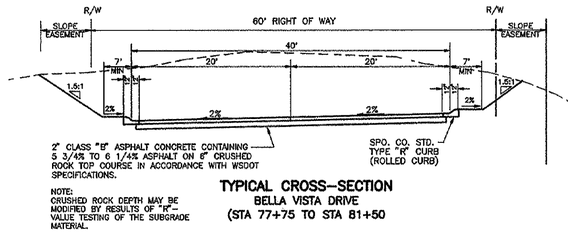
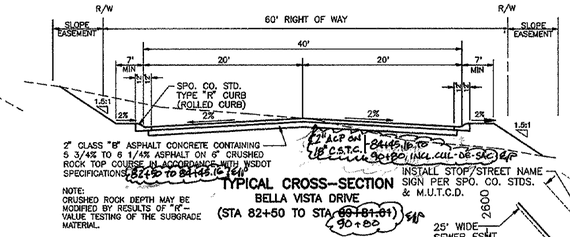
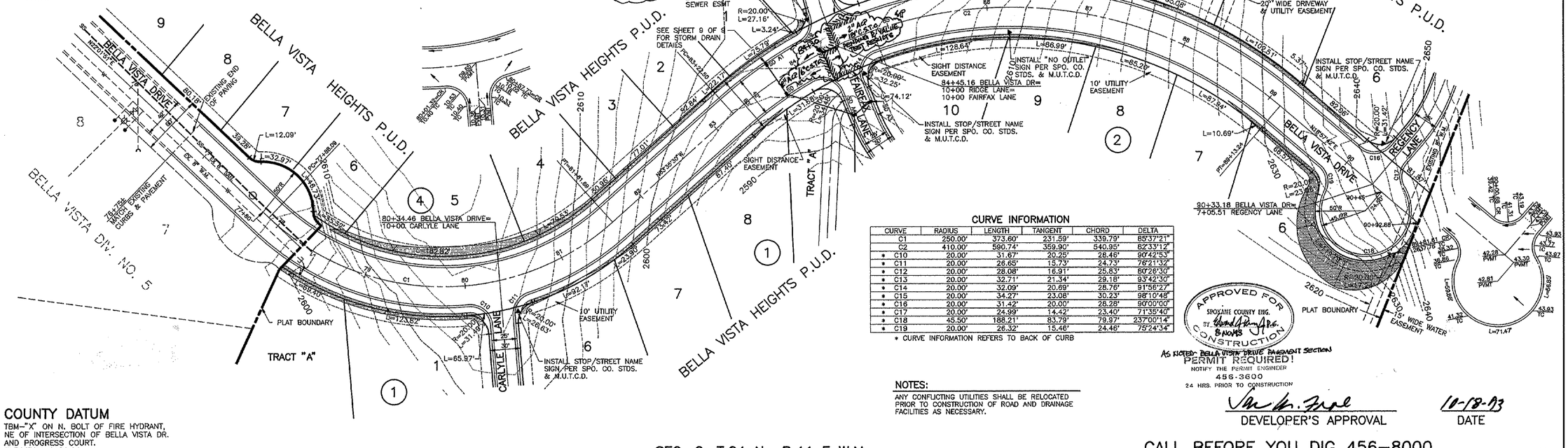


TYPICAL CROSS-SECTION
BELLA VISTA DRIVE
(STA 77+75 TO STA 81+50



TYPICAL CROSS-SECTION
BELLA VISTA DRIVE
(STA 82+50 TO STA ~~83+81.01~~ 90+60)



CURVE INFORMATION

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
C1	250.00'	373.60'	231.59'	339.79'	85°37'21"
C2	410.00'	590.74'	359.90'	540.95'	82°33'12"
* C10	20.00'	31.67'	20.25'	28.46'	90°42'53"
* C11	20.00'	26.65'	15.73'	24.73'	76°21'32"
* C12	20.00'	28.08'	16.91'	25.83'	80°26'30"
* C13	20.00'	32.71'	21.34'	29.18'	93°42'30"
* C14	20.00'	32.09'	20.69'	28.76'	91°56'27"
* C15	20.00'	34.27'	23.08'	30.23'	98°10'48"
* C16	20.00'	31.42'	20.00'	28.28'	90°00'00"
* C17	20.00'	24.99'	14.42'	23.40'	71°35'40"
* C18	45.50'	188.21'	83.79'	79.97'	237°00'14"
* C19	20.00'	26.32'	15.46'	24.46'	75°24'34"

* CURVE INFORMATION REFERS TO BACK OF CURB

APPROVED FOR CONSTRUCTION
SPOKANE COUNTY ENG.
BY ... P.E.
8-NOV-93

AS NOTED: BELLA VISTA DRIVE PAVEMENT SECTION
PERMIT REQUIRED!
NOTIFY THE PERMIT ENGINEER
456-3600
24 HRS. PRIOR TO CONSTRUCTION

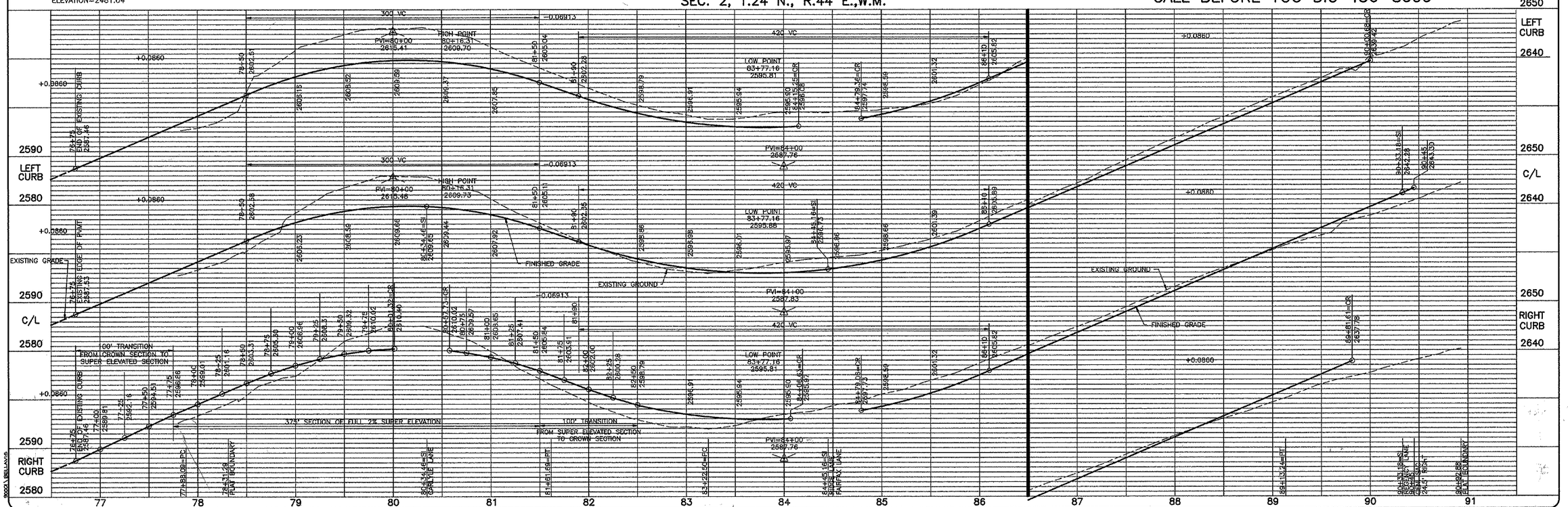
NOTES:
ANY CONFLICTING UTILITIES SHALL BE RELOCATED PRIOR TO CONSTRUCTION OF ROAD AND DRAINAGE FACILITIES AS NECESSARY.

DEVELOPER'S APPROVAL — DATE 10-18-93

COUNTY DATUM
TBM-"X" ON N. BOLT OF FIRE HYDRANT, NE OF INTERSECTION OF BELLA VISTA DR. AND PROGRESS COURT.
ELEVATION=2481.04

SEC. 2, T.24 N., R.44 E.,W.M.

CALL BEFORE YOU DIG 456-8000



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

DATE 10/16/93
DWN. MWK
CHK. SPS
APP. SPS

NO.	DATE	BY	REVISIONS

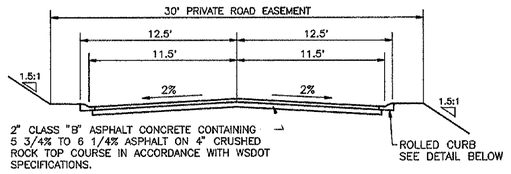
INLAND PACIFIC ENGINEERING
South 25 Altamont Spokane, Washington 99202
(509) 535-1410

BELLA VISTA HEIGHTS P.U.D.
BELLA VISTA DRIVE
STREET
(P-1666)

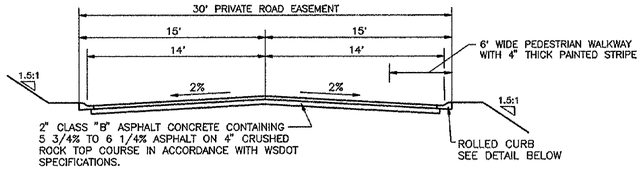
SHEET 1 OF 9
JOB NUMBER 90001

1666

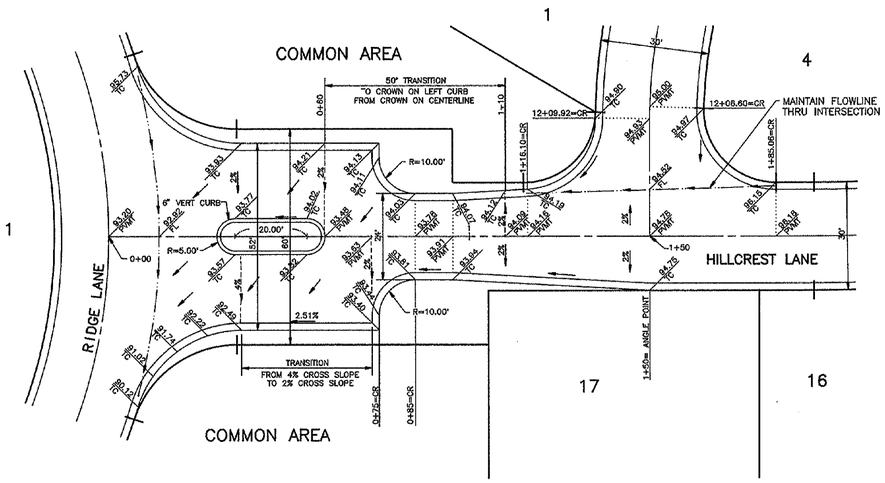
LP1666-PP-1.TIF



TYPICAL CROSS-SECTION
CARLYLE LANE, FAIRFAX LANE, CAMUS LANE, WYNGATE LANE, REGENCY LANE, TERRACE LANE



TYPICAL CROSS-SECTION
HILLCREST LANE, RIDGE LANE, BELLAIRE LANE

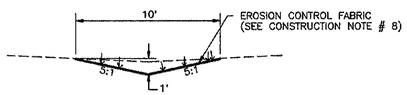


HILLCREST LANE ENTRANCE DETAIL

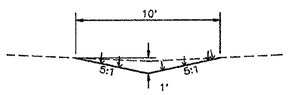
DEVELOPER'S APPROVAL — DATE 10-18-93

CONSTRUCTION NOTES

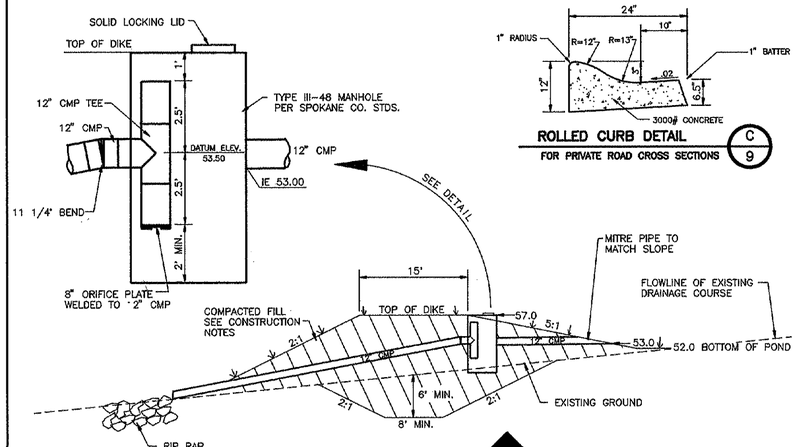
1. The Standard Specifications governing work on this project shall be the 1991 Standard Specifications for Road, Bridge and Municipal Construction as promulgated by Washington State Dept. of Transportation and as currently adopted by Spokane County
2. Clear and grub the entire site of excavation and embankment in accordance with Section 2-01 of the Standard Specifications, except that burning if allowed shall be in accordance with regulations of the Spokane County Air Pollution Control Authority.
3. All required embankment shall be placed in accordance with paragraph 2-03.3(14)A and compacted in accordance with paragraph 2-03.3(14)C, Method C, of the Standard Specifications, except that the minimum required compaction shall be 95%(ASTM D1557). Material for embankment construction is to be obtained from excess excavation material from road construction elsewhere within the Bella Vista Plat. All required excavation shall be incidental to the embankment requirements of the project. Embankment material will be a mixture of medium textured silt loam, decomposed granite, and fractured rock obtained from excess excavated material from road construction activities elsewhere on the Bella Vista site. The contractor shall mix the available soil materials to create a homogeneous embankment material. Embankment construction methods shall be in accordance with paragraph 2-03.3(14)A, except that the top 4 inches of the sloping sides of the embankment shall be native top soil material.
4. The Contractor shall employ at his own expense a soils consultant approved by the Owner to determine optimum desired moisture content and to perform up to 50 compaction density tests. Compaction tests shall be taken at a minimum of 2 locations on each 18" lift of embankment construction. The soils consultant shall keep written records of all tests and upon completion of embankment construction shall submit 3 copies of a written report which verifies that compaction requirements have been met.
5. Temporary erosion control during construction shall be accomplished by constructing a silt fence around the construction site as indicated below. The silt fence shall be 6 mil. polyethylene plastic film 6 to 10 ft. wide with one edge secured to natural ground with a small continuous earth berm piled on top of the plastic, and the other edge supported 12" to 18" above the natural ground with wood lath stake driven into the ground and spaced approximately 10 feet apart.
6. After completion of all clearing, grubbing, excavation and embankment construction, seed all cut bank slopes and fill embankments and other areas disturbed during construction. Seed mixture should be streambank wheatgrass (Sodar) 33.3%, Tall Wheatgrass (Alkar) 33.33% and intermediate wheatgrass (Greenar) 33.4%. Application shall be at the rate of 60 lbs. seed mixture per acre and shall include a fertilizer mix which yields 135 lbs./acre total Nitrogen as N, 60 lbs./acre available as Phosphoric P2O5, and 60 lbs./acre soluble Potash K2O. The seed and fertilizer mixture shall be sprayed on as a mulch with a tackifier of Terra Tac AR or J-Tac HS applied at the rate recommended by the manufacturer, and with wood cellulose fiber applied at 150 lbs./acre.
7. Where Rip Rap is called for in plans, the contractor shall overexcavate a depth of 2 feet below finished grade shown and place rock rip rap at culvert outlet as shown. Rip rap shall be placed on top of filter fabric ("AMOCO" #4545 or approved equal.)
8. Erosion control fabric to be North American Green P-300, Enkamat 7070, or approved equal.



SECTION C/9 NTS

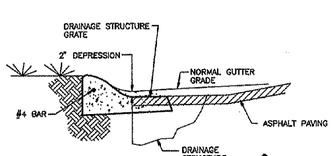


SECTION D/9 NTS

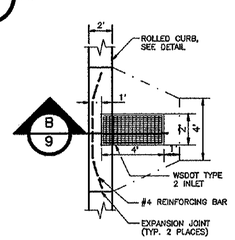


SECTION A/9

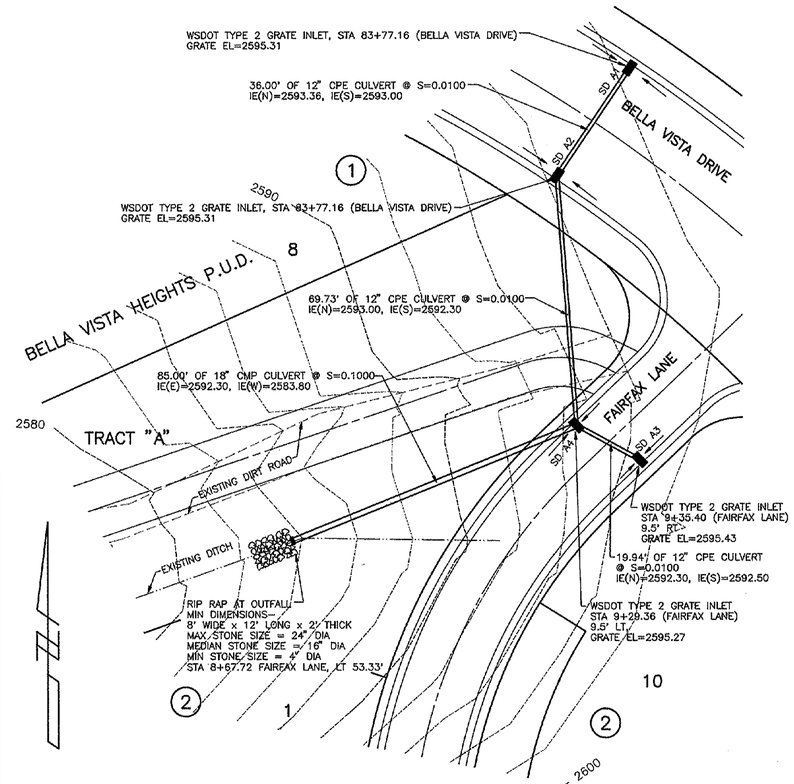
ROLLED CURB DETAIL C/9
FOR PRIVATE ROAD CROSS SECTIONS



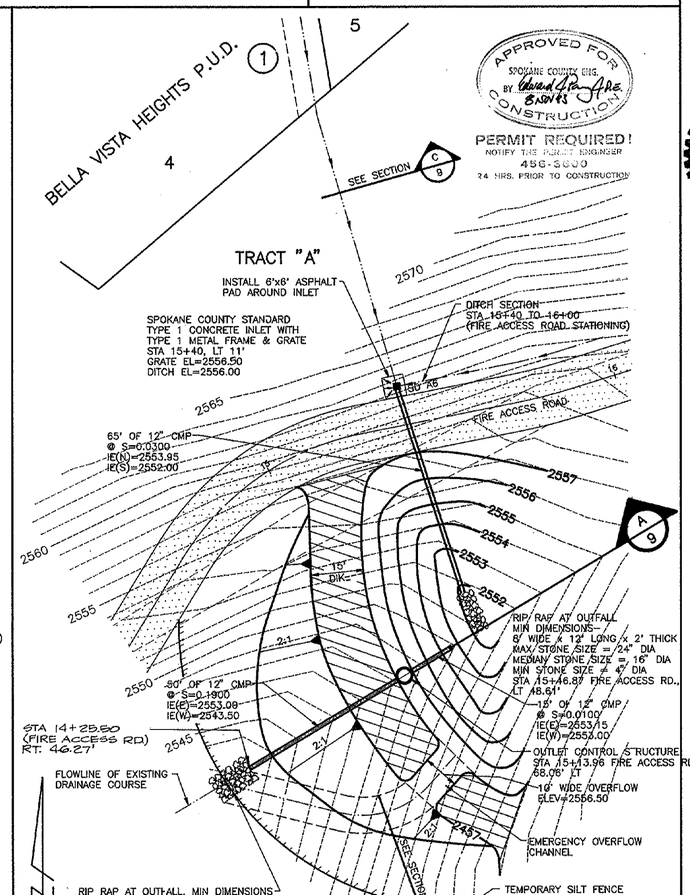
SECTION B/9 NTS



CURB TRANSITION DETAIL B/9 NTS



STORM DRAINAGE DETAIL
SCALE: 1"=20'



BELLA VISTA HEIGHTS P.U.D. DETENTION POND
SCALE: 1"=20'

APPROVED FOR CONSTRUCTION — SPOKANE COUNTY ENG. — BY 8-30-93
PERMIT REQUIRED! NOTIFY THE PERMIT ENGINEER 456-3600 24 HRS. PRIOR TO CONSTRUCTION

SCALE: HORIZONTAL AS SHOWN, VERTICAL N/A
DATE 10/18/93 — DWN. MRK — CHK. SPS — APP. SPS

NO.	DATE	BY	REVISIONS

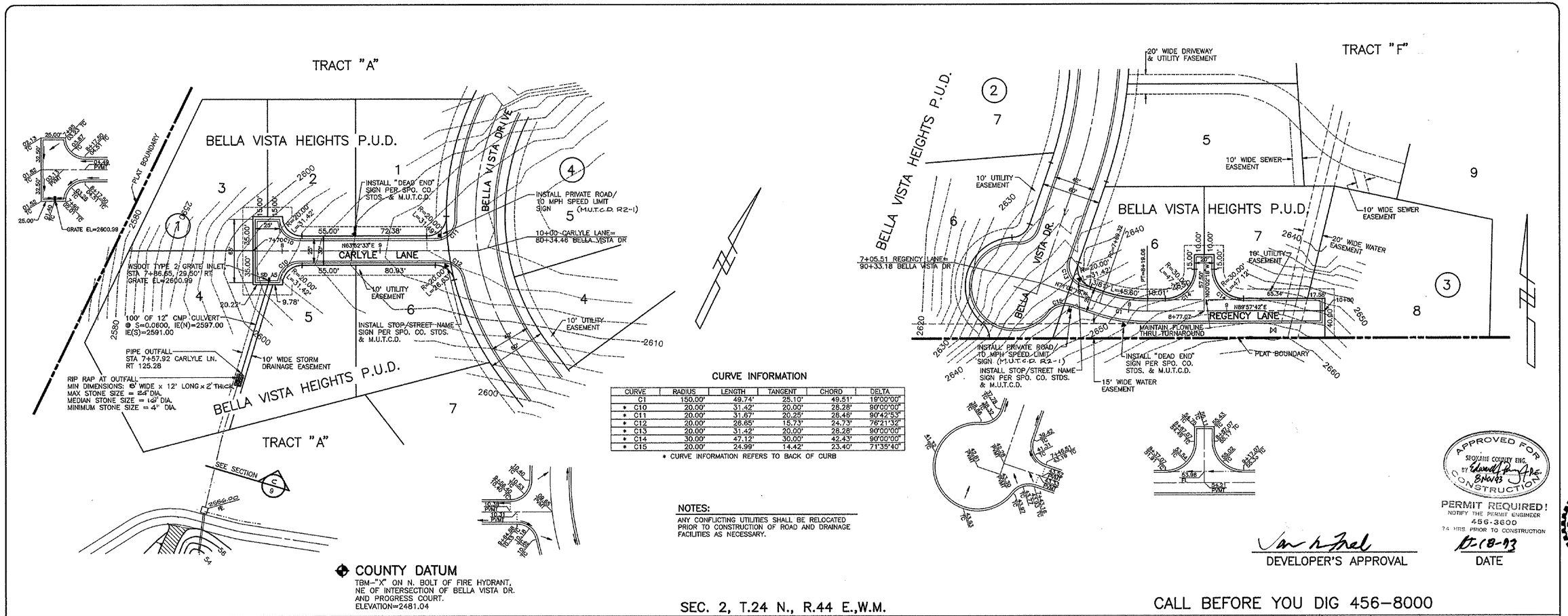
INLAND PACIFIC ENGINEERING
South 25 Altamont Spokane, Washington 99202
(509) 535-1410

BELLA VISTA HEIGHTS STREET
DETAIL SHEET

SHEET 9 OF 9
JOB NUMBER 90001

LP1666-UTIL-1.TIF

1666



CURVE INFORMATION

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
C1	150.00'	49.74'	25.10'	49.51'	19°00'00"
* C10	20.00'	31.42'	20.00'	28.28'	90°00'00"
* C11	20.00'	31.67'	20.25'	28.46'	90°42'53"
* C12	20.00'	26.65'	15.73'	24.73'	76°21'32"
* C13	20.00'	31.42'	20.00'	28.28'	90°00'00"
* C14	30.00'	47.12'	30.00'	42.43'	90°00'00"
* C15	20.00'	24.99'	14.42'	23.40'	71°35'40"

* CURVE INFORMATION REFERS TO BACK OF CURB

NOTES:

ANY CONFLICTING UTILITIES SHALL BE RELOCATED PRIOR TO CONSTRUCTION OF ROAD AND DRAINAGE FACILITIES AS NECESSARY.

APPROVED FOR CONSTRUCTION
SPOKANE COUNTY ENG.
BY 8/10/93

PERMIT REQUIRED!
NOTIFY THE PERMIT ENGINEER
456-3600
24 HRS PRIOR TO CONSTRUCTION

DEVELOPER'S APPROVAL

10-18-93
DATE

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

DATE 10/16/93
DWN. MWK
CHK. SPS
APP. SPS

NO.	DATE	BY	REVISIONS

EXPIRES 1-10-94

INLAND PACIFIC ENGINEERING
South 25 Altamont Spokane, Washington 99202
(509) 535-1410

BELLA VISTA HEIGHTS P.U.D.
CARLYLE LANE
REGENCY LANE
STREET
(P-1666)

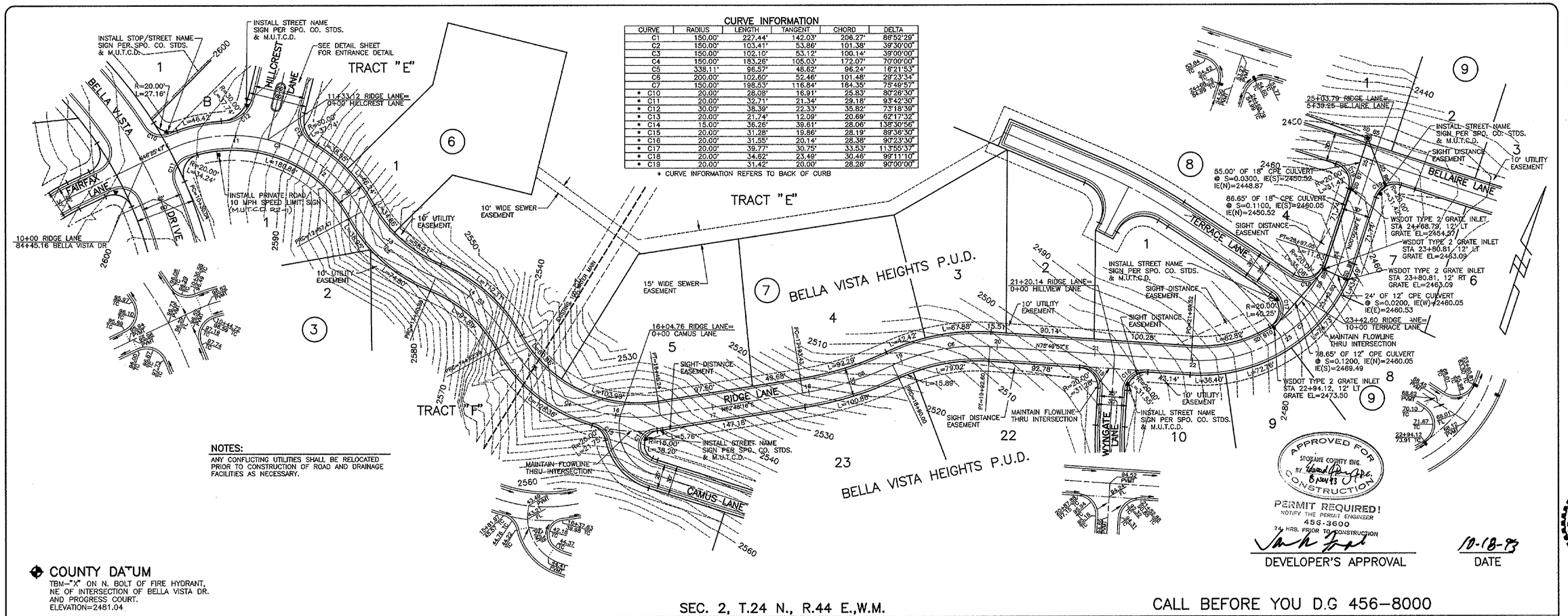
SHEET 2 OF 9
JOB NUMBER 90001

1666

CURVE INFORMATION

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
C1	150.00'	227.44'	142.03'	206.27'	86°52'29"
C2	150.00'	103.41'	53.86'	101.38'	39°30'00"
C3	150.00'	102.10'	53.12'	100.14'	39°00'00"
C4	150.00'	183.26'	105.03'	172.07'	70°00'00"
C5	338.11'	96.57'	48.62'	96.24'	16°21'53"
C6	200.00'	102.60'	52.46'	101.48'	29°23'34"
C7	150.00'	198.53'	116.84'	184.35'	75°49'57"
* C10	20.00'	28.08'	16.91'	25.83'	80°26'30"
* C11	20.00'	32.71'	21.34'	29.18'	93°42'30"
* C12	30.00'	38.39'	22.33'	35.82'	73°18'39"
* C13	20.00'	21.74'	12.09'	20.69'	62°17'32"
* C14	15.00'	36.26'	39.61'	28.06'	138°30'56"
* C15	20.00'	31.28'	19.86'	28.19'	89°36'30"
* C16	20.00'	31.55'	20.14'	28.38'	90°23'30"
* C17	20.00'	39.77'	30.75'	33.53'	113°55'37"
* C18	20.00'	34.62'	23.49'	30.46'	99°11'10"
* C19	20.00'	31.42'	20.00'	28.28'	90°00'00"

* CURVE INFORMATION REFERS TO BACK OF CURB



NOTES:

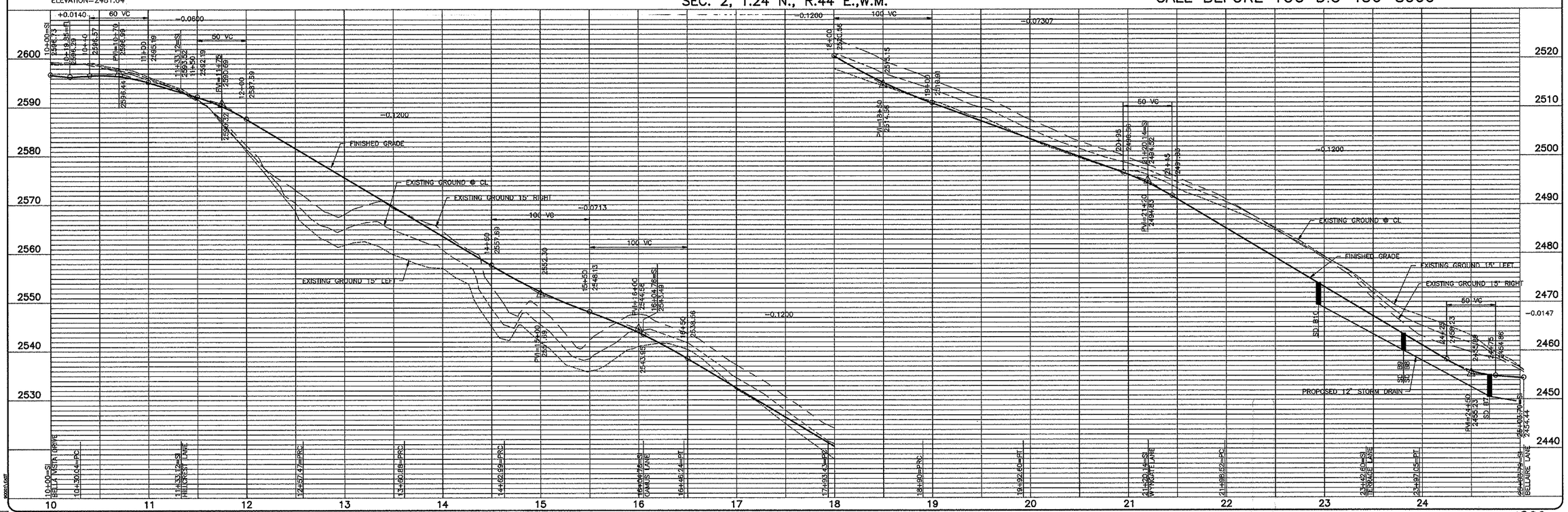
ANY CONFLICTING UTILITIES SHALL BE RELOCATED PRIOR TO CONSTRUCTION OF ROAD AND DRAINAGE FACILITIES AS NECESSARY.

COUNTY DATUM

TBM-"X" ON N. BOLT OF FIRE HYDRANT, NE OF INTERSECTION OF BELLA VISTA DR. AND PROGRESS COURT. ELEVATION=2481.04

SEC. 2, T.24 N., R.44 E.,W.M.

CALL BEFORE YOU D.G 456-8000



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

DATE 10/18/93 DWN. MWK CHK. SPS APP. SPS

NO.	DATE	BY	REVISIONS

STEVEN P. SOLLIS — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER

INLAND PACIFIC ENGINEERING
South 25 Altamont Spokane, Washington 99202
(509) 535-1410

BELLA VISTA HEIGHTS P.U.D.
RIDGE LANE — STREET
(P-1666)

SHEET 3 OF 9
JOB NUMBER 90001

1666

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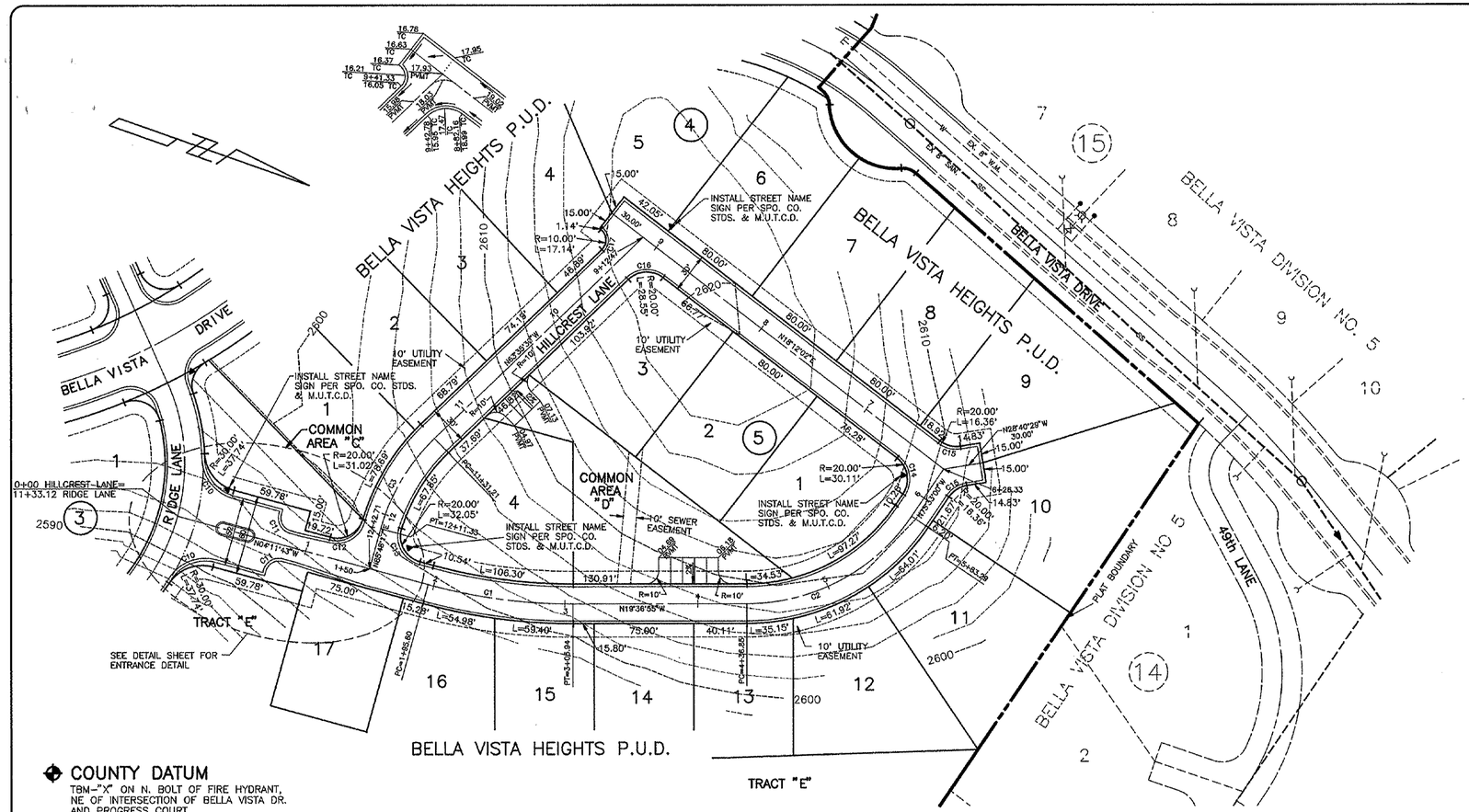


COUNTY DATUM

TBM-"X" ON N. BOLT OF FIRE HYDRANT, NE OF INTERSECTION OF BELLA VISTA DR. AND PROGRESS COURT.
ELEVATION=2481.04

CURVE INFORMATION

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
C1	410.00'	110.34'	55.51'	110.01'	15°25'11"
C2	150.00'	146.44'	79.65'	1-0.69'	55°56'05"
C3	150.00'	80.12'	41.04'	79.17'	30°36'13"
* C10	30.00'	38.39'	22.33'	35.82'	73°18'39"
* C11	10.00'	15.71'	10.00'	14.14'	90°00'00"
* C12	20.00'	30.13'	18.76'	27.36'	86°19'22"
* C13	20.00'	32.05'	20.64'	28.73'	91°48'21"
* C14	20.00'	30.11'	18.73'	27.34'	86°14'58"
* C15	20.00'	16.36'	8.67'	15.91'	46°52'31"
* C16	20.00'	28.55'	17.32'	26.19'	81°47'32"
* C17	10.00'	17.14'	11.55'	15.12'	98°12'28"

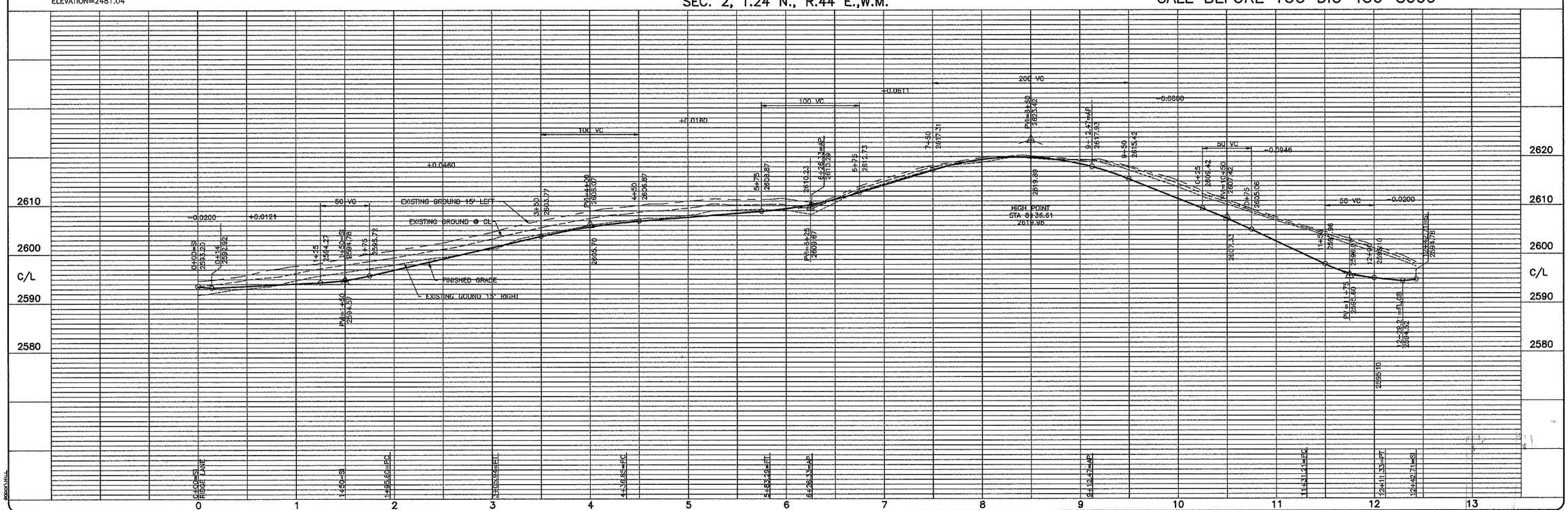
* CURVE INFORMATION REFERS TO BACK OF CURB

APPROVED FOR CONSTRUCTION
SPOKANE COUNTY ENG.
BY 8-NOV-93
PERMIT REQUIRED!
NOTIFY THE PERMIT ENGINEER
456-3600
24 HRS. PRIOR TO CONSTRUCTION

DEVELOPER'S APPROVAL

10-18-93
DATE

CALL BEFORE YOU DIG 456-8000



SCALE	
HORIZONTAL	1"=20'
VERTICAL	1"=10'

DATE 10/16/93
DWN. MWK
CHK. SPS
APP. SPS

NO.	DATE	BY	REVISIONS

EXPIRES 1-10-94

INLAND PACIFIC ENGINEERING
South 25 Altamont Spokane, Washington 99202
(509) 535-1410

BELLA VISTA HEIGHTS P.U.D.
HILLCREST LANE STREET
(P-1666)

SHEET 4 OF 9
JOB NUMBER 90001

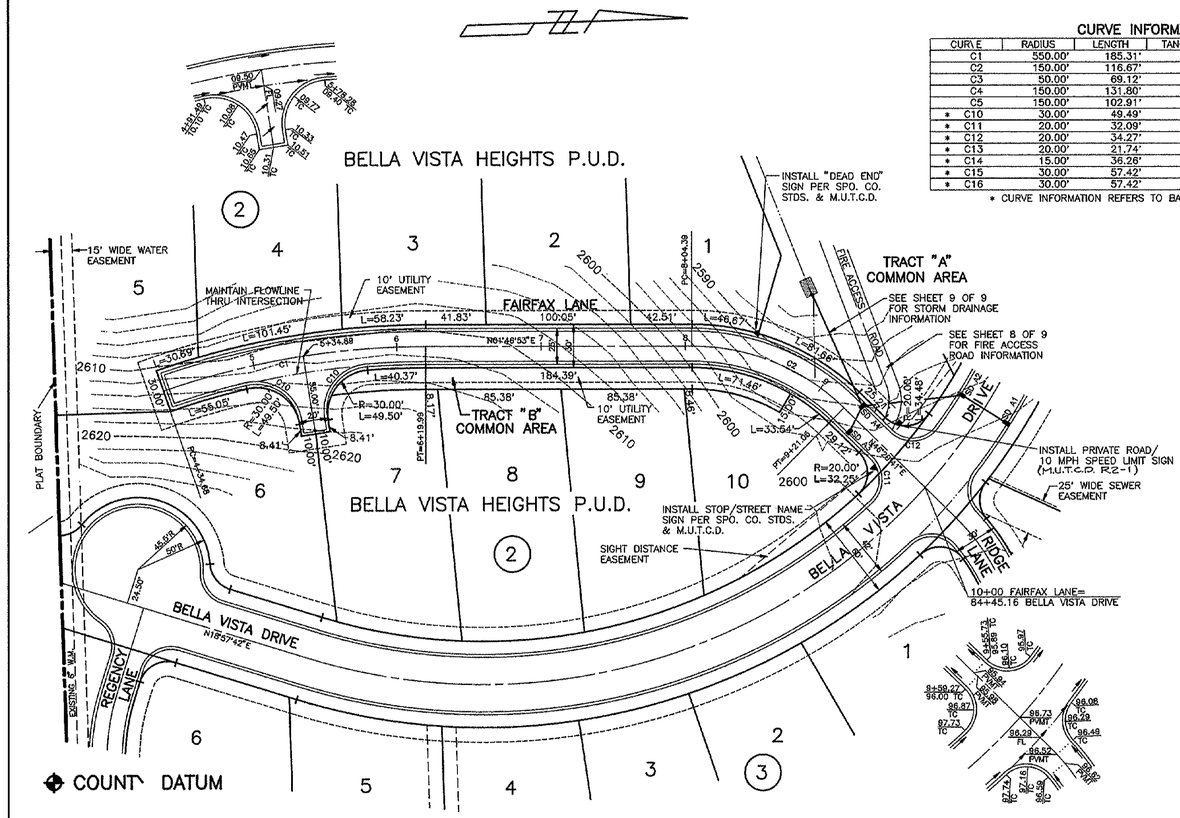
1666

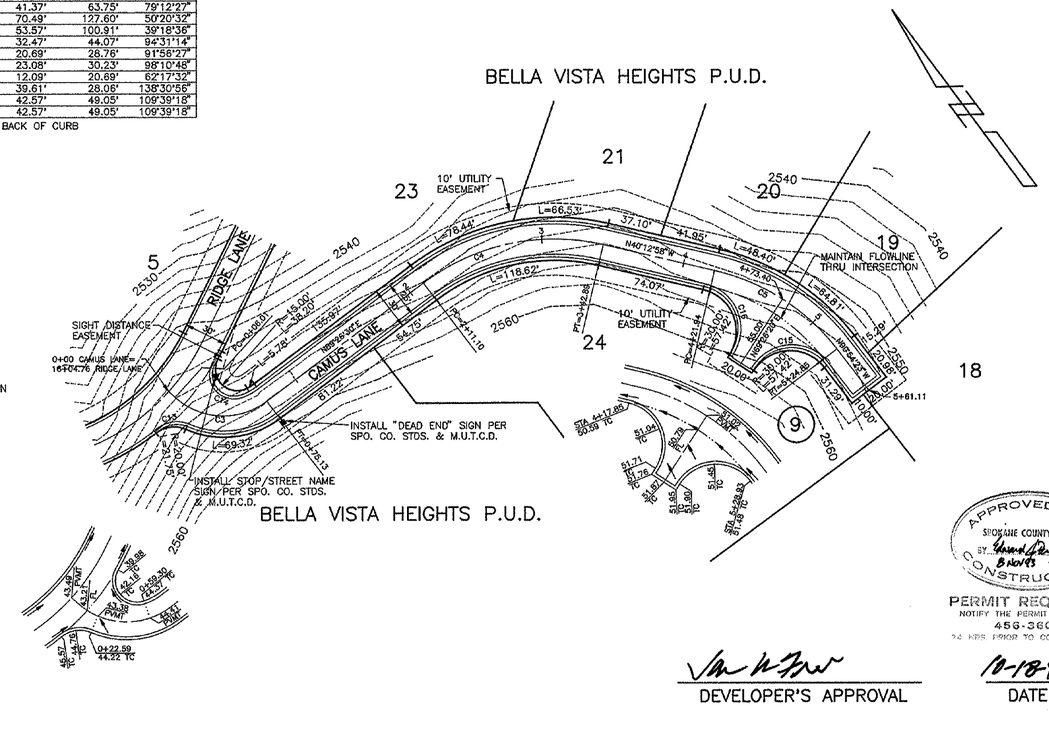
LP1666-PP-4.TIF

CURVE INFORMATION

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
C1	550.00'	185.31'	93.54'	184.44'	19°18'18"
C2	150.00'	116.67'	61.46'	113.75'	44°33'48"
C3	50.00'	69.12'	41.37'	63.75'	79°12'27"
C4	150.00'	131.80'	70.49'	127.60'	50°20'32"
C5	150.00'	102.91'	53.57'	100.91'	39°18'36"
* C10	30.00'	49.49'	32.47'	44.07'	94°31'14"
* C11	20.00'	32.09'	20.69'	28.76'	91°56'27"
* C12	20.00'	34.27'	23.08'	30.23'	98°10'48"
* C13	20.00'	21.74'	12.09'	20.69'	62°17'32"
* C14	15.00'	36.26'	39.61'	28.06'	138°30'56"
* C15	30.00'	57.42'	42.57'	49.05'	109°39'18"
* C16	30.00'	57.42'	42.57'	49.05'	109°39'18"

* CURVE INFORMATION REFERS TO BACK OF CURB





SEC. 2, T.24 N., R.44 E.,W.M.

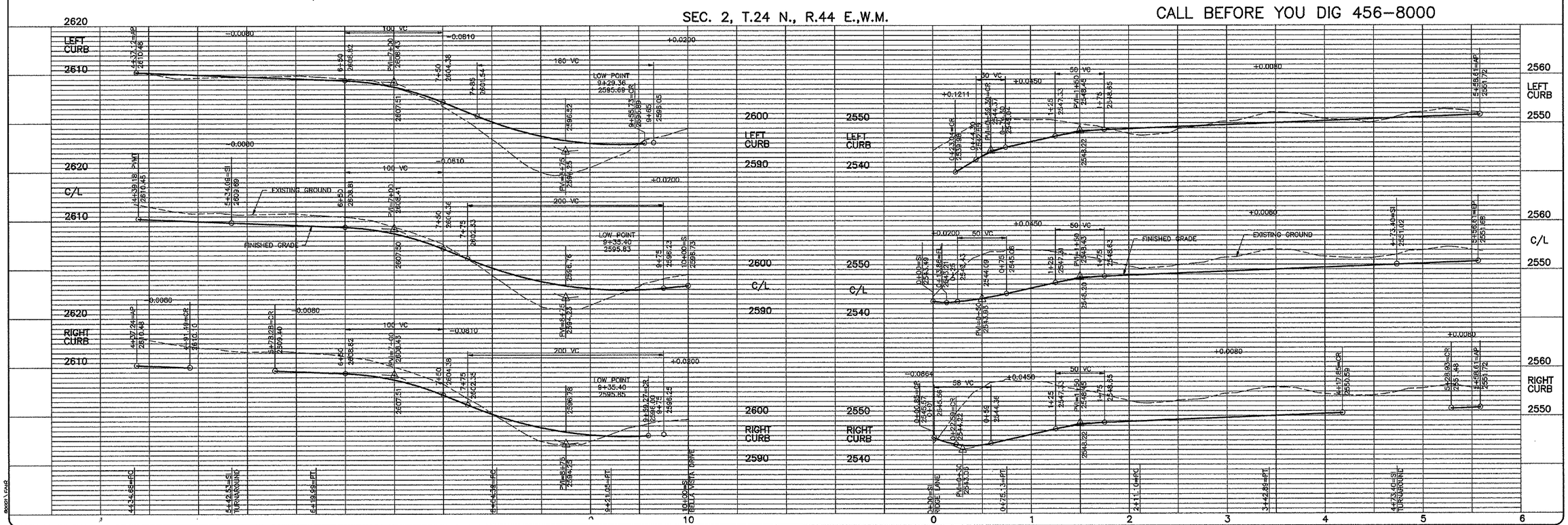
CALL BEFORE YOU DIG 456-8000

APPROVED FOR SPOKANE COUNTY ENG. BY 8/10/93 CONSTRUCTION

PERMIT REQUIRED! NOTIFY THE PERMIT ENGINEER 456-3600 24 HRS. PRIOR TO CONSTRUCTION

DEVELOPER'S APPROVAL

10-18-93
DATE



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

DATE 10/16/93 DWN. MWK CHK. SPS APP. SPS

REVISIONS

NO.	DATE	BY

EXPIRES 1-10-94

INLAND PACIFIC ENGINEERING
South 25 Altamont Spokane, Washington 99202
(509) 535-1410

BELLA VISTA HEIGHTS P.U.D.
FAIRFAX LANE
CAMUS LANE
(P-1666)

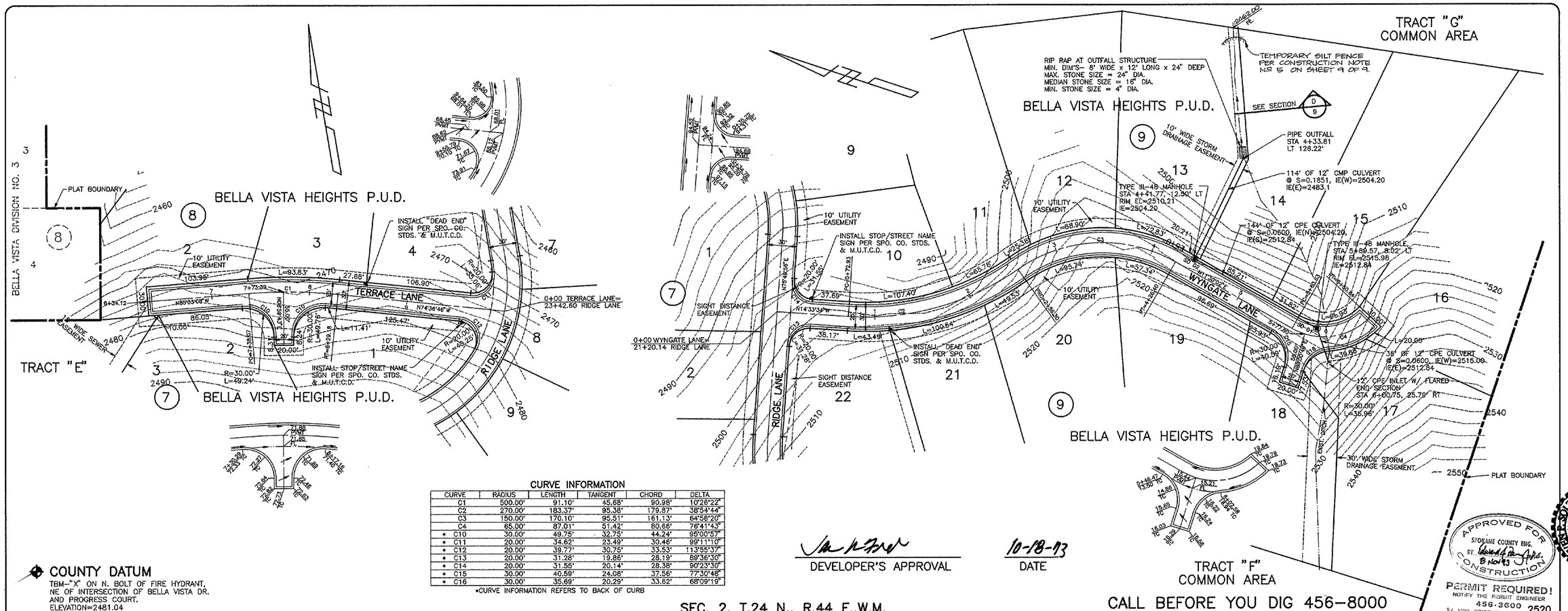
STREET

SHEET 5 OF 9

JOB NUMBER 90001

1666

LP1666-PP-S.TIF



CURVE INFORMATION

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
C1	500.00'	91.10'	45.68'	90.98'	10°26'22"
C2	270.00'	183.37'	95.38'	179.87'	38°54'44"
C3	150.00'	170.10'	95.51'	161.13'	64°58'20"
C4	65.00'	87.01'	51.42'	80.66'	76°41'43"
* C10	30.00'	49.75'	32.75'	44.24'	95°00'57"
* C11	20.00'	34.62'	23.49'	30.46'	99°11'10"
* C12	20.00'	39.77'	30.75'	33.53'	113°55'37"
* C13	20.00'	31.28'	19.86'	28.19'	89°36'30"
* C14	20.00'	31.55'	20.14'	28.38'	90°23'30"
* C15	30.00'	40.59'	24.08'	37.56'	77°30'48"
* C16	30.00'	35.69'	20.29'	33.62'	68°09'19"

*CURVE INFORMATION REFERS TO BACK OF CURB

COUNTY DATUM
TBM-"X" ON N. BOLT OF FIRE HYDRANT, NE OF INTERSECTION OF BELLA VISTA DR. AND PROGRESS COURT.
ELEVATION=2481.04

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

DATE 10/18/93 DWN. MWK CHK. SPS APP. SPS

REVISIONS

NO.	DATE	BY

EXPIRES 1-10-94

INLAND PACIFIC ENGINEERING
South 25 Altamont Spokane, Washington 99202
(509) 535-1410

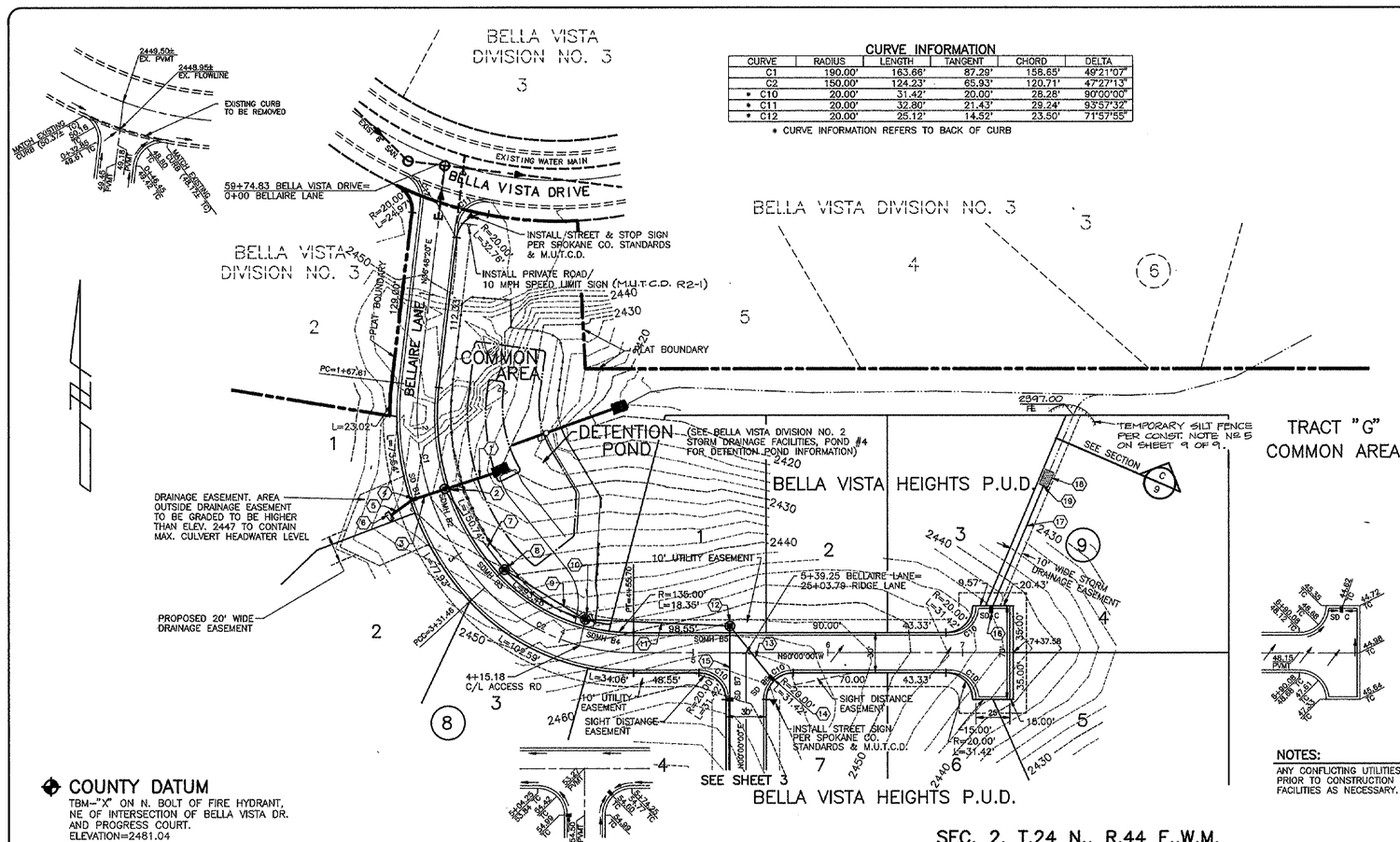
BELLA VISTA HEIGHTS P.U.D.
TERRACE LANE
WYNGATE LANE
STREET
(P-1666)

SHEET 6 OF 9

JOB NUMBER 90001

1666

LP1666-PP-6.TIF



CURVE INFORMATION

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
C1	190.00'	163.66'	87.29'	158.65'	49°21'07"
C2	150.00'	124.23'	65.93'	120.71'	47°27'13"
* C10	20.00'	31.42'	20.00'	28.28'	90°00'00"
* C11	20.00'	32.80'	21.43'	29.24'	93°57'32"
* C12	20.00'	25.12'	14.52'	23.50'	71°57'55"

* CURVE INFORMATION REFERS TO BACK OF CURB

STORM DRAIN CONSTRUCTION NOTES

1. 37' OF 24" CPE CULVERT @ S=0.1622, IE(W)=2438.00, IE(E)=2432.00
2. WSDOT TYPE 2 GRATE INLET WITH 2' TO 3' HEIGHT OF RISERS PLACED ON TYPE III-48 MANHOLE STRUCTURE WITH REDUCING FLAT SLAB TO MAKE TRANSITION FROM MANHOLE BARREL TO GRATE INLET. STA 2+50, 12' LT, GRATE EL=2446.75
3. 25' OF 18" CPE CULVERT @ S=0.0400, IE(W)=2439.00, IE(E)=2438.00
4. WSDOT TYPE 2 GRATE INLET, STA 2+50, 12' RT, GRATE EL=2446.75
5. 20' OF 18" CPE CULVERT @ S=0.1500, IE(W)=2442.00, IE(E)=2439.00
6. CONCRETE HEADWALL WITH TRASH RACK, STA 2+55.26, 32.37' RT
7. 74.45' OF 18" CPE CULVERT @ S=0.0505, IE(N)=2438.00, IE(S)=2441.76
8. TYPE III-48 MANHOLE W/ SOLID LID, STA 3+31.46, 20' LT, RIM EL=2447.86, IE=2441.76
9. 70.49' OF 18" CPE CULVERT @ S=0.0552, IE(NW)=2441.76, IE(SE)=2445.65
10. TYPE III-48 MANHOLE W/ SOLID LID, STA 4+13.82, 20' LT, RIM EL=2449.34, IE=2445.65
11. 107.48' OF 18" CPE CULVERT @ S=0.0300, IE(W)=2445.65, IE(E)=2448.87
12. TYPE III-48 MANHOLE W/ SOLID LID, STA 5+27.25, 20' LT, RIM EL=2454.58, IE=2448.87
13. 49.45' OF 12" CPE CULVERT @ S=0.0400, IE(W)=2448.87, IE(E)=2450.85
14. WSDOT TYPE 2 GRATE INLET, STA 5+57.99, 18.74' RT, GRATE EL=2454.18
15. 55.00' OF 18" CPE CULVERT @ S=0.0300, IE(N)=2448.87, IE(S)=2450.52
16. WSDOT TYPE 2 GRATE INLET, STA 7+21.32, 32' LT, GRATE EL=2444.21
17. 100.00' OF 18" CMP @ S=0.1500, IE(S)=2440.00, IE(N)=2425.00
18. RIP RAP AT OUTFALL, MIN. DIMENSIONS- 8' WIDE x 12' LONG x 2' THICK MAX STONE SIZE = 24" DIA. MEDIAN STONE SIZE = 16" DIA. MIN STONE SIZE = 4" DIA.
19. PIPE OUTFALL, STA 7+80.14, LT 124.16'

Oct-19-93

COUNTY DATUM

TBM-"X" ON N. BOLT OF FIRE HYDRANT, NE OF INTERSECTION OF BELLA VISTA DR. AND PROGRESS COURT. ELEVATION=2481.04

NOTES:

ANY CONFLICTING UTILITIES SHALL BE RELOCATED PRIOR TO CONSTRUCTION OF ROAD AND DRAINAGE FACILITIES AS NECESSARY.

APPROVED FOR CONSTRUCTION
SPOKANE COUNTY ENG.
BY Richard Pain Jr. P.E.
8-19-93

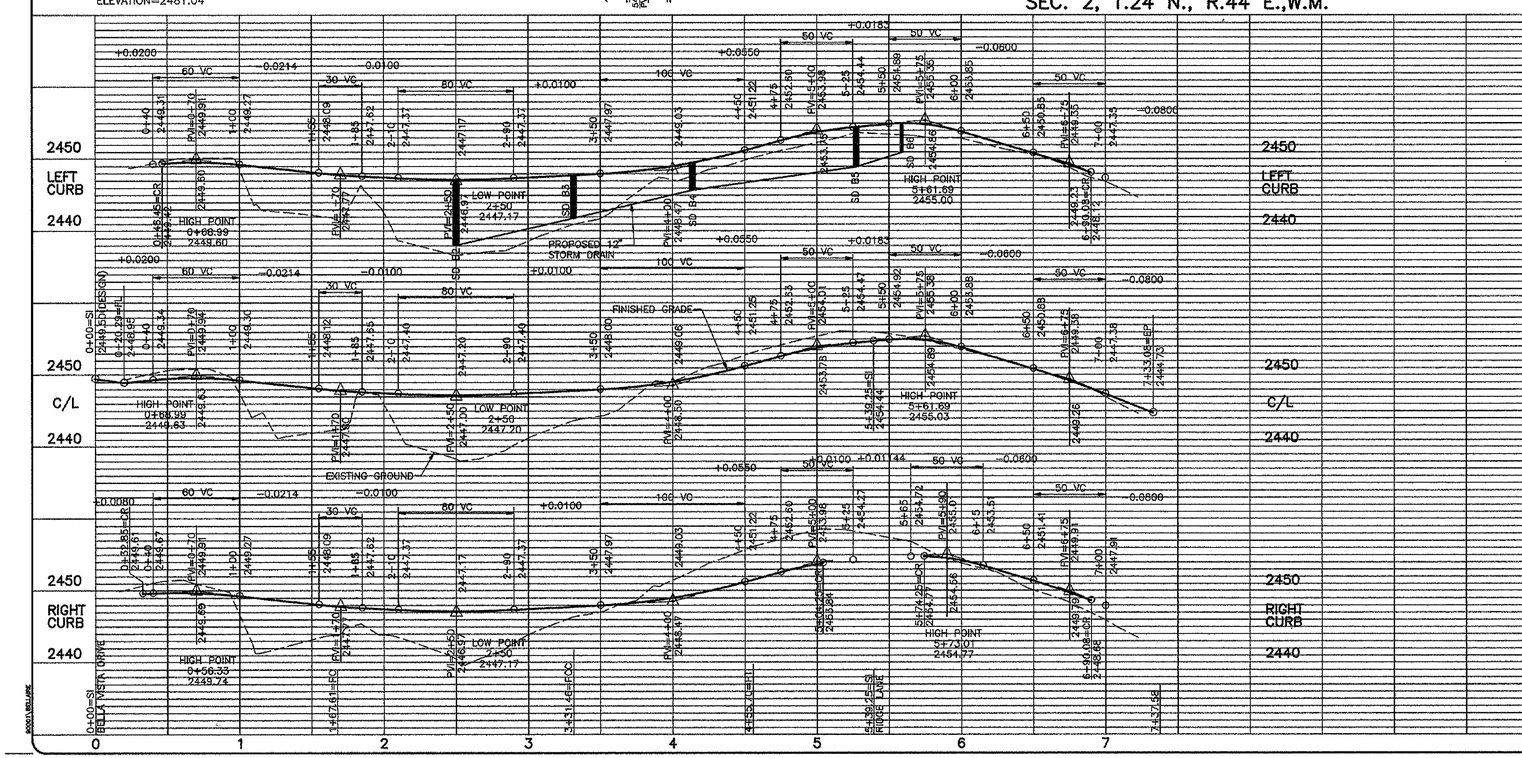
PERMIT REQUIRED!
NOTIFY THE PERMIT ENGINEER
456-2600
24 HRS. PRIOR TO CONSTRUCTION

DEVELOPER'S APPROVAL

10-18-93
DATE

SEC. 2, T.24 N., R.44 E.,W.M.

CALL BEFORE YOU DIG 456-8000



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

DATE 10/18/93 DWN. MMK CHK. SPS APP. SPS

NO.	DATE	BY	REVISIONS

EXPIRES 1-10-94

INLAND PACIFIC ENGINEERING
South 23 Altamont Spokane, Washington 99202
(509) 535-1410

BELLA VISTA HEIGHTS P.U.D.
BELLAIRE LANE
STREET
(P-1666)

SHEET 7 OF 9
JOB NUMBER 90001

1666

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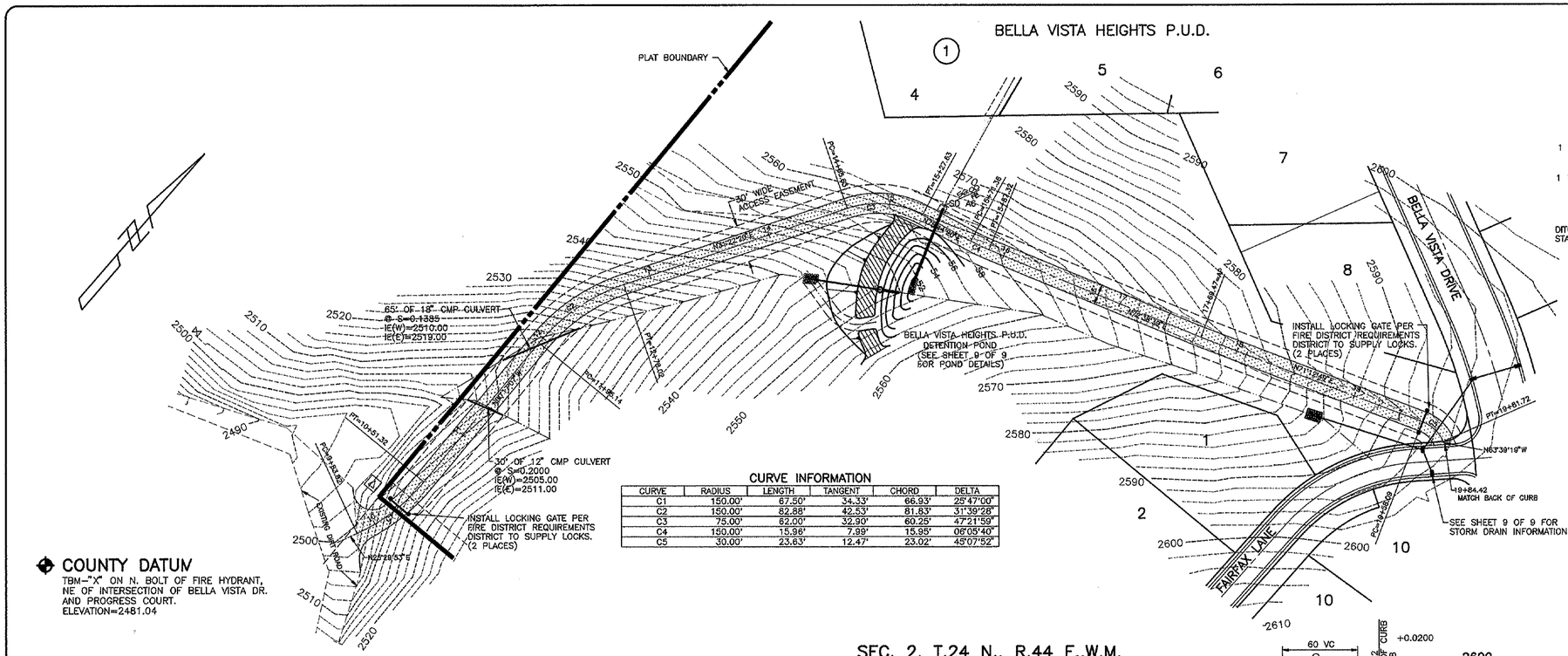
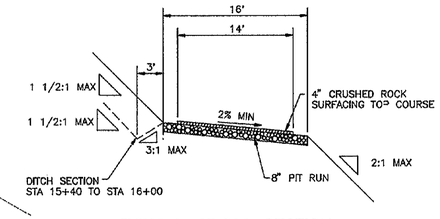
BELLA VISTA HEIGHTS P.U.D.





TYPICAL CROSS SECTION
ACCESS ROAD

FIRE DISTRICT NO. 8 APPROVAL

BY: _____ DATE: Oct-19-93

DEVELOPER'S APPROVAL — DATE: 10-18-93

COUNTY DATUM
TBM-"X" ON N. BOLT OF FIRE HYDRANT, NE OF INTERSECTION OF BELLA VISTA DR. AND PROGRESS COURT.
ELEVATION=2481.04

CURVE INFORMATION

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
C1	150.00'	67.50'	34.33'	66.93'	25°47'00"
C2	150.00'	82.88'	42.53'	81.83'	31°39'28"
C3	75.00'	62.00'	32.90'	60.25'	47°21'59"
C4	150.00'	15.96'	7.99'	15.95'	06°05'40"
C5	30.00'	23.63'	12.47'	23.02'	45°07'52"

SEC. 2, T.24 N., R.44 E.,W.M.

CALL BEFORE YOU DIG 456-8000

APPROVED FOR CONSTRUCTION
SPOKANE COUNTY ENG.
BY: B. HOPES
PERMIT REQUIRED!
NOTIFY THE PERMIT ENGINEER
456-3600
24 HRS. PRIOR TO CONSTRUCTION

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

DATE 10/18/93 DWN. MWK CHK. SPS APP. SPS

REVISIONS

NO.	DATE	BY

STATE OF WASHINGTON — SHERRY P. SPAYS — REGISTERED PROFESSIONAL ENGINEER — 13806 — EXPIRES 1-10-94

INLAND PACIFIC ENGINEERING
South 25 Altamont Spokane, Washington 99202
(509) 535-1410

BELLA VISTA HEIGHTS P.U.D.
FIRE ACCESS ROAD — STREET
(P-1666)

SHEET 8 OF 9
JOB NUMBER 90001

90001/FIRE

LP1666-PP-8.TIF

1666