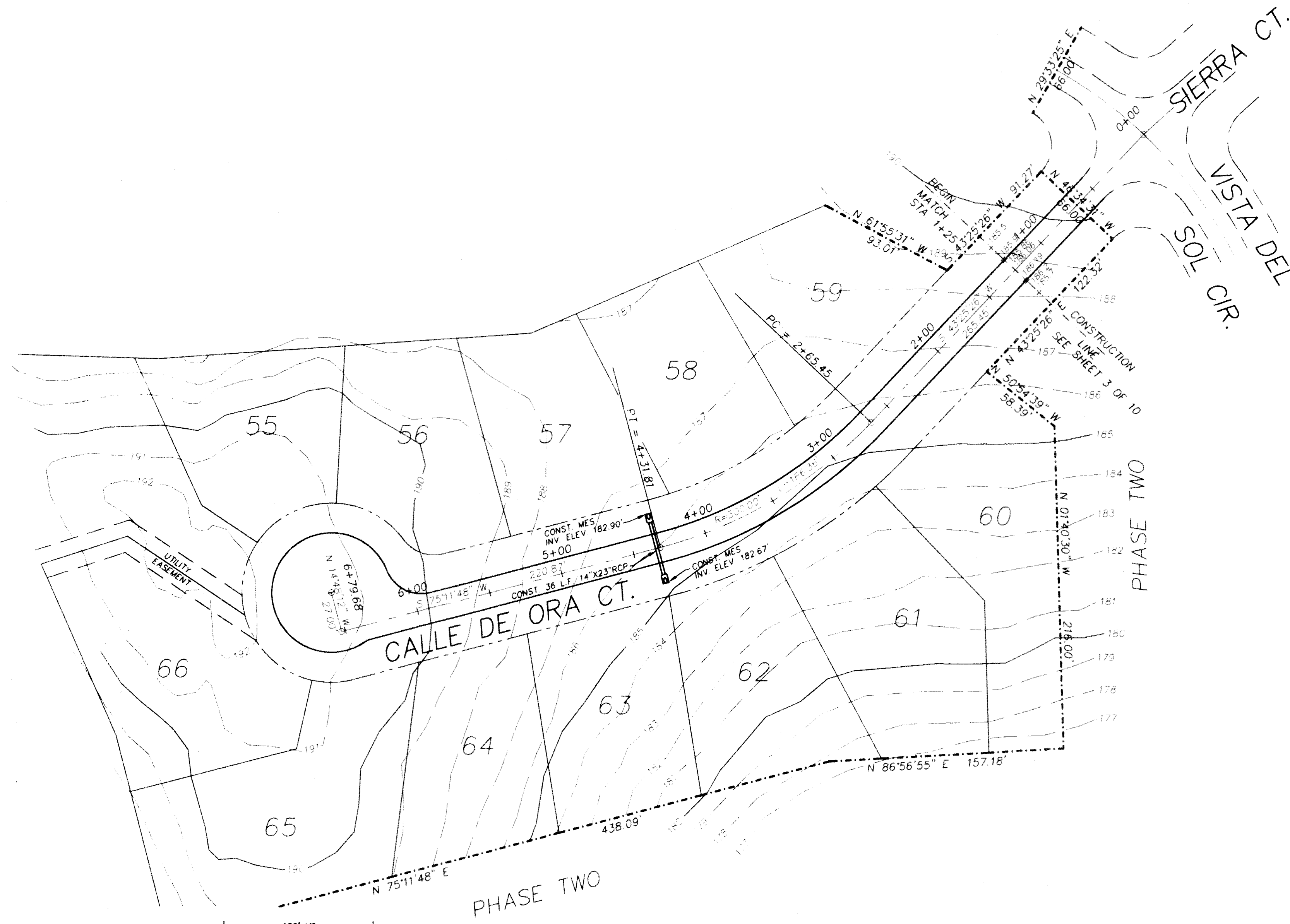
W S WICKS CONSULTING SERVICES, INC.  
10000 E. Highway 10, Suite 100, Aurora, Colorado 80012  
(303) 443-9888 • FAX 303-443-9889

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P.O. BOX 307  
BROADHEADSVILLE, PA. 18322  
(717) 992-7488

PLAN AND PROFILE  
VISTA DEL SOL CIRCLE  
THE VISTAS  
PHASE 4

Drawn	RS	REVISION	DATE
Checked	DLC		
Date	3-21-95		
Scale	HORIZ 1"=50'		
VERT	1"=5'		
File No.	12293-04		

Sheet: 4 Of: 10



CALLE DE ORA COURT

SCALE: HORIZ 1"=50'  
VERT. 1"=5'

DAVID L. CLUTTS, P.E.  
DATE 2-18-95  
FL REG NO 47684

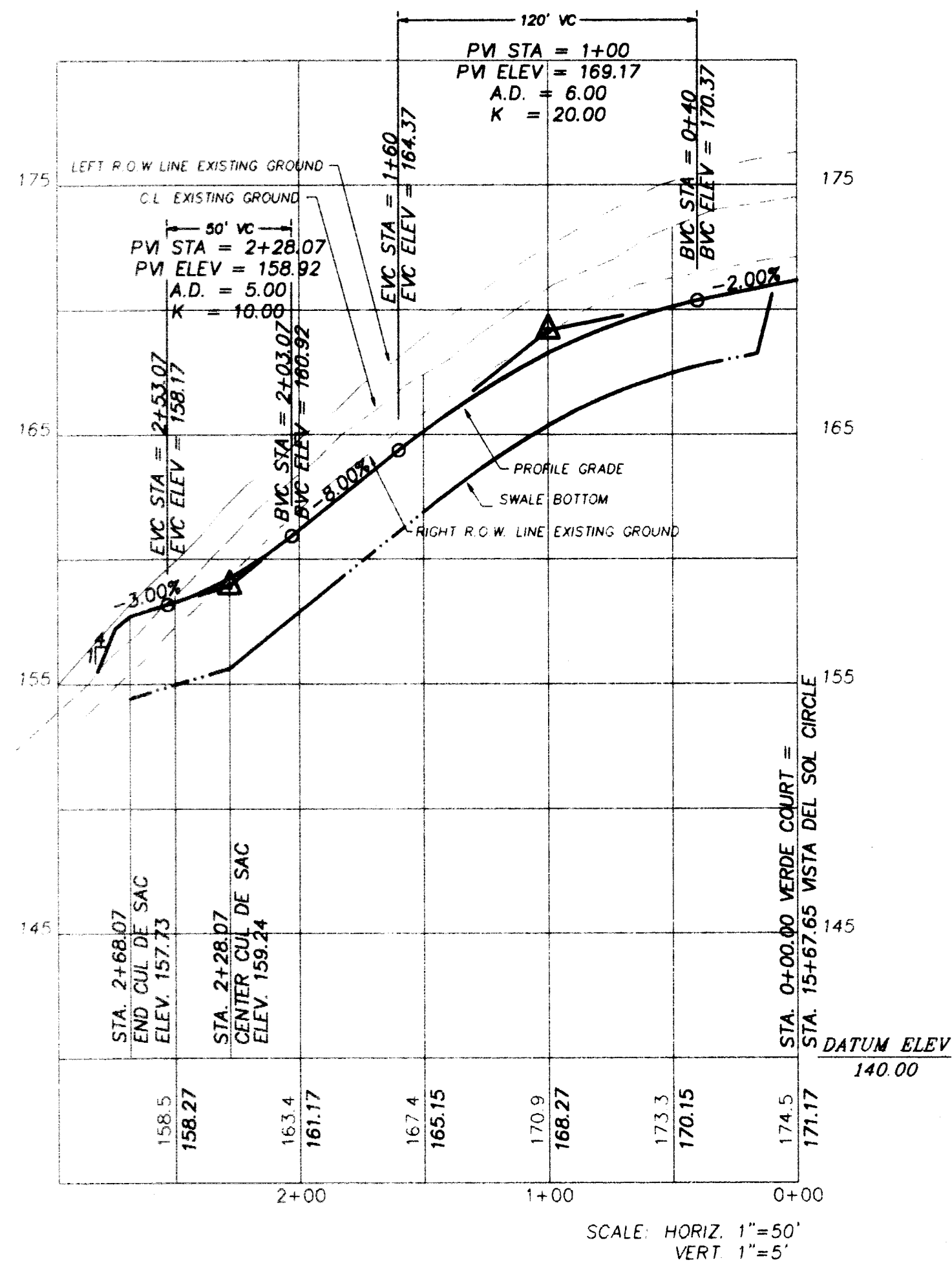
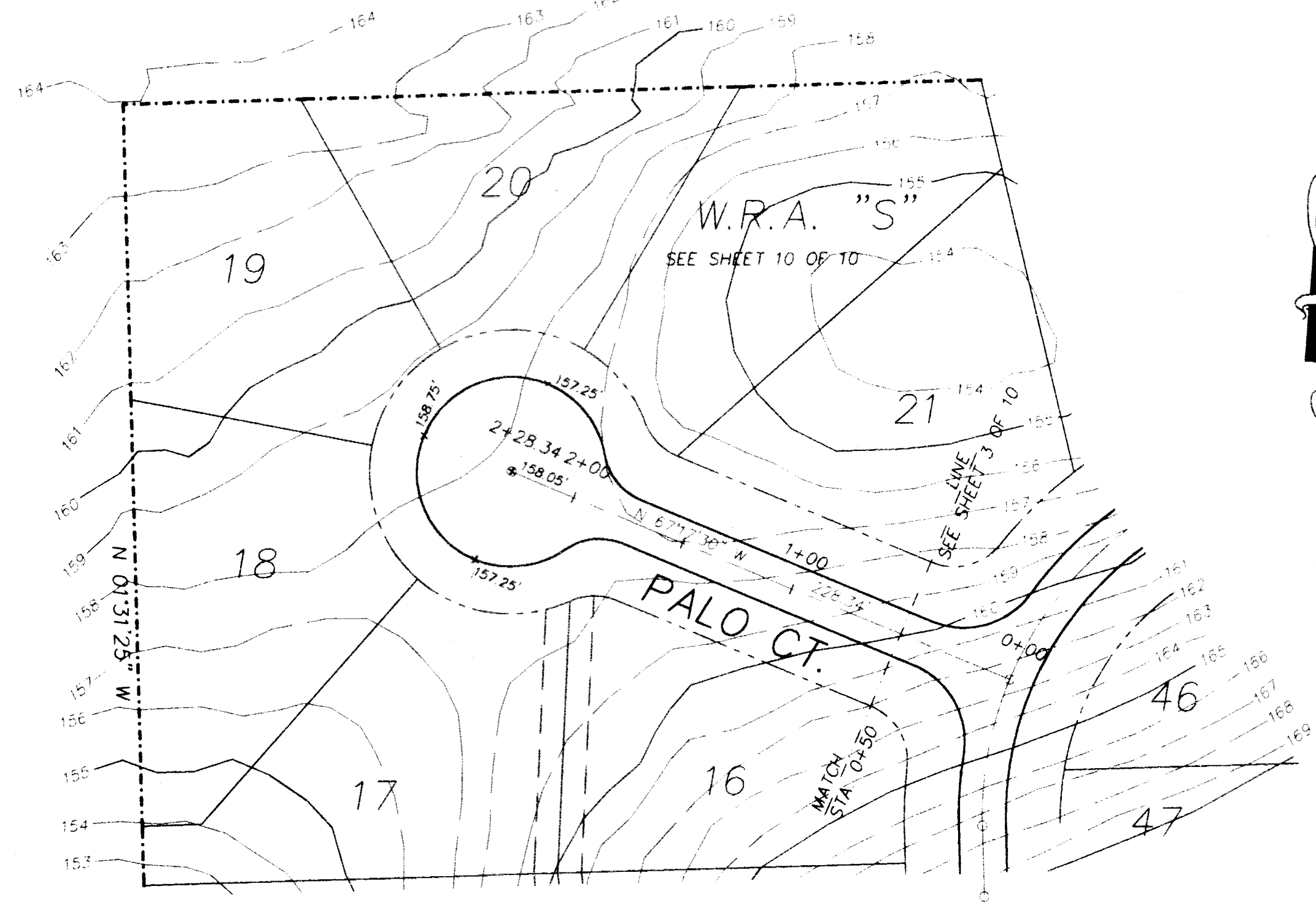
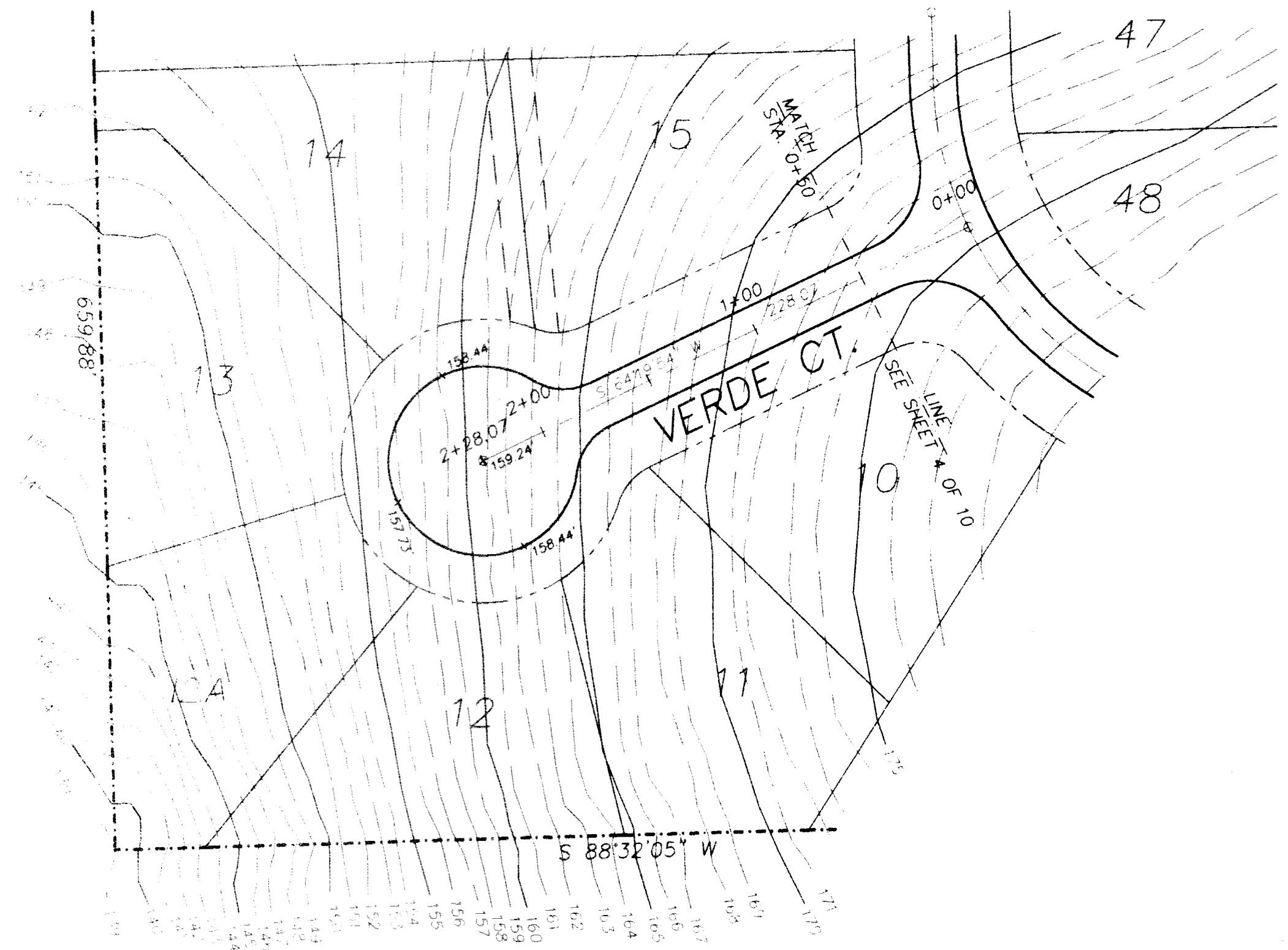
WCS  
WCKS  
CONSULTING  
SERVICES, INC.  
Environmental, Cultural, & Water & Resources Engineering  
1401 34th Street, Suite 100  
Tampa, Florida 33609

FRANKLIN D. LONGENBACH  
P.O. BOX 307  
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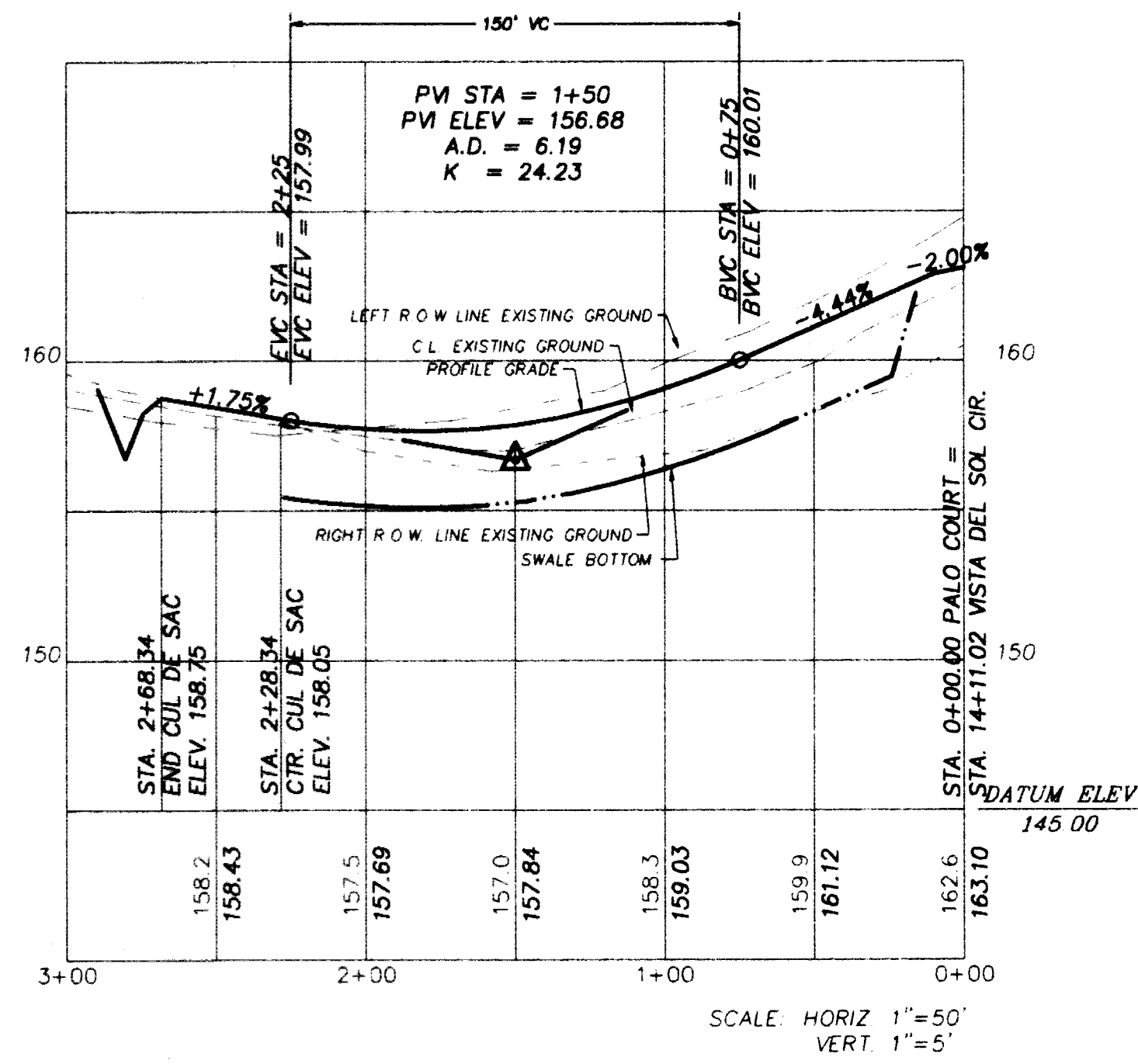
PLAN AND PROFILE  
CALLE DE ORA COURT  
THE VISTAS  
PHASE 4

Drawn	JFS	REVISION	DATE
Checked	DLC		
Date	3-21-95		
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	VERT 1"=5'		
File No	12293-05		

Sheet: 5 Of: 10



VERDE COURT



PALO COURT

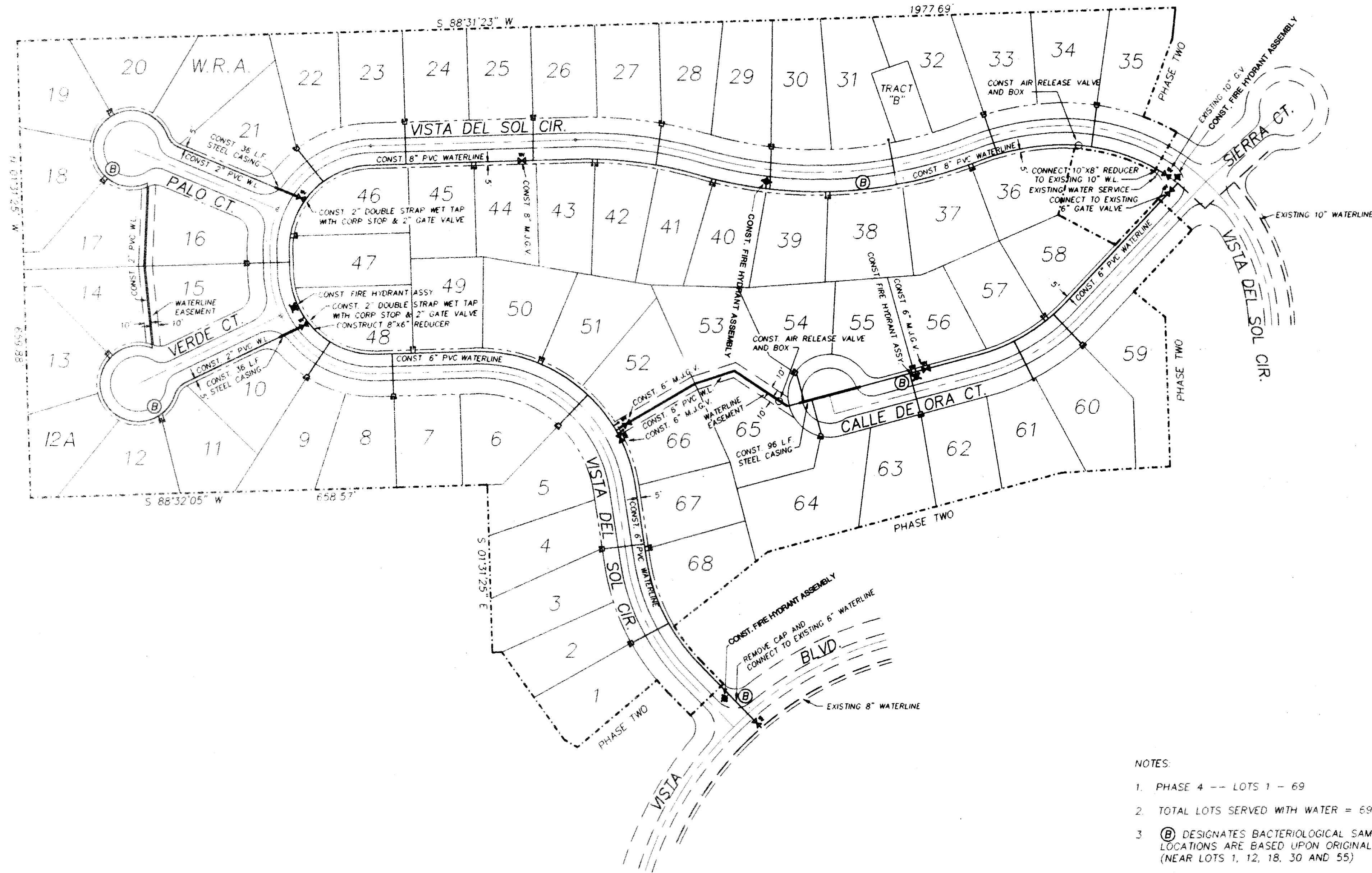
DAVID L. CLUTTS, P.E.  
 DATE: 9-18-95  
 FL REG. NO.  
 47684

PLAN AND PROFILE  
 PALO COURT AND VERDE COURT  
 THE VISTAS  
 PHASE 4

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WICKS  
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 101 West Main Street  
 Harrisburg, PA 17101  
 (717) 651-1867

Drawn: J/S	REVISION:	DATE:
Checked: D/C		
Date: 3-21-95		
Scale: HORIZ. 1"=50'		
VERT. 1"=5'		
File No.: 12293-06		
Sheet: 6 Of: 10		



NOTES

1. PHASE 4 -- LOTS 1 - 69
2. TOTAL LOTS SERVED WITH WATER = 69
3. (B) DESIGNATES BACTERIOLOGICAL SAMPLING LOCATIONS. LOCATIONS ARE BASED UPON ORIGINAL PERMIT REQUIREMENTS (NEAR LOTS 1, 12, 18, 30 AND 55)
4. ORIGINAL PERMIT FOR PROJECT WC35-233215
5. CONNECTIONS TO EXISTING WATER MAIN TO BE WET TAP WITH MECHANICAL JOINT TAPPING SLEEVE AND GATE VALVE OF APPROPRIATE SIZE
6. STEEL CASING TO BE 14" FOR 6" MAINS AND 6" FOR 2" MAINS
7. ALL SERVICE LINES SHALL BE INSTALLED IN A P.V.C. SLEEVE WHERE THEY CROSS UNDER THE PAVEMENT
8. ALL D.I.P. FITTINGS SHALL BE CEMENT LINED

PUBLIC SERVICES  
NOV 16 1995

DAVID L. CLAVITS P.E.  
DATE: 11/16/95  
PL. RES. NO. 47684

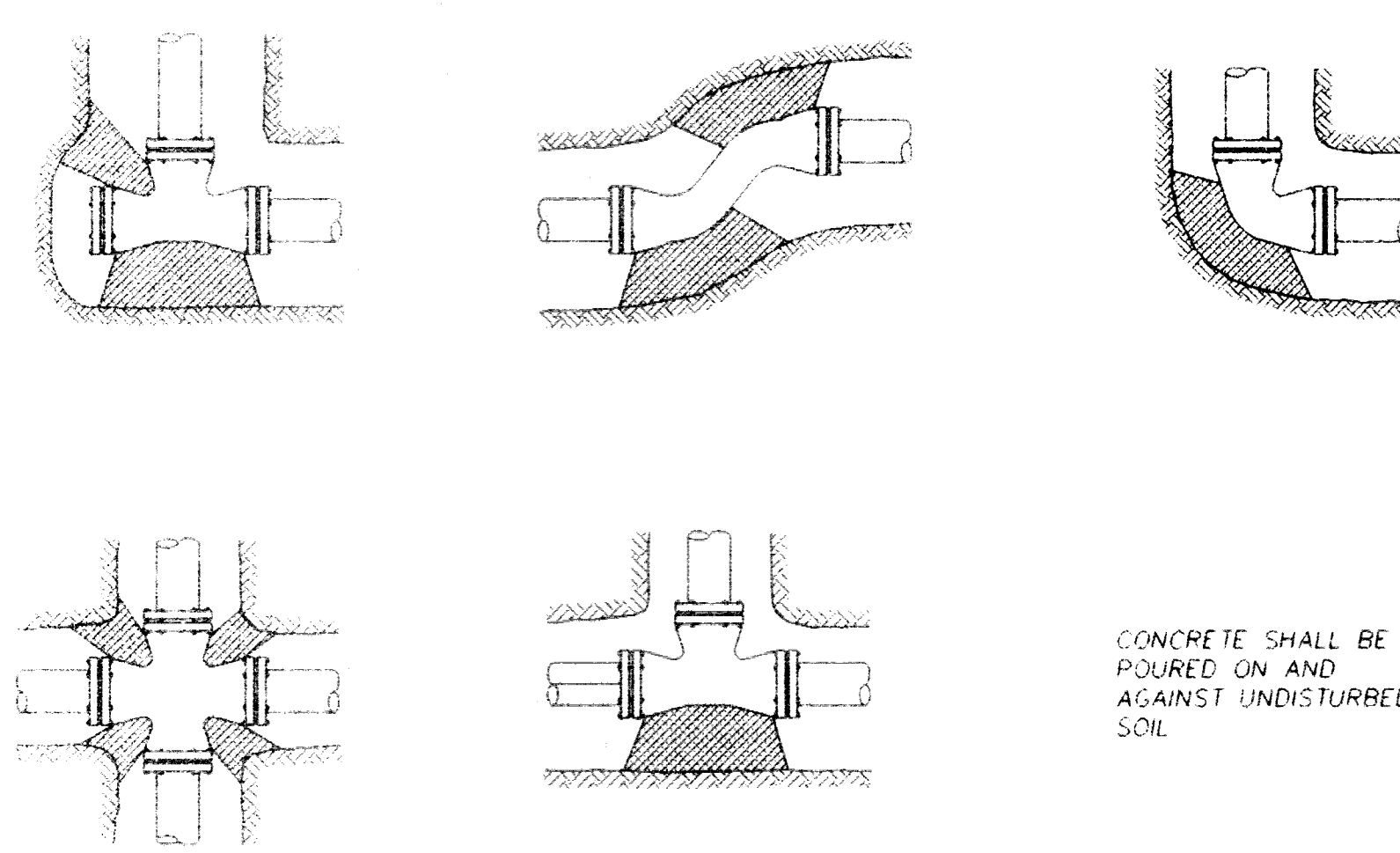
W C WICKS CONSULTING SERVICES, INC.  
107 West Lake Street, Suite 200  
Broadheads, Pennsylvania 17007  
(717) 992-7488

FRANKLIN D. LONGENACK  
P.O. BOX 307  
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WATERLINE PLAN  
THE VISTAS  
PHASE 4

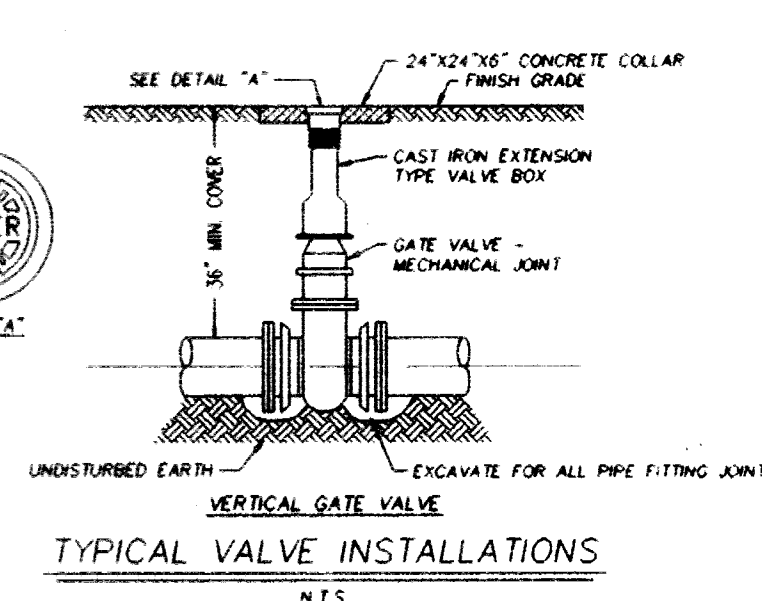
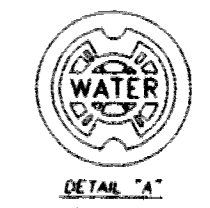
Drawn	J.S.	REVISION	DATE
Checked	DLC	ISSUE AND AIR RELEASE VALVES	6-16-95
Date	4-12-93	F.H. LOCATIONS	11/16/95
Scale	1"=100'		
File No.	12293-M		

Sheet: 7 Of 10



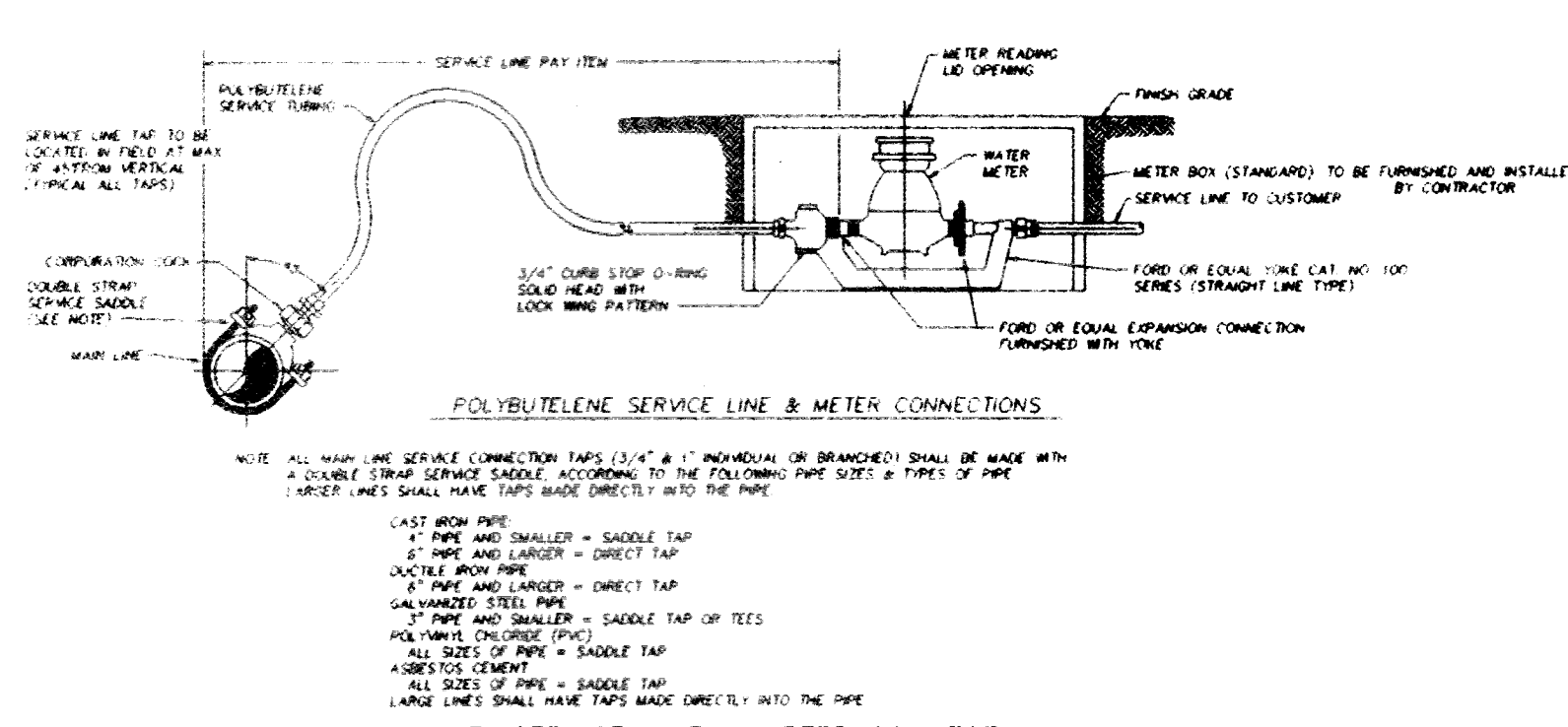
**THRUST BLOCK DETAILS**  
NTS

CONCRETE SHALL BE  
POURED ON AND  
AGAINST UNDISTURBED  
SOIL

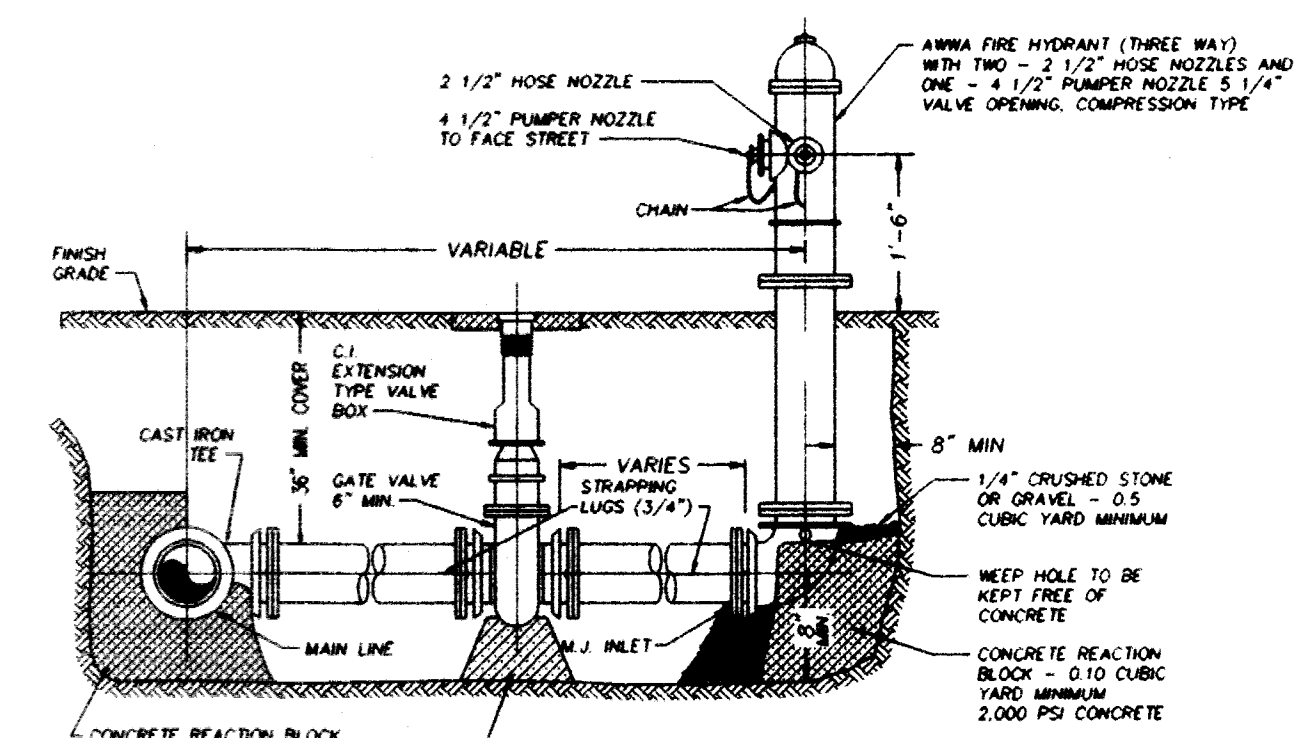


**TYPICAL VALVE INSTALLATIONS**  
NTS

- WATER DISTRIBUTION**
- EXCAVATED TRENCH BOTTOM(S) SHALL BE FREE OF STICKS, ROOTS, STUMPS, STONES, BOULDERS AND ALL DEBRIS AND SHALL BE GRADED AND SHAPED FOR CONTINUOUS BEARING OF THE BOTTOM OF THE PIPE SYSTEM WITH ALLOWANCE FOR VALVES, FITTINGS, AND COUPLINGS.
  - UNLESS OTHERWISE SHOWN ON THE PLANS, PIPE SHALL BE MANUFACTURED FROM CLEAN VIRGIN TYPE 1, GRADE 1, RIGID UNPLASTICIZED POLYVINYL CHLORIDE RESIN CONFORMING TO ASTM DESIGNATION D 1785. THE PIPE SHALL BEAR THE NATIONAL SANITATION FOUNDATION (NSF) SEAL FOR POTABLE WATER PIPE. PIPE SHALL MEET THE REQUIREMENTS OF AWWA C900, (D.R. 18) "STANDARD FOR POLYVINYL CHLORIDE (PVC) PRESSURE PIPE, 4 INCHES THROUGH 12 INCHES FOR WATER" AND SHALL BE FURNISHED IN CAST IRON PIPE EQUIVALENT OUTSIDE DIAMETERS WITH RUBBER GASKETED JOINTS AS LISTED C900 STANDARD.
  - CONNECTIONS FOR PIPE 2" IN DIAMETER AND LARGER SHALL BE RUBBER COMPRESSION RING TYPE. PIPE SHALL BE EXTRUDED WITH INTEGRAL THICKENED WALL BELLS WITHOUT INCREASE IN SDR. RUBBER RING GASKETS SHALL CONSIST OF SYNTHETIC COMPOUNDS MEETING THE REQUIREMENTS OF ASTM DESIGNATION D1869, AND SUITABLE FOR THE DESIGNATED SERVICE. OTHER CONNECTIONS FOR PIPE, SOLVENT WELDED SLEEVE TYPE JOINT, FITTINGS FOR 2 INCH AND SMALLER PIPE SHALL BE P.V.C. SOLVENT WELDED JOINTS. FITTINGS FOR USE WITH P.V.C. PIPE WILL BE CAST IRON OR DUCTILE IRON WITH MECHANICAL JOINT. RUBBER COMPRESSION RING TYPE JOINTS WHERE MECHANICAL JOINT IRON FITTINGS OR DUCTILE IRON PIPE ARE TO INTERFACE WITH P.V.C. PIPE, A TRANSITION GASKET, CLOW F-6340 OR EQUAL, SHALL BE USED. NO P.V.C. FITTINGS WILL BE ALLOWED EXCEPT ON PIPE AND FITTINGS SMALLER THAN 3 INCHES.
  - P.V.C. PIPE CONNECTED TO HEAVY FITTINGS AND/OR RIGID STRUCTURES SHALL BE SUPPORTED SO THAT NO SUBSEQUENT RELATIVE MOVEMENT BETWEEN THE P.V.C. PIPE AT THE JOINT AND THE RIGID STRUCTURE IS POSSIBLE.
  - CONCRETE REACTION (THRUST) BLOCKS SHALL BE PROVIDED AT ALL BENDS OF TEES, UNLESS SPECIAL RESTRAINING JOINT FITTINGS ARE UTILIZED WITH SUITABLE LENGTHS OF DUCTILE IRON PIPE (ANSI STANDARD A21.5), THICKNESS CLASS 2) ON BOTH SIDES OF SUCH BEARING AREA AGAINST THE UNDISTURBED TRENCH WALL OF AT LEAST 0.9 SQUARE FEET PER INCH OF PIPE DIAMETER FOR 12 INCH PIPE, WHICH MAY BE DECREASED BY 0.1 SQUARE FEET FOR EACH SUCCESSIVELY SMALLER PIPE SIZE (E.G., 0.8 FOR 8 INCH, ETC.). THE BEARING AREA SHALL LIE IN A VERTICAL PLANE PERPENDICULAR TO A LINE BISECTING THE INCLUDED ANGLE OF THE FITTING. THE BEARING AREAS FOR BENDS LESS THAN 90° MAY BE DECREASED AS FOLLOWS: 45°-54% 22-1/2% 28% 11-1/4% 14% OF THE AREAS COMPUTED FOR 90° BENDS.
- NOTE: THE ABOVE FIGURES ARE BASED ON 120 PSI WATER PRESSURE AND APPROXIMATELY 1,800 PSI SOIL BEARING PRESSURE.
- BACKFILLING OF THE TRENCH FROM THE BOTTOM UP TO TWELVE (12) INCHES OVER THE TOP OF THE PIPE SHALL BE COMPACTED IN SIX (6) INCH LAYERS USING DRY FRABLE SOIL (MAXIMUM PARTICLE OR FRAGMENT DIMENSION 1") TO NINETY-FIVE (95) PERCENT MAXIMUM DENSITY. THE REMAINDER OF THE TRENCH SHALL BE BACKFILLED WITH EXCAVATED EARTH MATERIAL (MAXIMUM ROCK OR FRAGMENT DIMENSION 6") IN NINE (9) INCH LAYERS COMPACTED TO NINETY (90) PERCENT MAXIMUM DENSITY. NINETY-EIGHT (98) PERCENT UNDER AREAS TO BE PAVED, DENSITY DETERMINATIONS SHALL BE MADE IN ACCORDANCE WITH ASSHO SPECIFICATION T-180. MINIMUM COVER OVER THE TOP OF THE PIPE SHALL BE THIRTY-SIX (36) INCHES UNLESS OTHERWISE SHOWN. IF POSSIBLE, JOINTS SHOULD BE LEFT UNCOVERED UNTIL AFTER TESTING HAS BEEN SATISFACTORILY COMPLETED.
  - THE PIPE SYSTEM SHALL BE TESTED AND EXAMINED FOR LEAKAGE IN SECTIONS NOT EXCEEDING 1,000 FEET, AT NOT LESS THAN 150 PSI STATIC PRESSURE, IN ACCORDANCE WITH SECTION 13 OF AWWA STANDARD C600. ALLOWABLE LEAKAGE SHALL BE LESS THAN 0.0027 GALLON PER HOUR PER JOINT PER INCH OF PIPE DIAMETER. ANY JOINT SHOWING LEAKAGE SHALL BE REPAIRED AND THAT SECTION OF THE PIPE SYSTEM SHALL BE RETESTED.
  - AFTER COMPLETION OF CONSTRUCTION AND TESTING, THE WATER SYSTEM SHALL BE DISINFECTED WITH CHLORINE SOLUTION BEFORE ACCEPTANCE FOR DOMESTIC OPERATION. THE AMOUNT OF CHLORINE APPLIED SHALL BE SUFFICIENT TO PROVIDE A DOSAGE SOLUTION OF NOT LESS THAN FIFTY (50) PARTS PER MILLION PRIOR TO INTRODUCING THE CHLORINE SOLUTION. THE LINE SHALL BE THOROUGHLY FLUSHED WITH CLEAN POTABLE WATER. CHLORINE SOLUTION SHALL BE INTRODUCED IN ACCORDANCE WITH AWWA STANDARD C600 AND SHALL REMAIN IN THE SYSTEM FOR A CONTACT PERIOD OF AT LEAST TWENTY-FOUR (24) HOURS, DURING WHICH TIME EVERY VALVE IN THE SYSTEM SHALL BE OPENED AND CLOSED SEVERAL TIMES TO ASSURE CONTACT WITH EVERY SURFACE OF THE SYSTEM. AFTER COMPLETION OF THE DISINFECTION PROCEDURE, THE SYSTEM SHALL BE FLUSHED USING CHLORINATED WATER FROM THE CENTRAL WATER SUPPLY. SAMPLES SHALL BE TAKEN FROM THE NEW SYSTEM FOR TESTING BY, TO THE SATISFACTION OF, AND IN ACCORDANCE WITH THE REGULATIONS OF THE FLORIDA DEPARTMENT OF HEALTH & REHABILITATIVE SERVICES, BEFORE IT IS PLACED IN ACTIVE SERVICE.
  - GATE VALVES SHALL BE MUELLER CLASS 200 RESILIENT SEATED VALVES, OR APPROVED EQUAL, WITH MECHANICAL JOINT ENDS, MANUFACTURED TO MEET OR EXCEED REQUIREMENTS OF AWWA C509, LATEST REVISION. EACH VALVE SHALL BE FITTED WITH A CAST IRON BOX AND COVER.
  - FIRE HYDRANT(S) SHALL BE MUELLER STANDARD OR APPROVED EQUAL 3-WAY WITH TWO (2) 2-1/2 INCH HOSE CONNECTIONS AND ONE (1) 4-1/2 INCH PUMPER NOZZLE. MAIN BARREL VALVE SIZE SHALL BE 5-1/4 INCHES. AFTER INSTALLATION THE HYDRANT SHALL BE PAINTED IN ACCORDANCE WITH THE LOCAL FIRE DEPARTMENT REQUIREMENTS.
  - ALL WATER SERVICE LINES TWO (2) INCHES AND UNDER SHALL BE POLYBUTYLENE, SDR 9, WITH A PRESSURE RATING OF 200 PSI.
  - ALL PVC WATER MAINS AND SERVICE LINES SHALL BE LAID WITH METALIC LOCATING TAPE PLACED 18" ABOVE THE CENTER OF THE WATERLINE FOR FUTURE LOCATING PURPOSES. #16 COPPER ARMORED POLYGLARD WIRE SHALL BE TAPED TO THE TOP OF THE PIPE AND TERMINATE WITH 12" EXTENDING ABOVE THE TOP OF THE VALVE BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH THE VALVE OPERATION.
  - CONNECTION TO EXISTING WATER SYSTEM SHALL BE THROUGH A FDEP APPROVED JUMPER CONNECTION UNTIL TESTING IS COMPLETED AND LINE IS CLEARED FOR SERVICE.

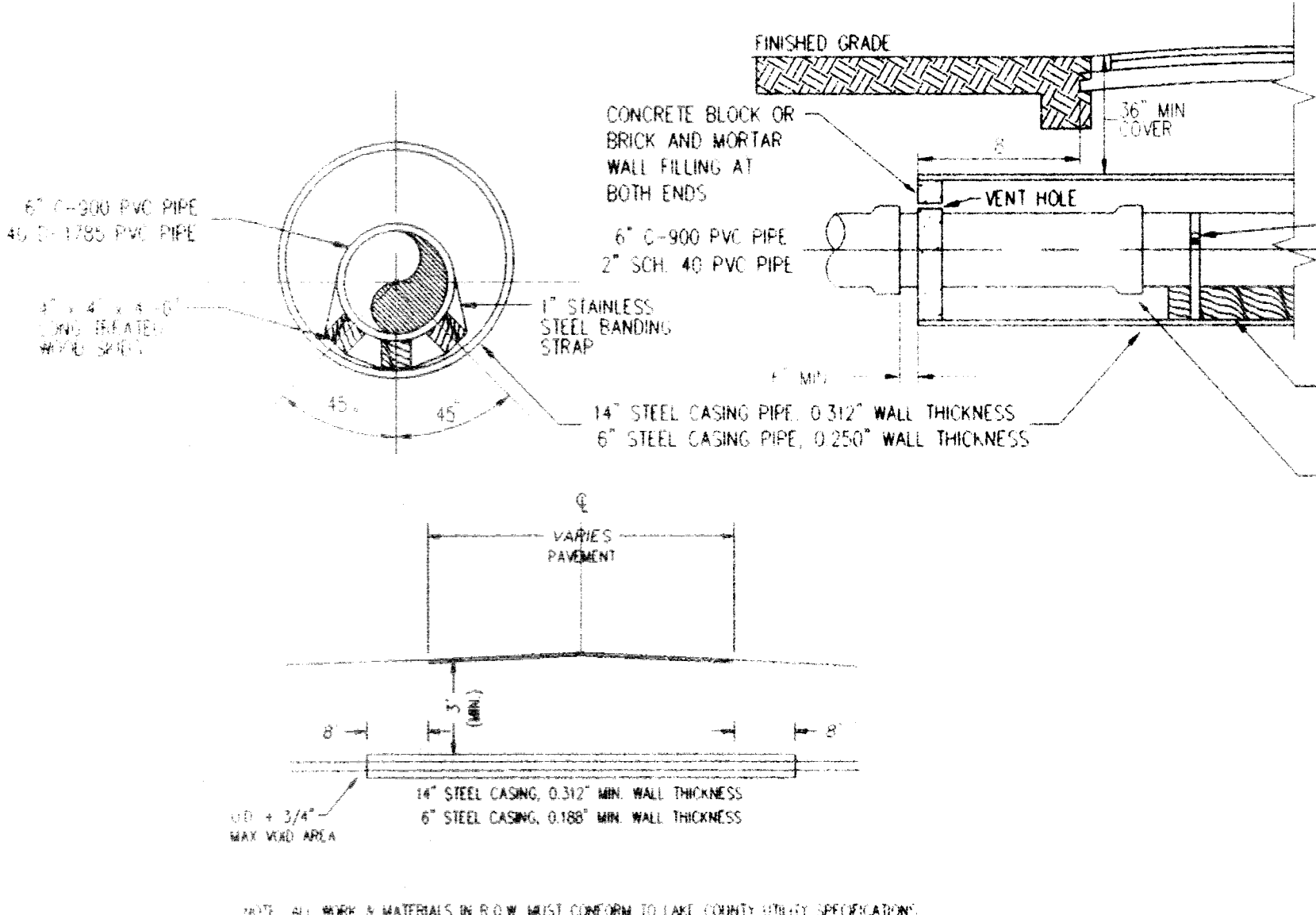


**TYPICAL MAIN LINE, SERVICE LINE & METER CONNECTION**  
NTS

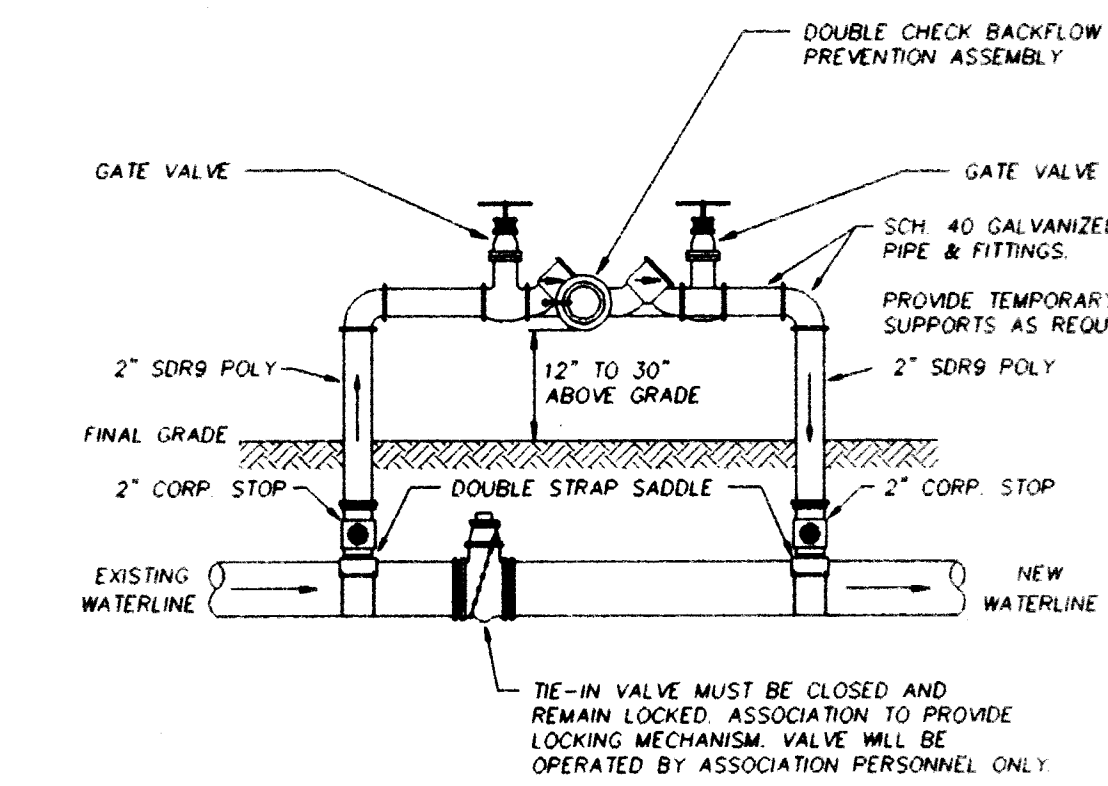


**TYPICAL FIRE HYDRANT SETTING**  
NTS

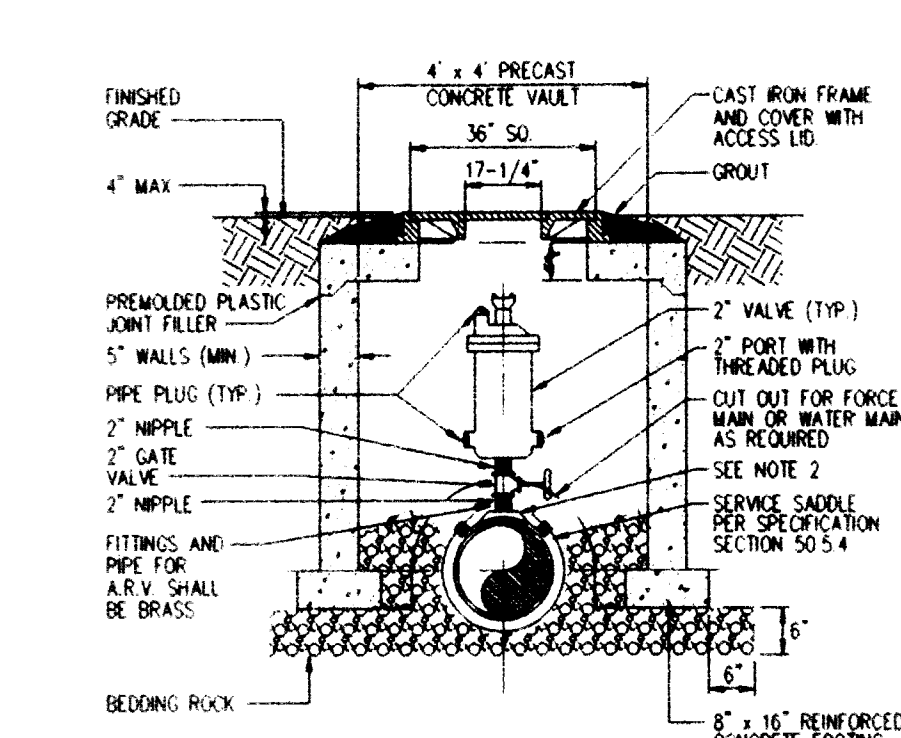
- \* All pipe crossings under roadway to have 98% comp. 6" lifts 12" density EACH Lane.
- \* All pressure lines under roadway to be increased or D.I.P.



**CASING DETAIL**  
NTS



**TEMPORARY JUMPER CONNECTION**



**AIR OR COMBINATION AIR/VACUUM RELEASE VALVE DETAIL**

DAVID L. CURTIS, P.E.  
DATE: 7-18-95  
FL REG. NO. 4-684

W.C. WICKS CONSULTING SERVICES, INC.  
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107 West Main Street, Tampa, Florida 33606  
(813) 251-8831

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BRODHEADSVILLE, PA 18322  
(717) 992-7488

**THE VISTAS**  
WATER SYSTEM DETAILS

Drawn: JFS	DATE: 4-12-93
Checked: D.L.C.	REVISION: AIR RELEASE VALVE
Date: 4-12-93	AND NOTES
Scale: AS SHOWN	
File No.: 12293-WD	

Sheet: 8 Of: 10





**EROSION & SEDIMENT CONTROL**

Prior to starting construction of planned improvements, all W.R.A.'s will be excavated and rough graded to provide sediment and runoff control during construction.

All disturbed areas will be brought to final grade and seeded and mulched as soon as possible.

Areas which may erode due to slopes or concentrated runoff during construction will be treated. Temporary slope drain protection will be provided per DOT Road Design Standard Index No. 100.

On-site discharge of untreated stormwater will be prevented using temporary berms and dikes where needed.

Upon completion of site improvements, the W.R.A.'s, swales, and other stormwater management devices will be final graded and sodded as specified in the approved construction plans.

**ROUTINE MAINTENANCE -- STORMWATER**

After completion of construction, W.R.A.'s will be mowed and maintained as part of the normal lawn and open space maintenance.

Trash and debris that accumulates within the W.R.A.'s, swales, pipes, and ditches will be manually collected and disposed of with other normal solid waste.

Any erosion loss of grass, etc., will be repaired or replaced routinely and as needed.

Pipes, ditches, flumes, and other control devices will be inspected annually and repairs made as needed.

- LEGEND:**
- 172--- EXISTING 1' CONTOURS
  - 175--- EXISTING 5' CONTOURS
  - 172--- FINISHED GRADE CONTOURS
  - ▲ SWALE CHECK (POINTS UPSLOPE)
  - 188.00' RECOMMENDED FINISH FLOOR ELEVATION
  - - - - - BASIN BOUNDARY
  - LOT LINE
  - - - - - PROPERTY LINE
- NOTES:**
- EACH LOT DRIVEWAY SERVES AS A SWALE CHECK.
  - MAXIMUM SLOPES SHOWN ON & OF ROADWAYS ARE FOR STORMWATER PERMITTING INFORMATION ONLY. SEE PROFILE SHEETS FOR VERTICAL ALIGNMENT INFORMATION.
  - 6" OF CONCRETE CULVERT IS INCLUDED WITH M.E.S.
  - ELEVATIONS SHOWN ARE REFERENCED TO N.G.V.D.

**SPECIAL WATER RETENTION AREA CONSTRUCTION NOTES**

PROTECTION OF W.R.A.'S AND SWALES

- THE CONTRACTOR SHALL ROUGH GRADE PROPOSED SWALES TO NO LOWER THAN 0.5' AND W.R.A.'S TO NO LOWER THAN 1.0' ABOVE THE FINAL BOTTOM ELEVATION PRIOR TO BEGINNING OTHER SITE WORK.
- THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO RESTRICT W.R.A.'S FROM CONSTRUCTION VEHICLE TRAFFIC TO REDUCE THE COMPACTION OF SOILS IN THE W.R.A.'S.
- IMMEDIATELY PRIOR TO COMPLETION OF THE PROJECT THE CONTRACTOR SHALL FINAL GRADE ALL SWALES AND W.R.A.'S. THE PURPOSE IS TO REMOVE ANY ACCUMULATED SILTS ETC. AND ANY SOILS WHICH MAY HAVE BECOME COMPACTED DURING CONSTRUCTION.
- FINAL SODDING AND SEEDING & MULCHING SHALL BE INSTALLED WITHIN 48 HOURS OF THE FINAL EXCAVATION OF W.R.A.'S AND SWALES.

DAVID E. CLUTTS, P.E.  
 DATE: 9/15/85  
 FL REG NO. 47684

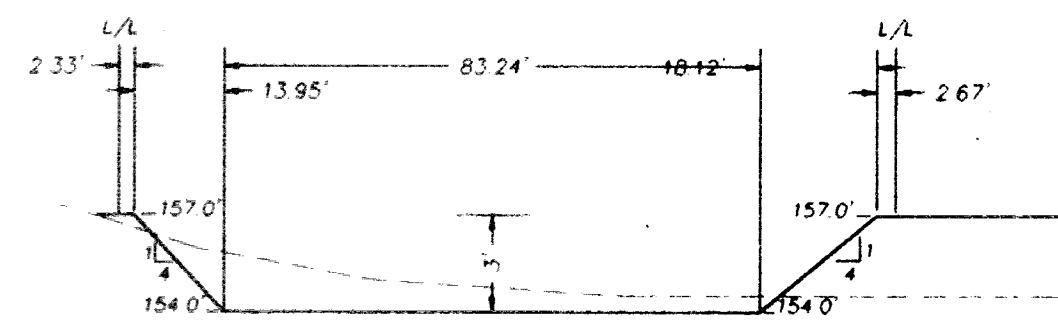
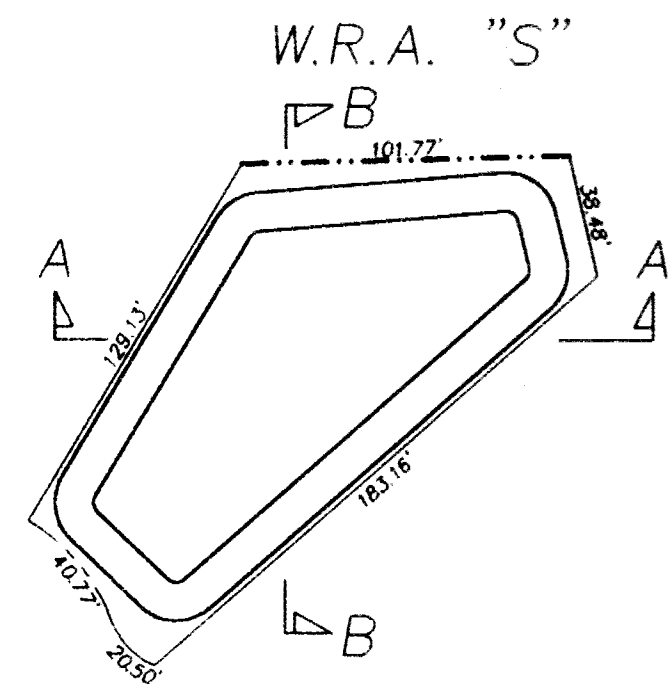
W C WICKS CONSULTING SERVICES, INC.  
 Environmental, Sanitary & Water Resources Engineering  
 (904) 342-8667, 107 West Main Street, Tallahassee, Florida 32309-4809

FRANKLIN D. LONGENBACH  
 P.O. BOX 307  
 BROADHEADSVILLE, PA. 18322  
 (717) 992-7488

**STORMWATER AND DRAINAGE**  
**THE VISTAS**  
 PHASE 4

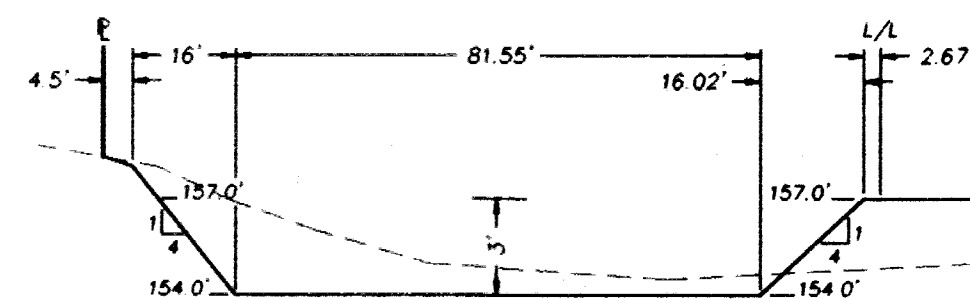
Drawn: JFS	DATE: 5-16-95
Checked: DLC	NOTES & SILT FENCE: 5-16-95
Date: 3-22-95	W.R.A. REMOVED: 6-27-95
Scale: 1"=60'	
File No.: 12293-07	

Sheet 9 of 10



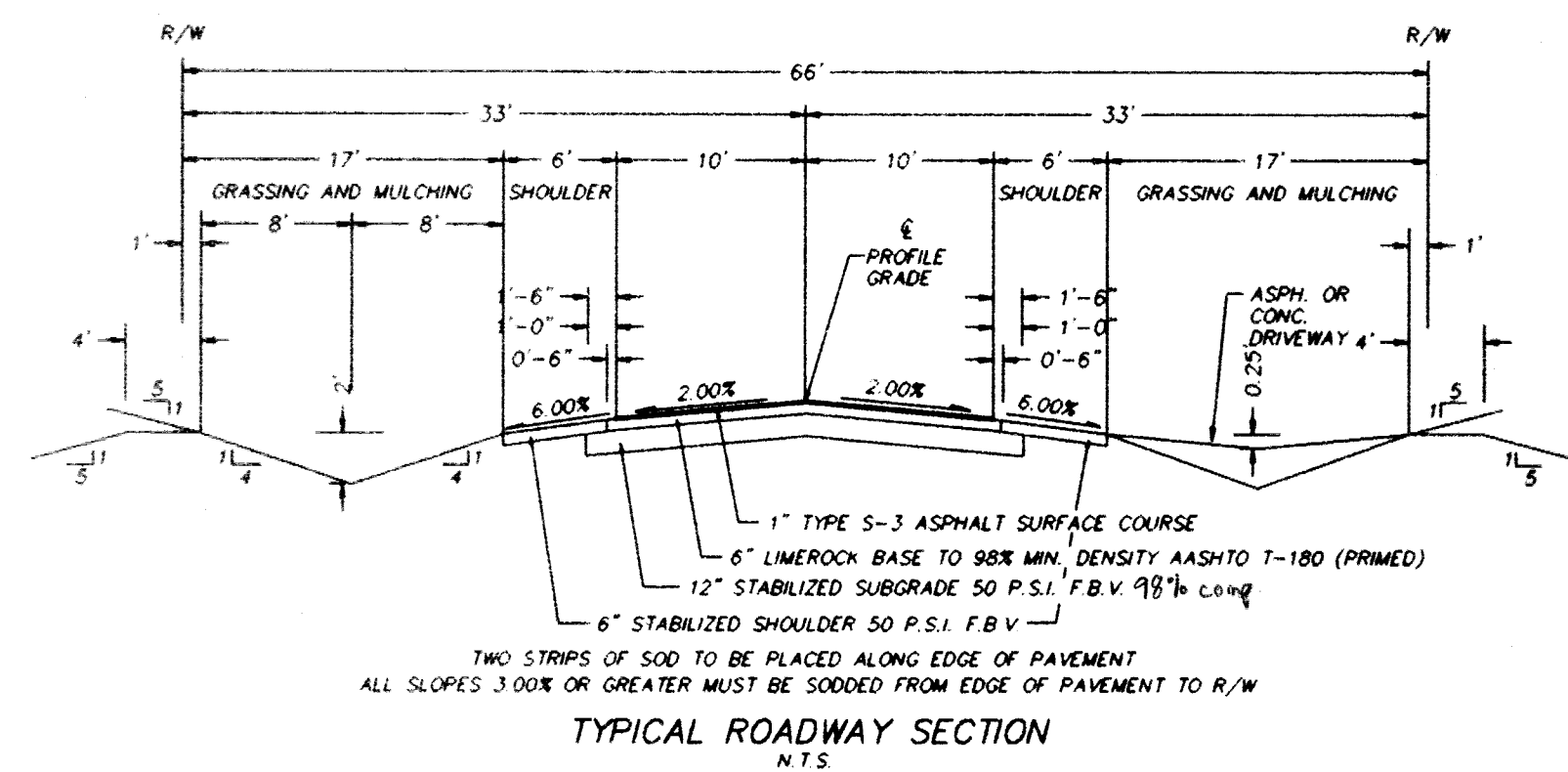
SIDES TO BE SOODED, BOTTOM TO BE SEEDED AND MULCHED

SECTION A-A  
N.T.S.



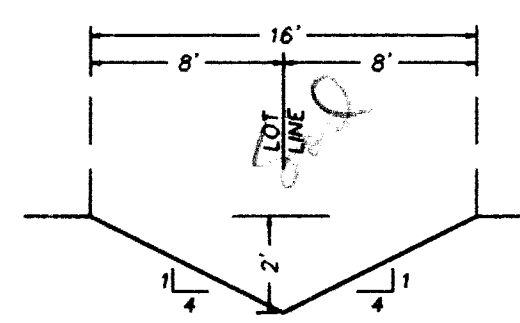
SIDES TO BE SOODED, BOTTOM TO BE SEEDED AND MULCHED

SECTION B-B  
N.T.S.

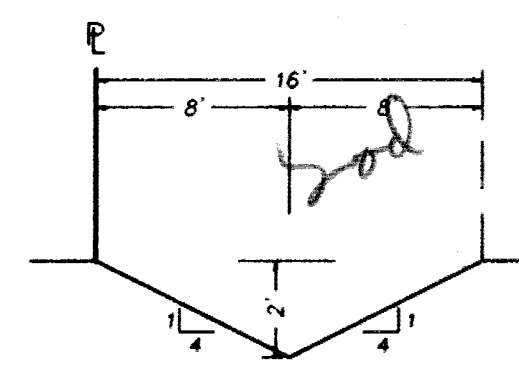


TWO STRIPS OF SOO TO BE PLACED ALONG EDGE OF PAVEMENT  
ALL SLOPES 3.00% OR GREATER MUST BE SOODED FROM EDGE OF PAVEMENT TO R/W

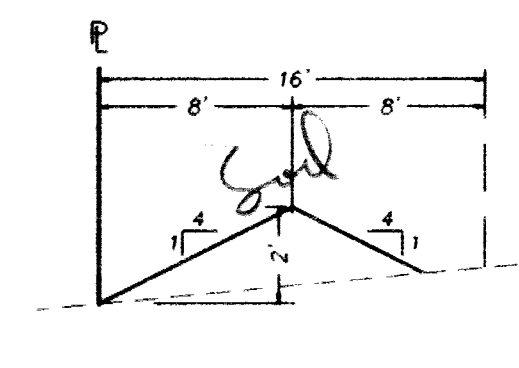
TYPICAL ROADWAY SECTION  
N.T.S.



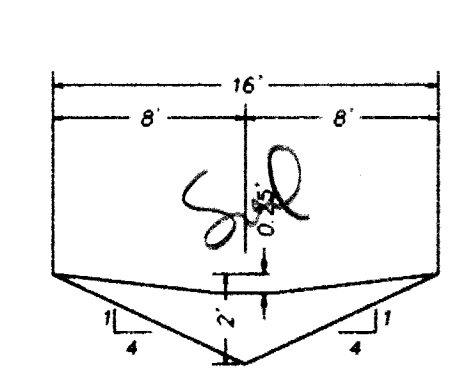
SECTION E-E  
N.T.S.



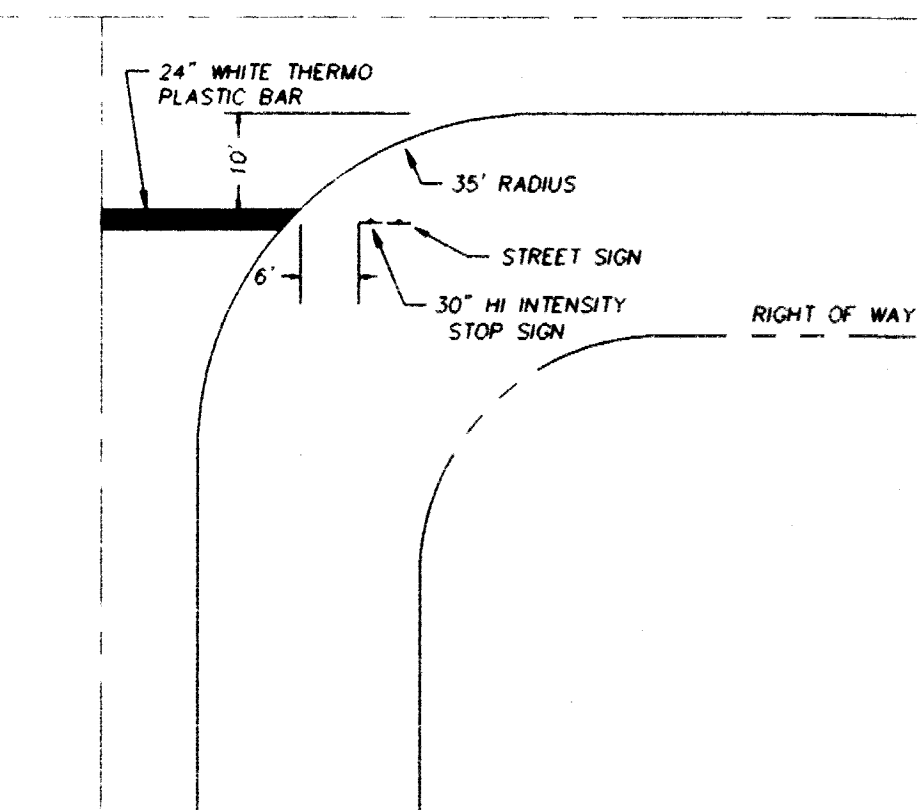
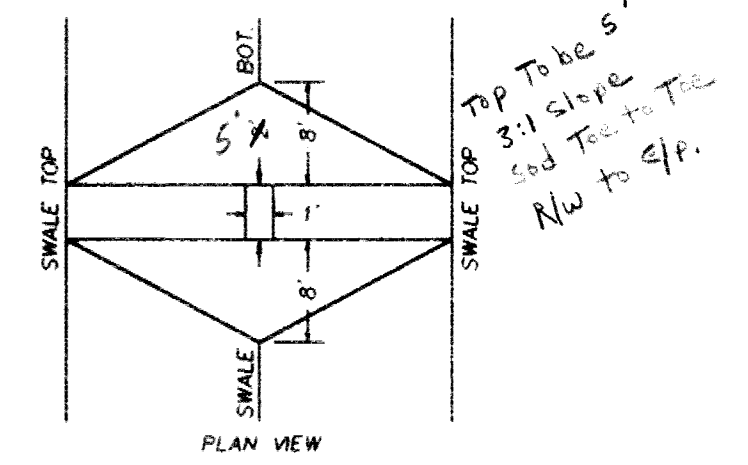
SECTION F-F  
N.T.S.



SECTION G-G  
N.T.S.



TYPICAL SWALE CHECK  
N.T.S.



STOP BAR, STOP SIGN AND STREET SIGN  
LOCATION DETAIL  
SCALE 1"=20'

DAVID L. GUTTS, P.E. FL REG NO 47684  
DATE 8/18/95

W C WICKS CONSULTING SERVICES, INC.  
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DETAILS  
THE VISTAS  
PHASE 4

Drawn	JFS	REVISION	DATE
Checked	DLC	W.R.A. T. REMOVED	6-27-95
Date	3-22-95		
Scale	AS SHOWN		
File No.	12293-10		

Sheet: 10 Of 10