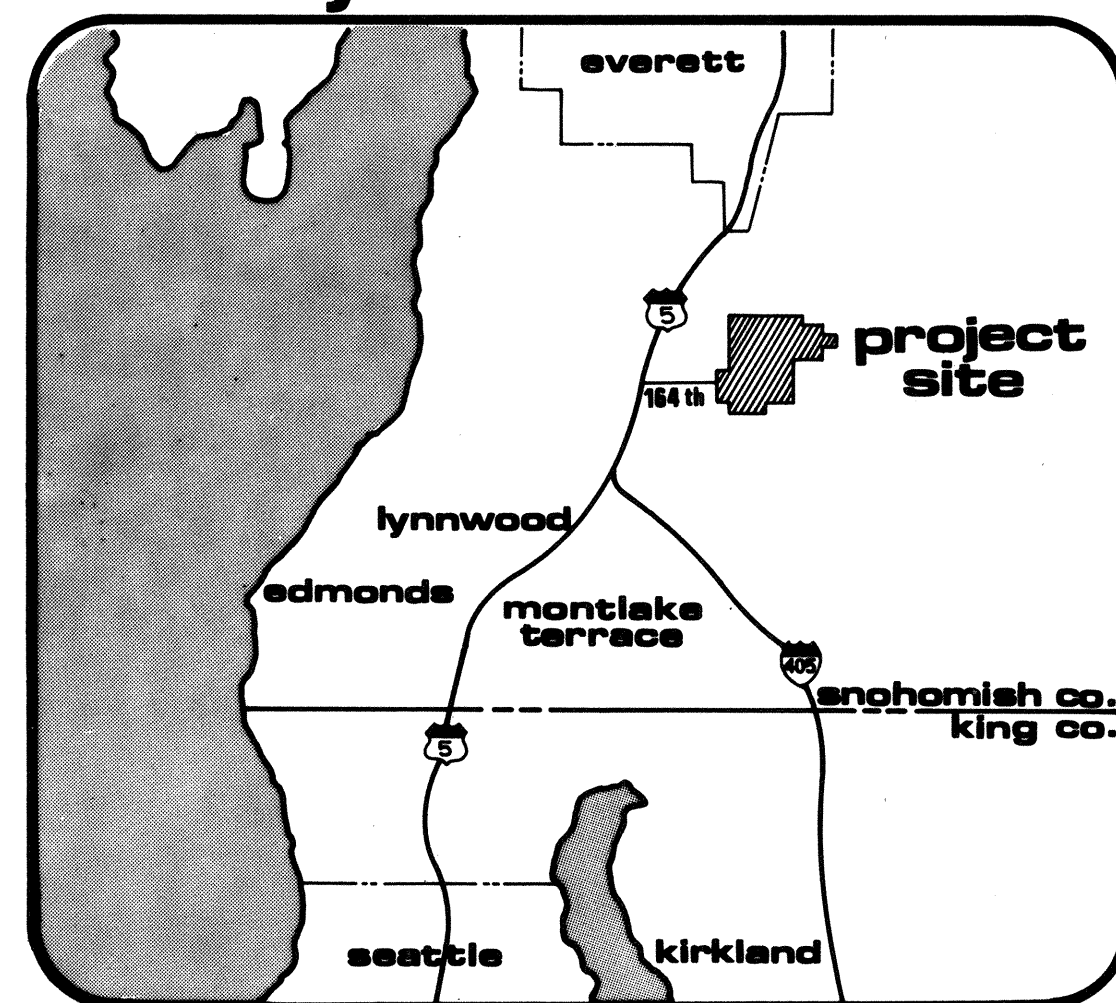


# improvement plans

for: united development corp.  
by: wilsey & ham inc.

W & H WILSEY & HAM, INC.  
ENGINEERING • PLANNING • SURVEYING  
• ENVIRONMENTAL ANALYSIS •

### vicinity

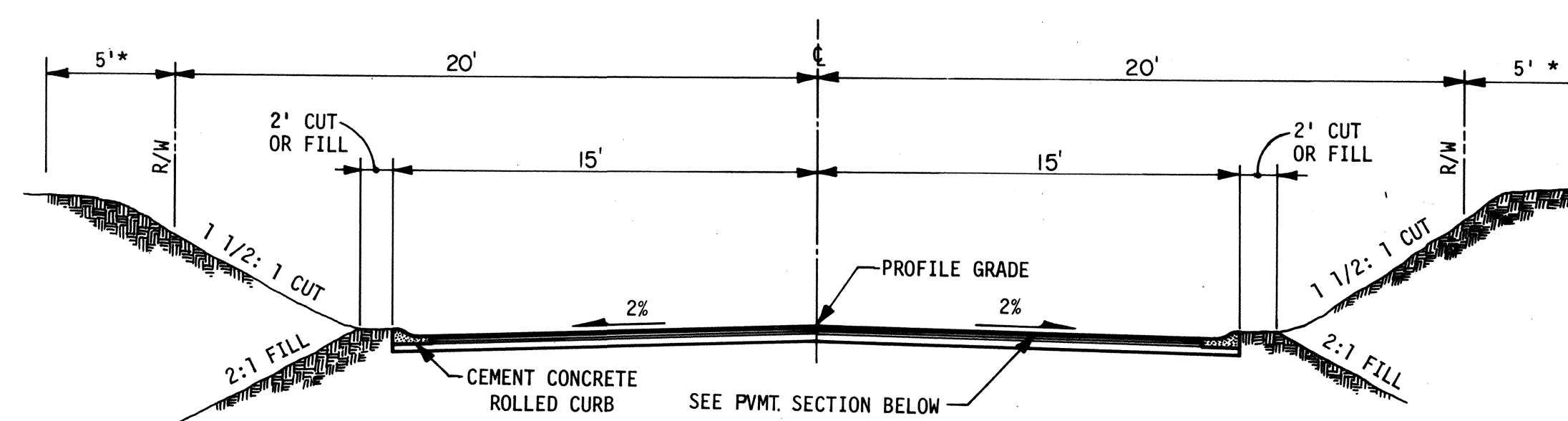


### general notes

- ALL CONSTRUCTION SHALL CONFORM WITH THESE PLANS AND SPECIFICATIONS AND APPLICABLE STANDARDS AND SPECIFICATIONS OF SNOHOMISH COUNTY AND THE STATE OF WASHINGTON.
- ALL EARTHWORK AND STORM DRAINAGE BACKFILL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE SPECIFICATIONS AND UNDER THE DIRECTION OF THE SOILS ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT FROM DAMAGE ALL EXISTING FACILITIES AT NO DIRECT COST TO THE OWNER OR ENGINEER.
- ALL STATIONING SHOWN ON THESE PLANS SHALL REFER TO STREET CENTER-LINE STATIONING UNLESS SPECIFICALLY NOTED OTHERWISE.
- ELEVATIONS SHOWN ON THE PLANS ARE BASED UPON MEAN SEA LEVEL, AS ESTABLISHED BY THE U. S. COAST AND GEODETIC SURVEY, UNLESS SPECIFICALLY STATED OTHERWISE ON THE PLANS.
- BASIS OF BEARINGS IS THE WASHINGTON STATE GRID SYSTEM - NORTH ZONE.
- ALL SIGNING SHALL BE DESIGNED AND INSTALLED BY SNOHOMISH COUNTY.
- ALL CORRUGATED PIPE SHALL BE 16 GAUGE ALUMINUM UNLESS NOTED OTHERWISE.
- NO BACKFILLING OF DRAINAGE PIPES SHALL BE DONE UNTIL INSPECTED BY THE SNOHOMISH COUNTY ENGINEER.
- FOR SPECIFICATIONS REFER TO THE APPROVED IMPROVEMENT PLANS FOR STREETS AND STORM DRAINS FOR MILL CREEK I.
- ALL TYPE II CATCH BASINS ARE TO HAVE LOCKING LIDS.
- ALL FILLS SHALL BE COMPACTED TO MINIMUM OF 95% OF MAXIMUM DENSITY.
- PRIOR TO ANY SITE WORK PERTAINING TO DRAINAGE, THE CONTRACTOR SHALL CONTACT THE FIELD COORDINATOR FOR PLATS, UTILITIES AND DRAINAGE AT 259-9464 TO SET UP SCHEDULING. AS-BUILTS SHALL BE PROVIDED BY THE ENGINEER.

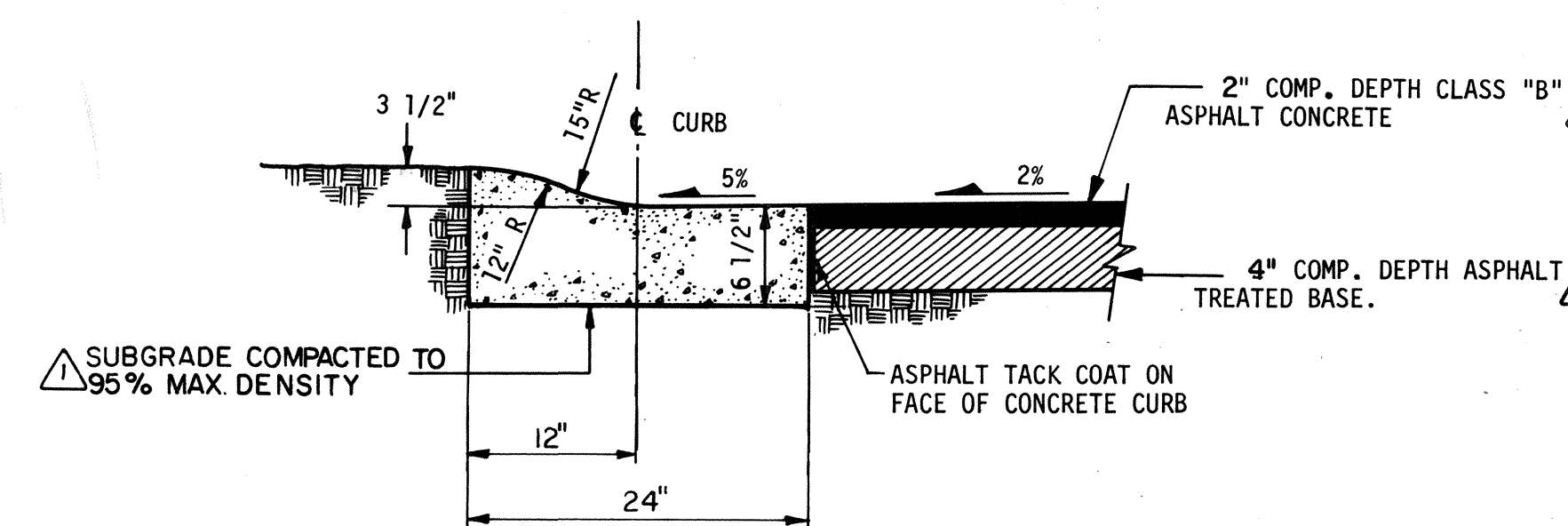
### LIST OF DRAWINGS

TITLE	SHEET NO.
TYPICAL SECTIONS, GENERAL NOTES, & VICINITY MAP	1
STREET & STORM SEWER PLAN	2
STREET & STORM SEWER PROFILES	3
CURB RETURN DETAILS	4
GRADING & EROSION CONTROL PLAN	5

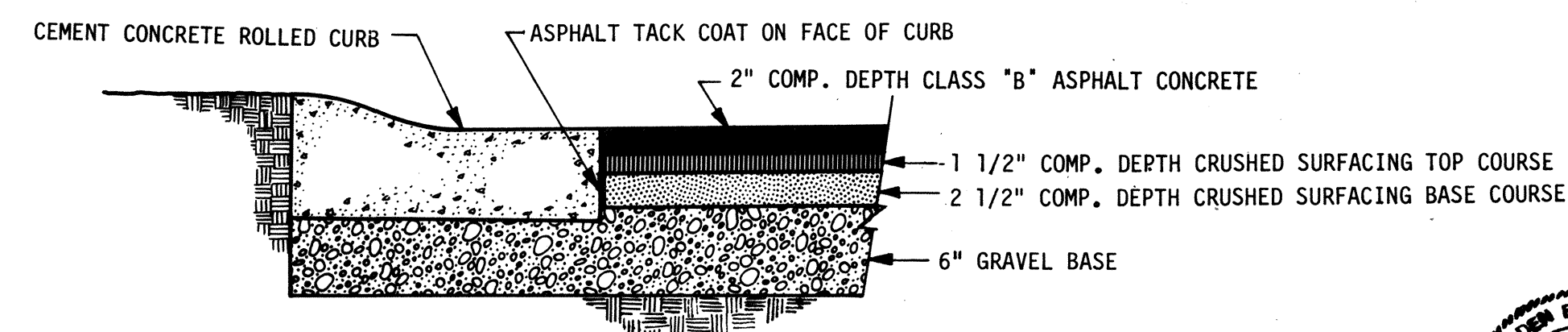


typical street section

\*5' EASEMENT FOR SLOPES, UTILITIES, AND TRAILS. (SEE PLAT).



typical pavement section

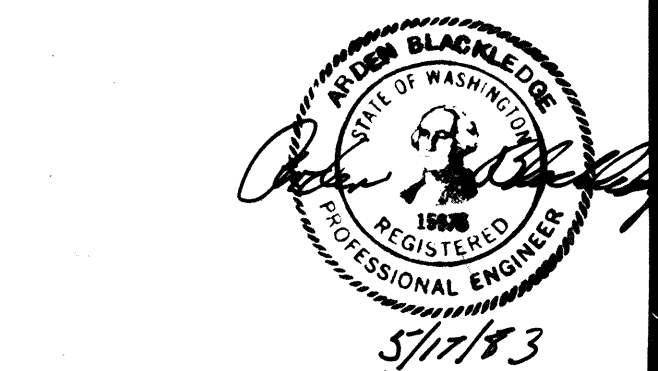


alternate pavement section

### PROJECT BENCHMARK:

P.K. NAIL IN PAVEMENT, SOUTH 1/4 CORNER,  
SEC. 6, T.27N., R.5E., W.M.  
ELEV. 284.19  
DATUM: U.S.C. & G. M.S.L.

Reviewed by: *G.E. Wood*  
DATE: 8/6/83



approval  
FOR CONSTRUCTION  
Gerald E. Wood, P.E.  
SNOHOMISH COUNTY  
ENGINEER

Revisions: \_\_\_\_\_  
Date: MAY 1983  
Scale: AS NOTED  
Designed: GJB  
Drawn: JTB  
Checked: GJB  
Approved: GJB  
Dwg. Number: 3-99-3801-20  
SHEET: 1 of 5

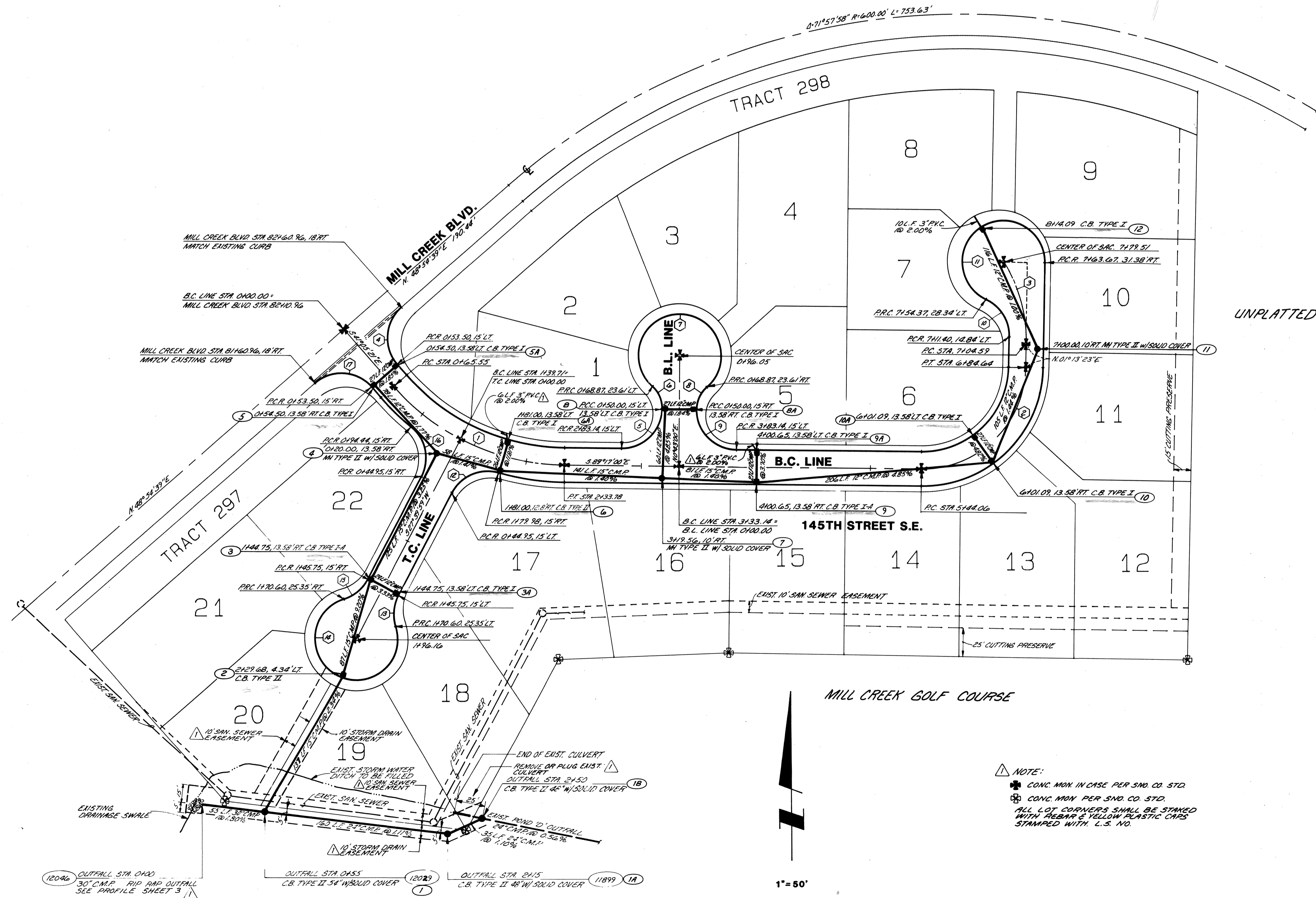
SEC. 31 T. 28N R. 5EWM

CURVE NO. CURVE DATA  
Street Centerline Curve Data

1	R = 200' Delta = 48°11'39" L = 168.23'
2	R = 90' Delta = 89°29'36" L = 140.58'
3	R = 130' Delta = 33°01'19" L = 74.92'

Curb Return Curve Data (See details sheet 4 of 5 for curb elevations)

4	R = 35' Delta = 90°00'00" L = 54.98'
5	R = 35' Delta = 90°00'00" L = 54.98'
6	R = 25' Delta = 49°01'28" L = 21.39'
7	R = 36' Delta = 278°02'56" L = 174.70'
8	R = 25' Delta = 49°01'28" L = 21.39'
9	R = 35' Delta = 90°00'00" L = 54.98'
10	R = 35' Delta = 65°53'33" L = 40.25'
11	R = 36' Delta = 245°53'33" L = 154.50'
12	R = 35' Delta = 78°27'47" L = 47.93'
13	R = 35' Delta = 45°13'59" L = 27.63'
14	R = 36' Delta = 270°27'58" L = 169.94'
15	R = 35' Delta = 45°13'59" L = 27.63'
16	R = 35' Delta = 78°27'47" L = 47.93'
17	R = 35' Delta = 90°00'00" L = 54.98'



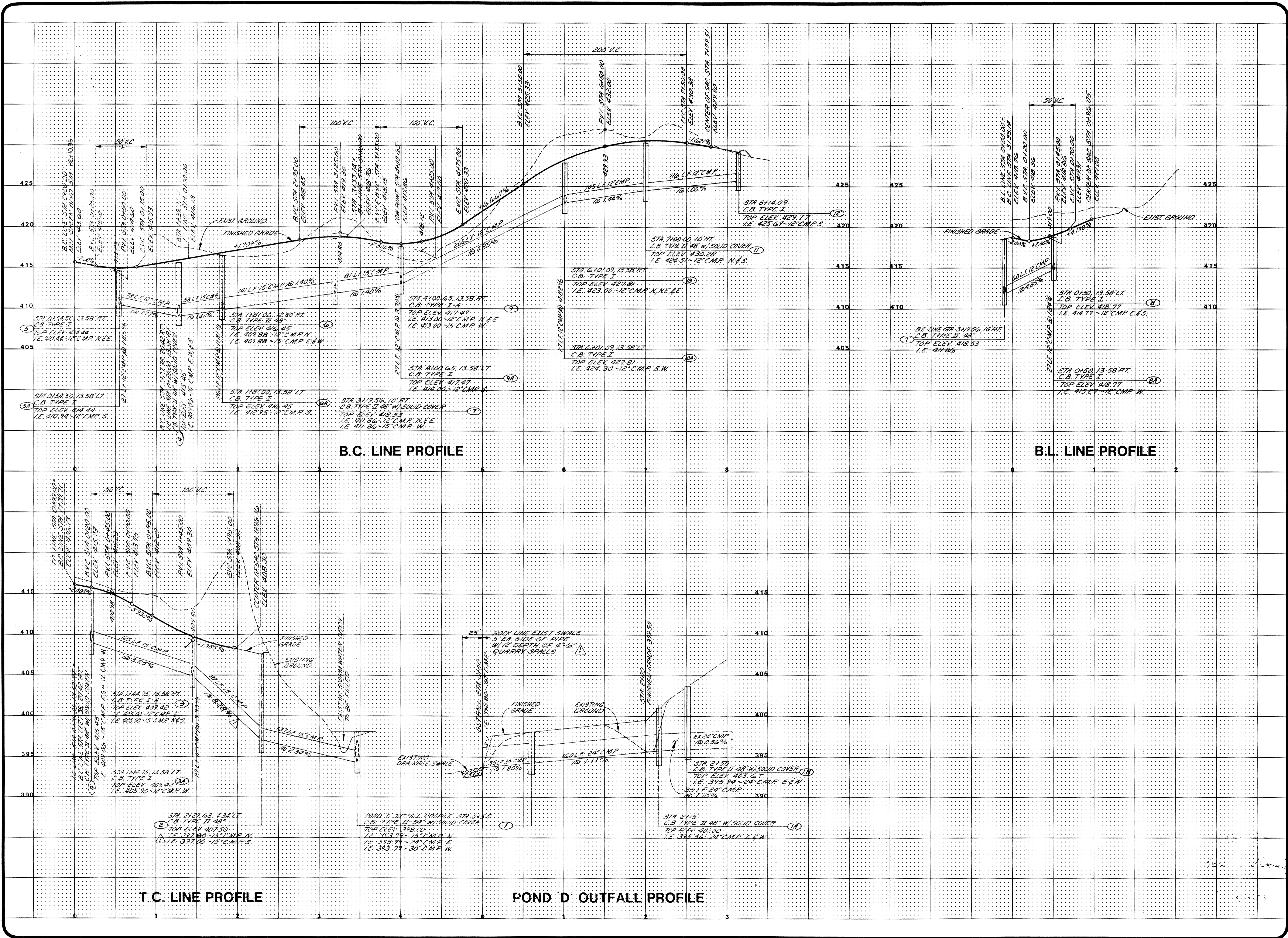
NOTE:  
 \* CONC. MAN IN CHSE PER SNO. CO. STD.  
 \* CONC. MAN PER SNO. CO. STD.  
 ALL LOT CORNERS SHALL BE STAKED WITH RED AND YELLOW PLASTIC CAPS STAMPED WITH U.S. NO.

1" = 50'

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MILL CREEK 14  
**STREET & STORM SEWER PLAN**  
 WASHINGTON  
 SNOHOMISH COUNTY

REVISIONS: \_\_\_\_\_  
 Date: MAY 1983  
 Scale: 1"=50'  
 Designed: A.J.B.  
 Drawn: A.J.B.  
 Checked: A.J.B.  
 Approved: A.J.B.  
 Dwg. Number: 3-597-3801-20  
 SHEET: 2 of 5

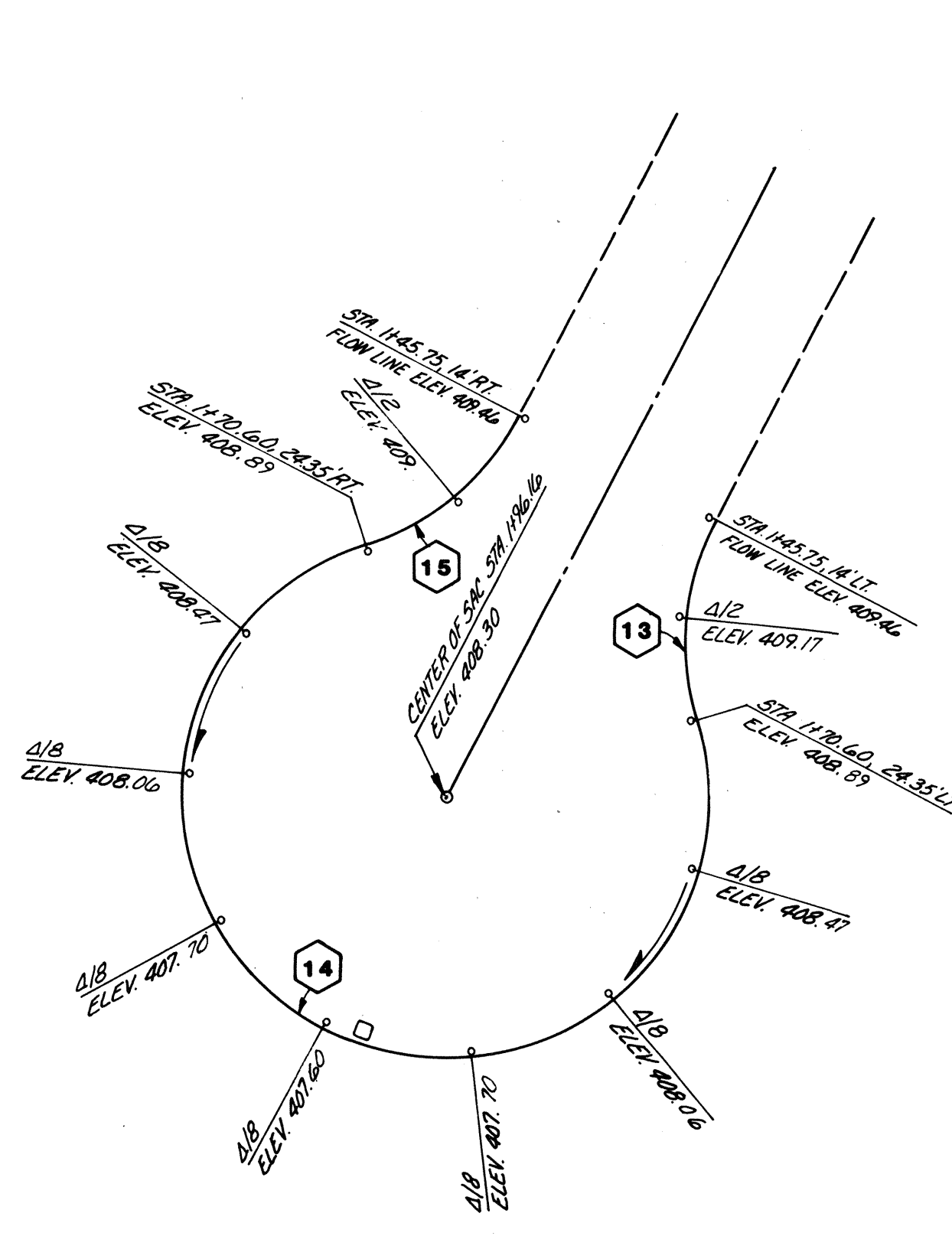


Revisions

By Date

Date *MMV 1983*  
 Scale *1"=30' H, 1"=5' V*  
 Designed *AJB*  
 Drawn *LSM*  
 Checked *AJB*  
 Approved *AJB*

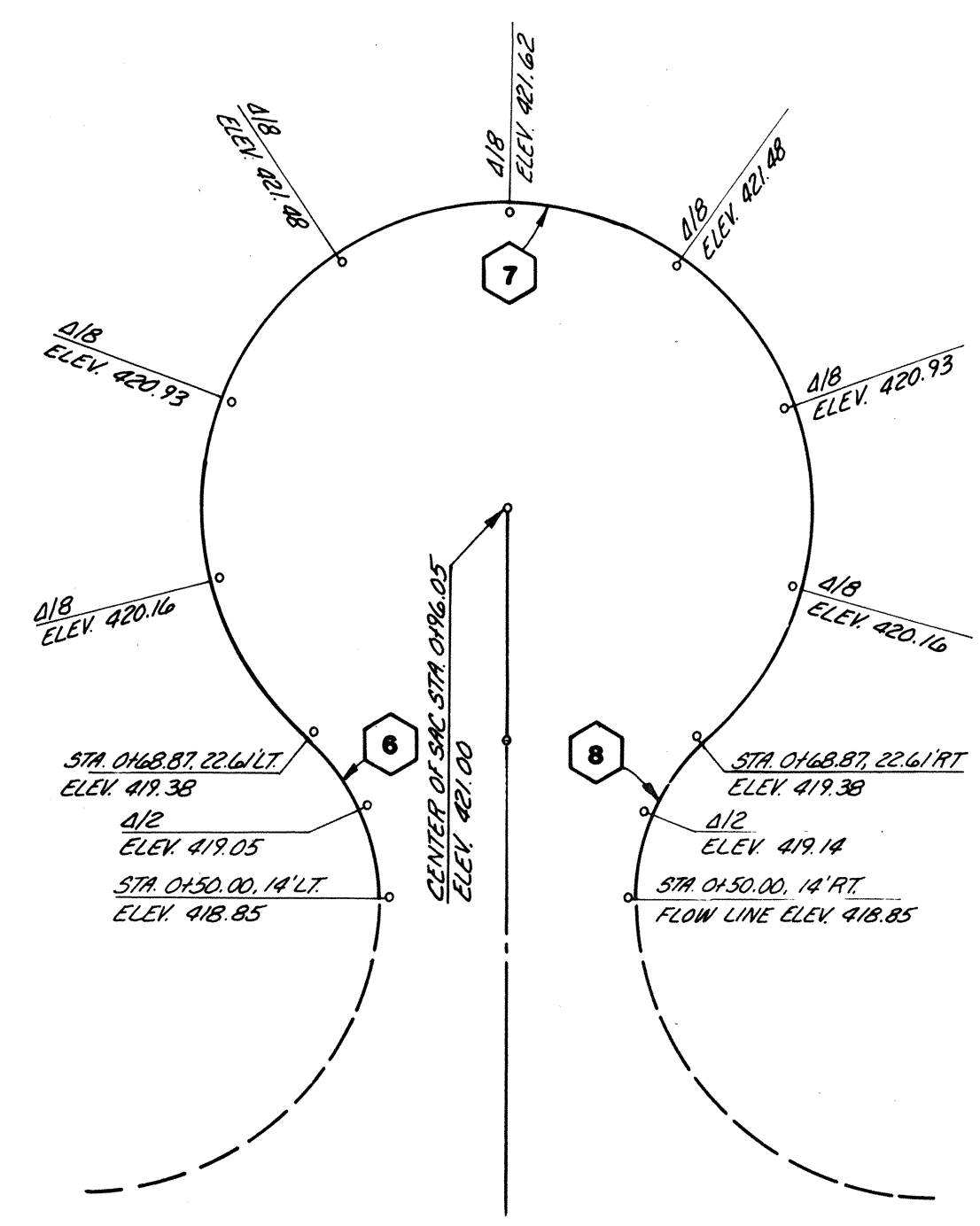
Dwg. Number *3-57-390-20*  
 SHEET **3** of **5**



CURB RETURN NO.'S 13 14 15

**T C LINE CUL-DE-SAC**

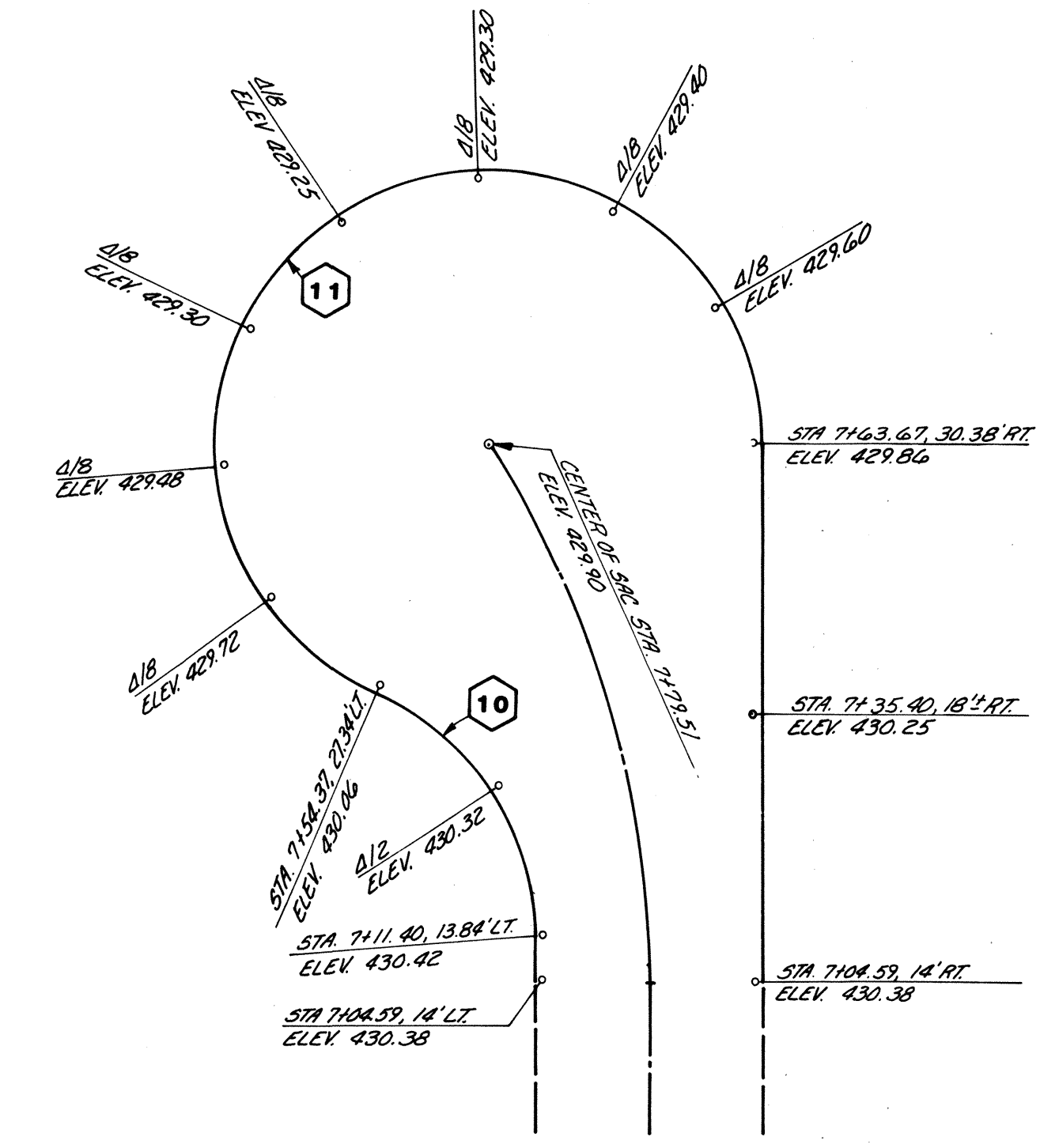
1" = 20'



CURB RETURN NO.'S 6 7 8

**B L LINE CUL-DE-SAC**

1" = 20'

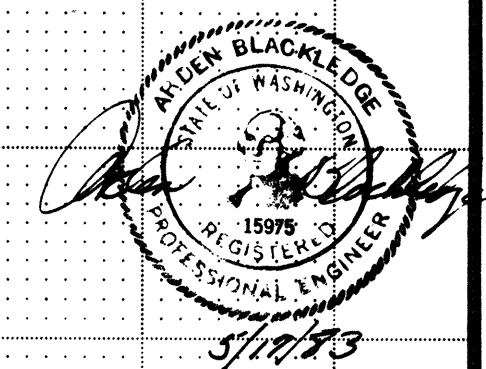
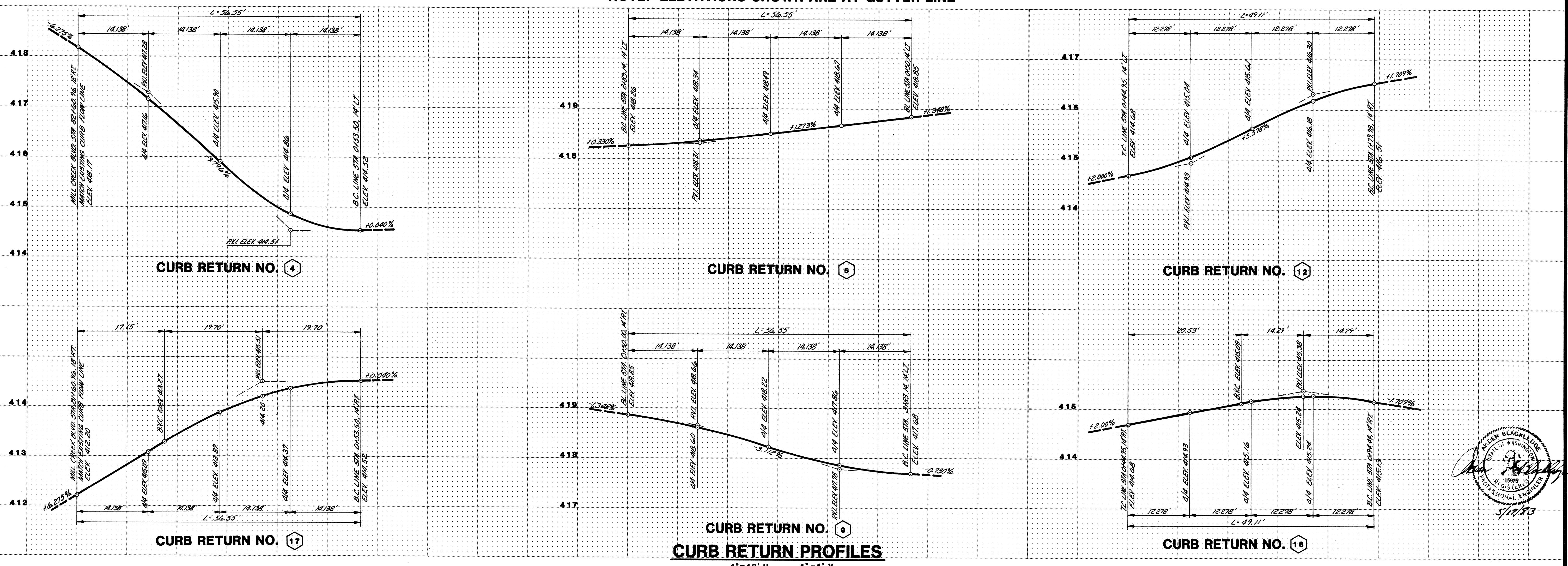


CURB RETURN NO.'S 10 11

**B C LINE CUL-DE-SAC**

1" = 20'

NOTE: ELEVATIONS SHOWN ARE AT GUTTER LINE



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MILL CREEK 14  
 CURB RETURN DETAILS  
 SNOHOMISH COUNTY WASHINGTON



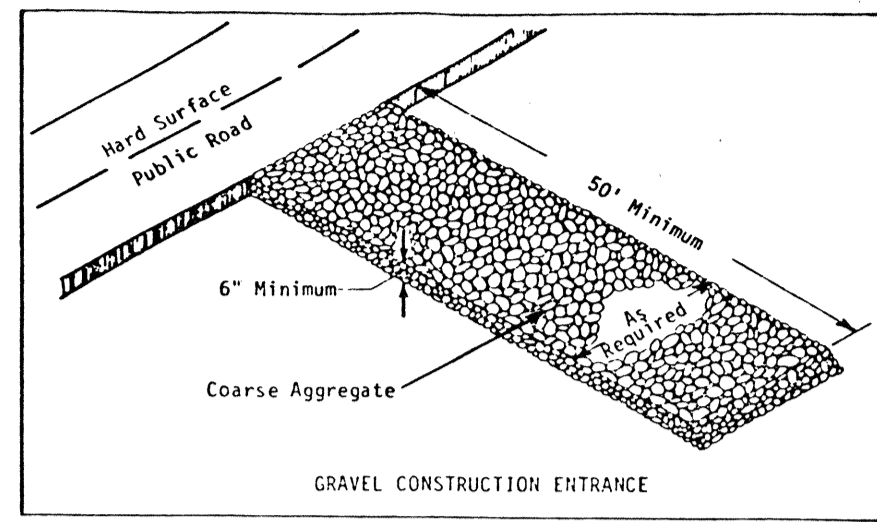
Revisions: \_\_\_\_\_  
 By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Date: MAY 1973  
 Scale: AS NOTED  
 Designed: JEM  
 Drawn: JEM  
 Checked: RTB  
 Approved: RTB  
 Dwg Number: E-58-520-20  
 SHEET: 4 of 5

**NOTES**

1. PRIOR TO EXTENSIVE CLEARING, GRADING AND/OR EXPOSURE OF SUBSURFACE SOILS, ALL TEMPORARY EROSION CONTROL SHALL BE INSTALLED GENERALLY AS SHOWN. ALL TEMPORARY EROSION CONTROL SHALL REMAIN IN PLACE UNTIL COMPLETION OF CONSTRUCTION.
2. WHERE POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.
3. UPON COMPLETION OF CONSTRUCTION, ALL TEMPORARY SILTATION CONTROL AREAS SHALL BE RETURNED TO ORIGINAL GROUND CONDITIONS OR PHASED INTO THE PERMANENT APPROVED DRAINAGE PLAN.
4. IMMEDIATELY FOLLOWING FINISH GRADING HYDROSEED WITH A PERMANENT VEGETATION MIXTURE AS LISTED BELOW:

SEED MIX	FERTILIZER	MULCH-WOOD CELLULOSE/ HYDRAULIC SEEDING
20% ANNUAL, PERENNIAL, OR HYBRID RYEGRASS	300 LBS/ACRE	1,500 LBS/ACRE
40% CREEPING FESCUE	10-20-20	
40% WHITE CLOVER		
120 LBS/ACRE		

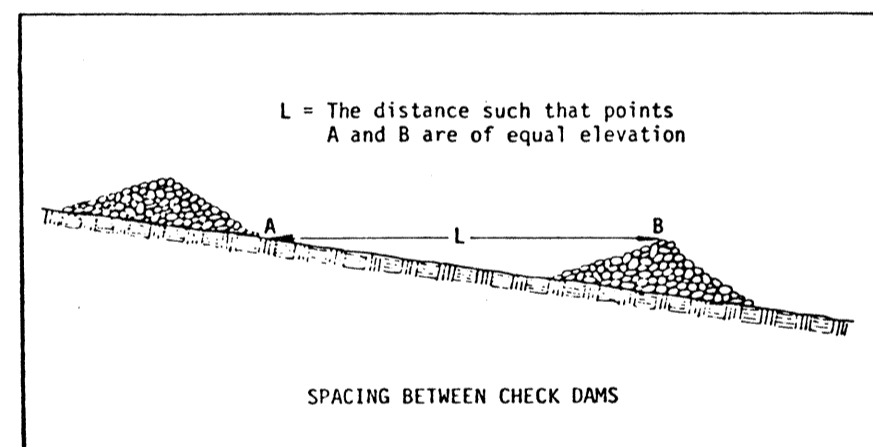
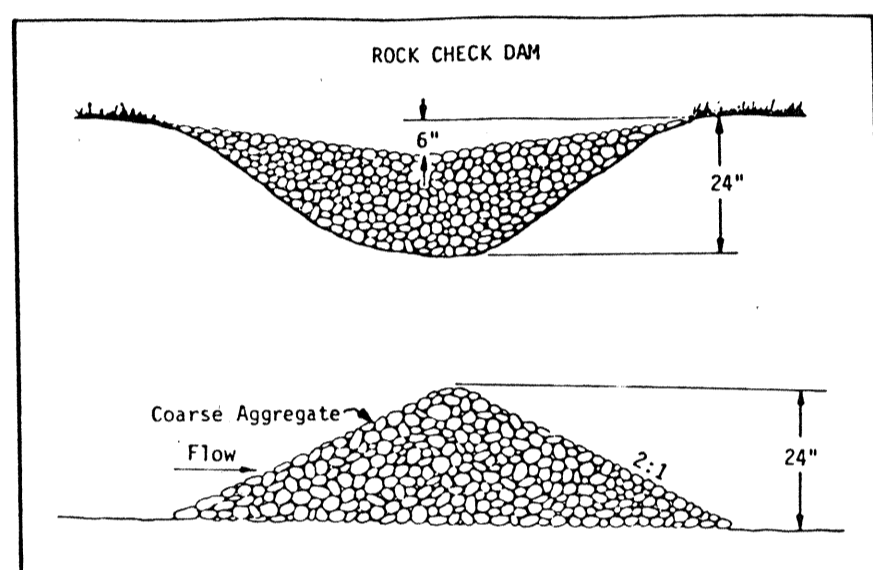
5. THE SILTATION CONTROL SYSTEMS DEPICTED ON THIS DRAWING ARE SUCH AS TO MEET MINIMUM COUNTY REQUIREMENTS. AS CONSTRUCTION PROGRESSES AND EXPECTED SEASONAL CONDITIONS DICTATE, MORE SILTATION CONTROL FACILITIES MAY BE REQUIRED TO INSURE COMPLETE SILTATION CONTROL. THEREFORE, DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE MINIMUM REQUIREMENTS, AS MAY BE NEEDED.



1980 Maintenance 1.01

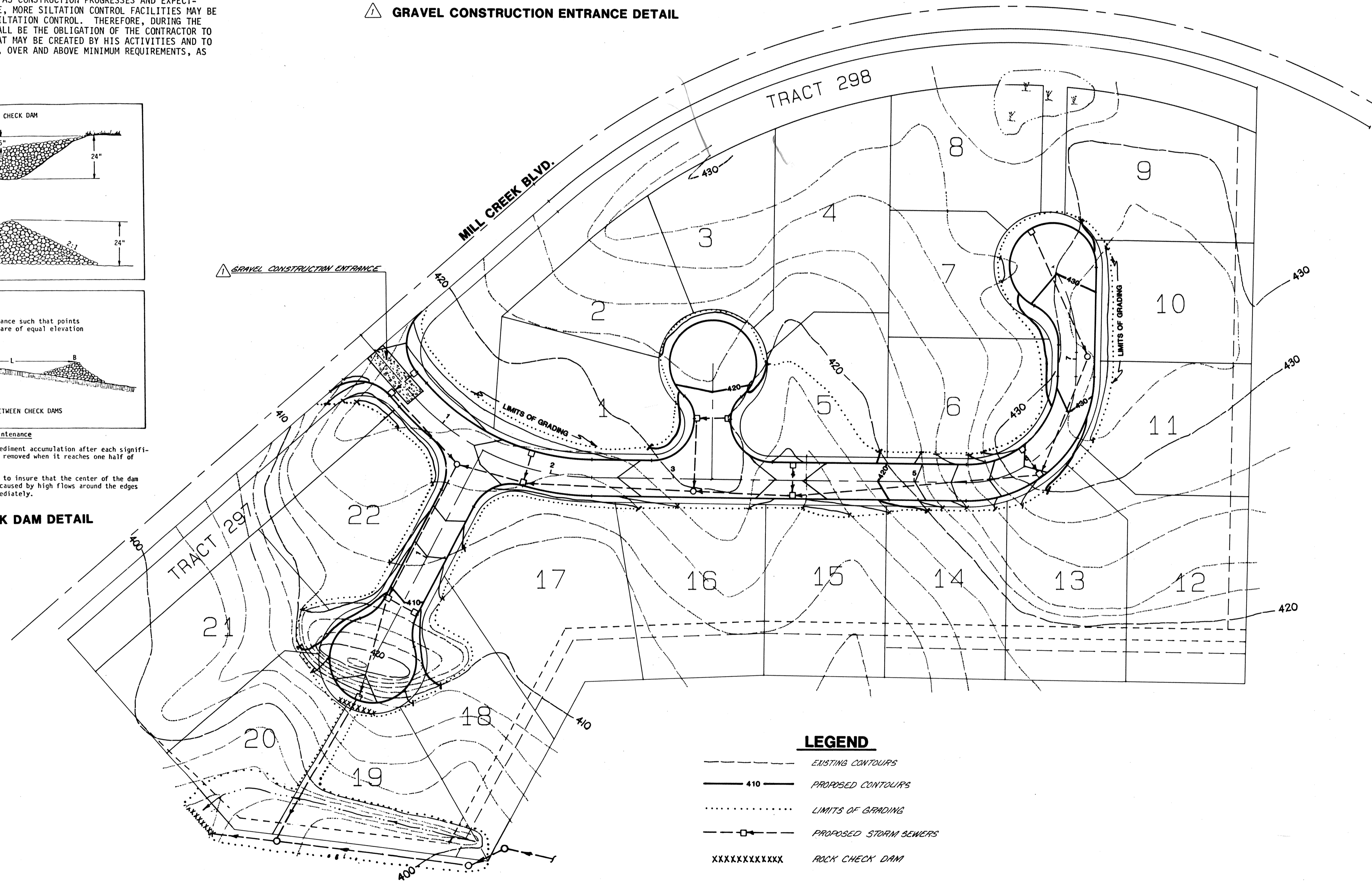
The entrance shall be maintained in a condition which will prevent tracking or flow of mud onto public rights-of-way. This may require periodic top dressing with 2-inch stone, as conditions demand, and repair and/or cleanup of any structures used to trap sediment. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately.

GRAVEL CONSTRUCTION ENTRANCE DETAIL



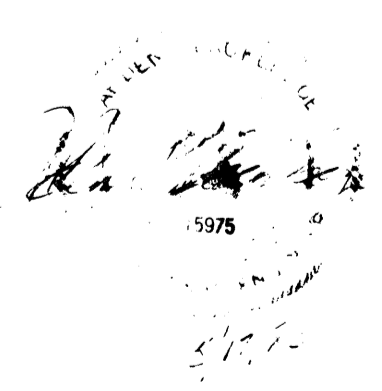
Check dams should be checked for sediment accumulation after each significant rainfall. Sediment should be removed when it reaches one half of the original height or before.  
Regular inspections should be made to insure that the center of the dam is lower than the edges. Erosion caused by high flows around the edges of the dam should be corrected immediately.

ROCK CHECK DAM DETAIL



**LEGEND**

- EXISTING CONTOURS
- 410 — PROPOSED CONTOURS
- ..... LIMITS OF GRADING
- □ — PROPOSED STORM SEWERS
- XXXXXXXXXXXXX ROCK CHECK DAM



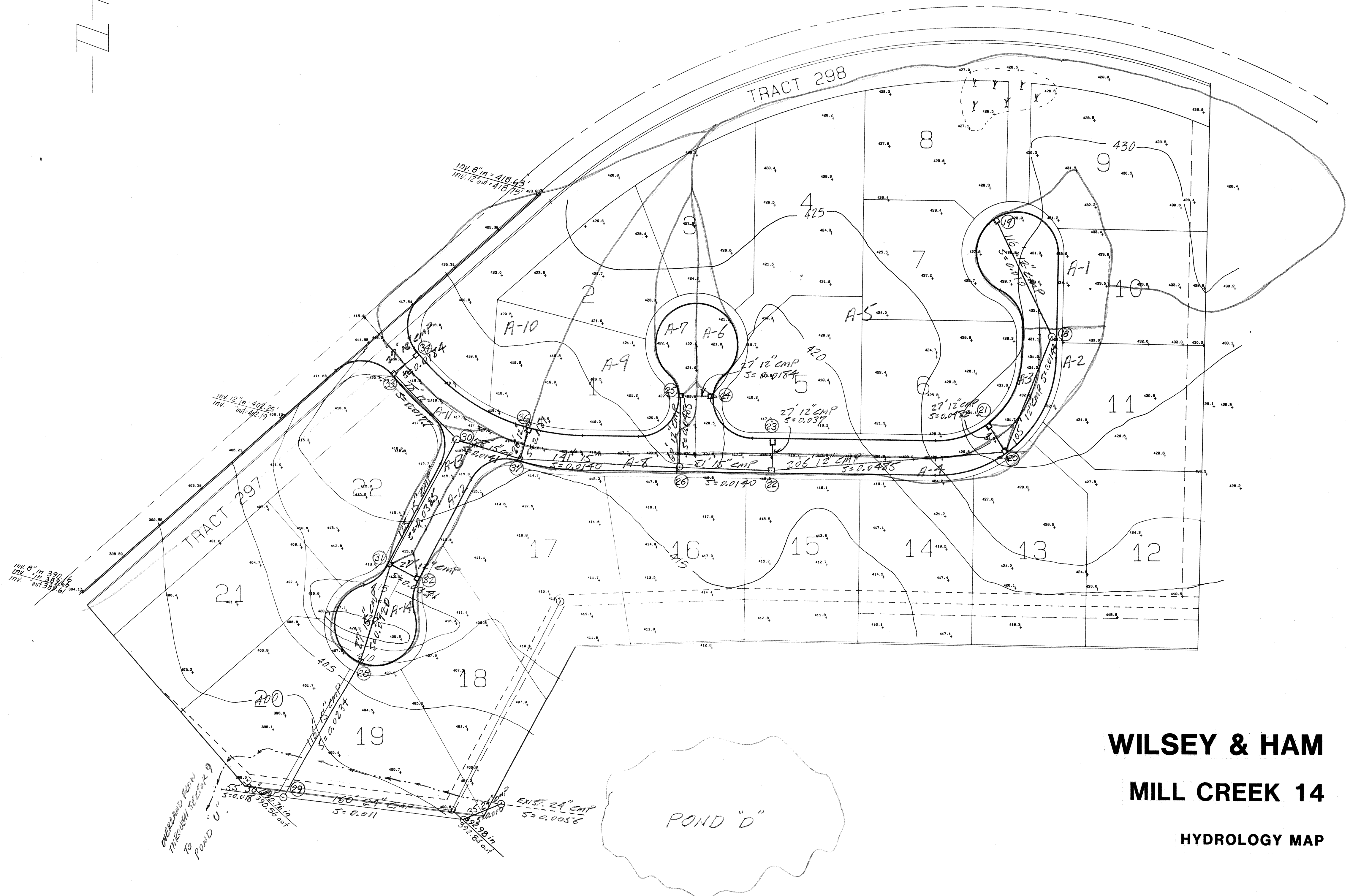
**WILSEY & HAM INC.**  
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 environmental analysis • landscape design  
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 Bellevue, Washington 98004  
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 (206) 494-8250

MILL CREEK 14  
**GRADING & EROSION CONTROL PLAN**  
 WASHINGTON  
 SNOHOMISH COUNTY

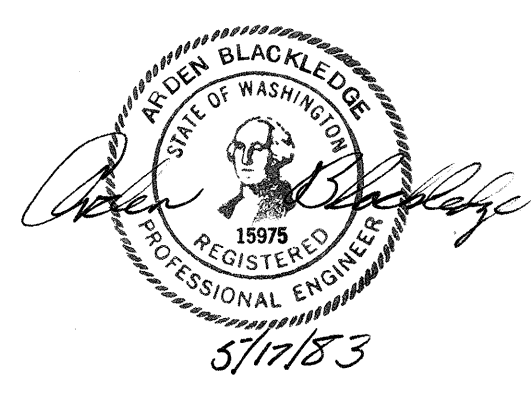
REVISIONS: \_\_\_\_\_  
 Date: MAY 1983  
 Scale: 1"=50'  
 Designed: SLA  
 Drawn: SLA  
 Checked: SLA  
 Approved: SLA  
 Dwg Number: 3-29-3801-20  
 SHEET  
**5 of 5**

AREA No.	ACRES
A-1	0.27
A-2	0.09
A-3	0.03
A-4	0.12
A-5	2.90
A-6	0.07
A-7	0.11
A-8	0.04
A-9	0.44
A-10	0.72
A-11	0.03
A-12	0.07
A-13	0.07
A-14	0.12

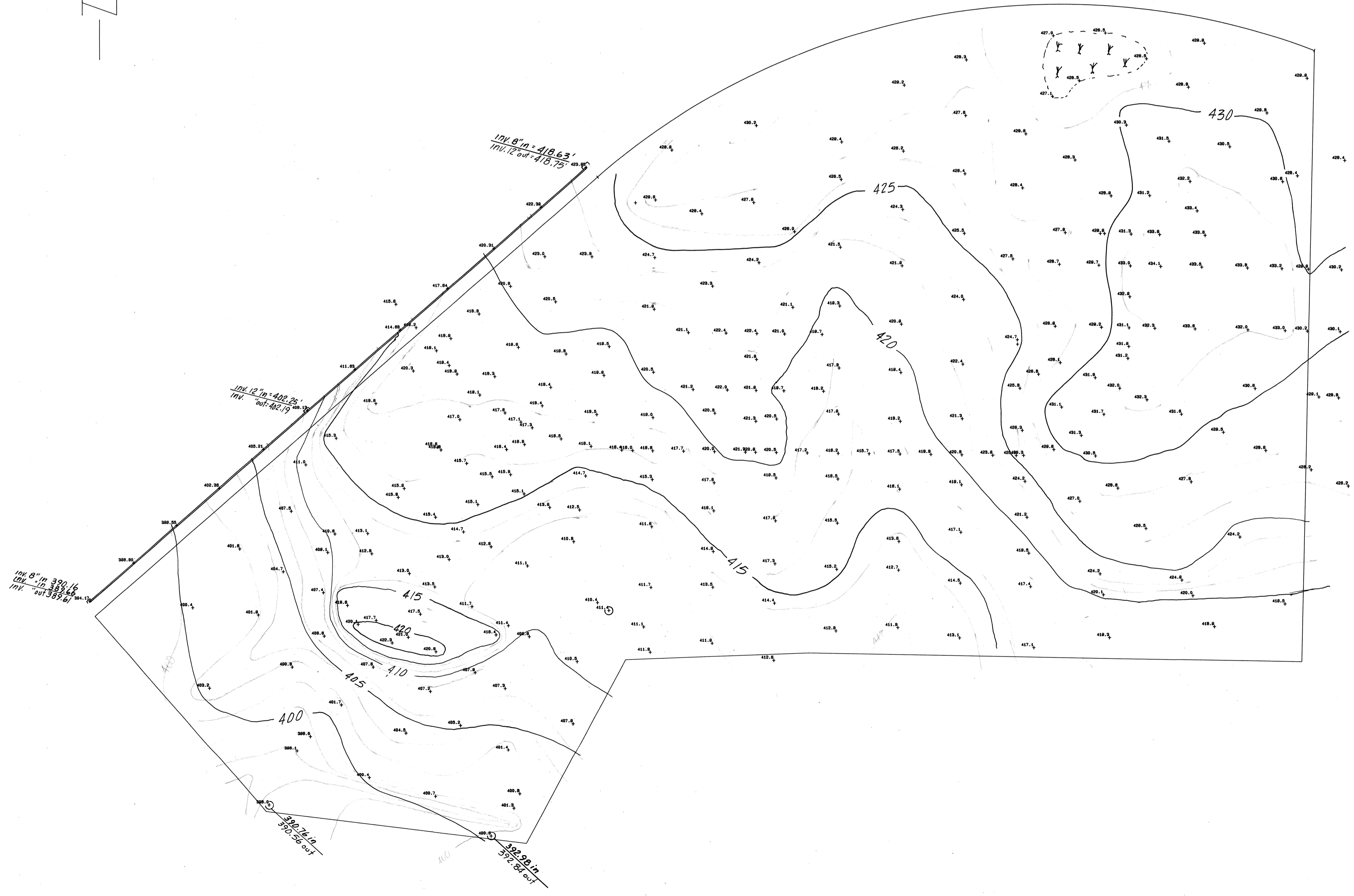
SCALE: 1" = 50'



**WILSEY & HAM**  
**MILL CREEK 14**  
 HYDROLOGY MAP



SCALE: 1" = 50'



LAUREL PLAT

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 Bellevue, Washington 98004 (206) 454-3250

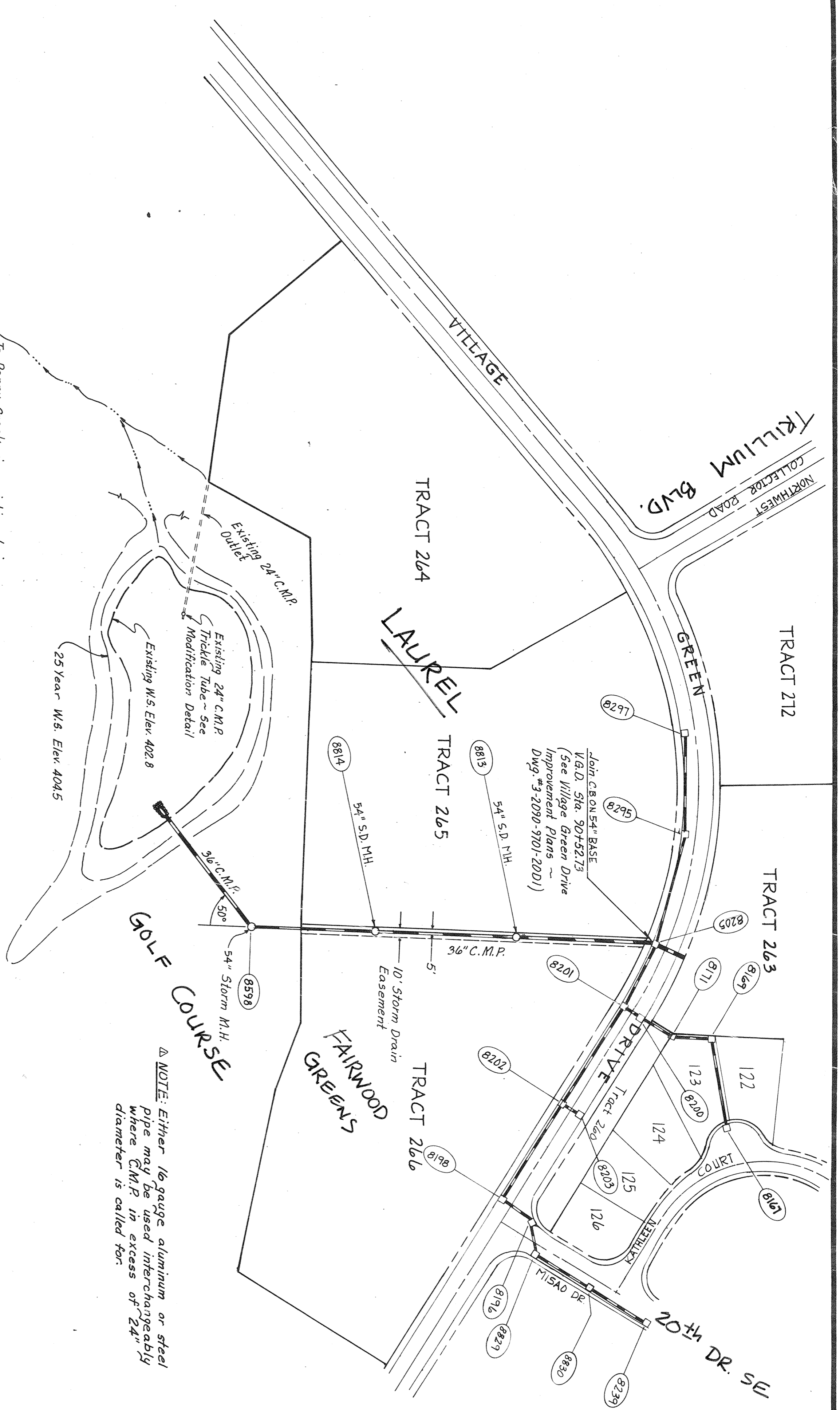
**MILL CREEK 14**  
 DESIGN SURVEY

Revisions	By	Date

Date **MARCH 1983**  
 Scale \_\_\_\_\_  
 Designed \_\_\_\_\_  
 Drawn \_\_\_\_\_  
 Checked \_\_\_\_\_  
 Approved \_\_\_\_\_

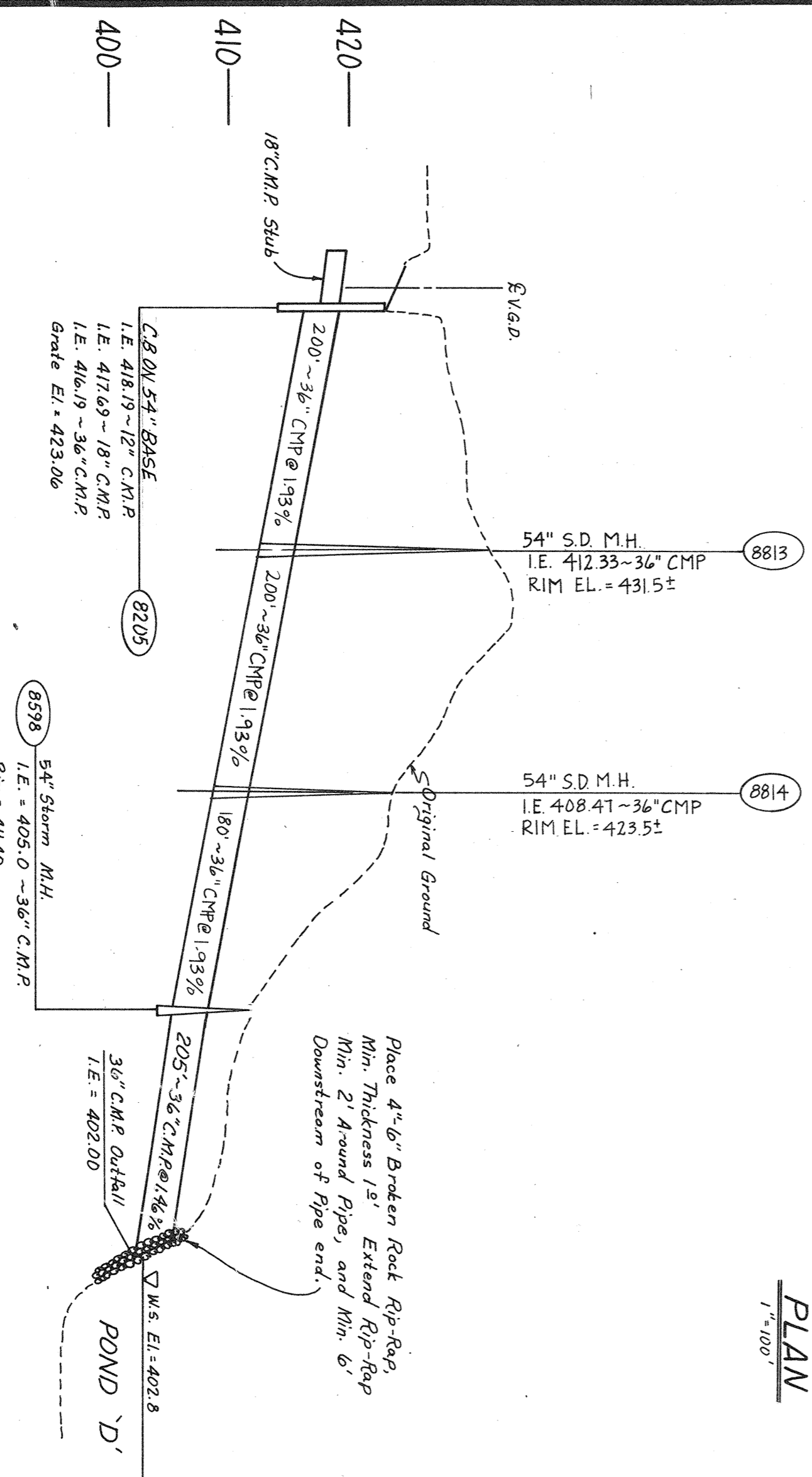
Dwg. Number  
 3-591-3802-15  
 SHEET

1 of 1

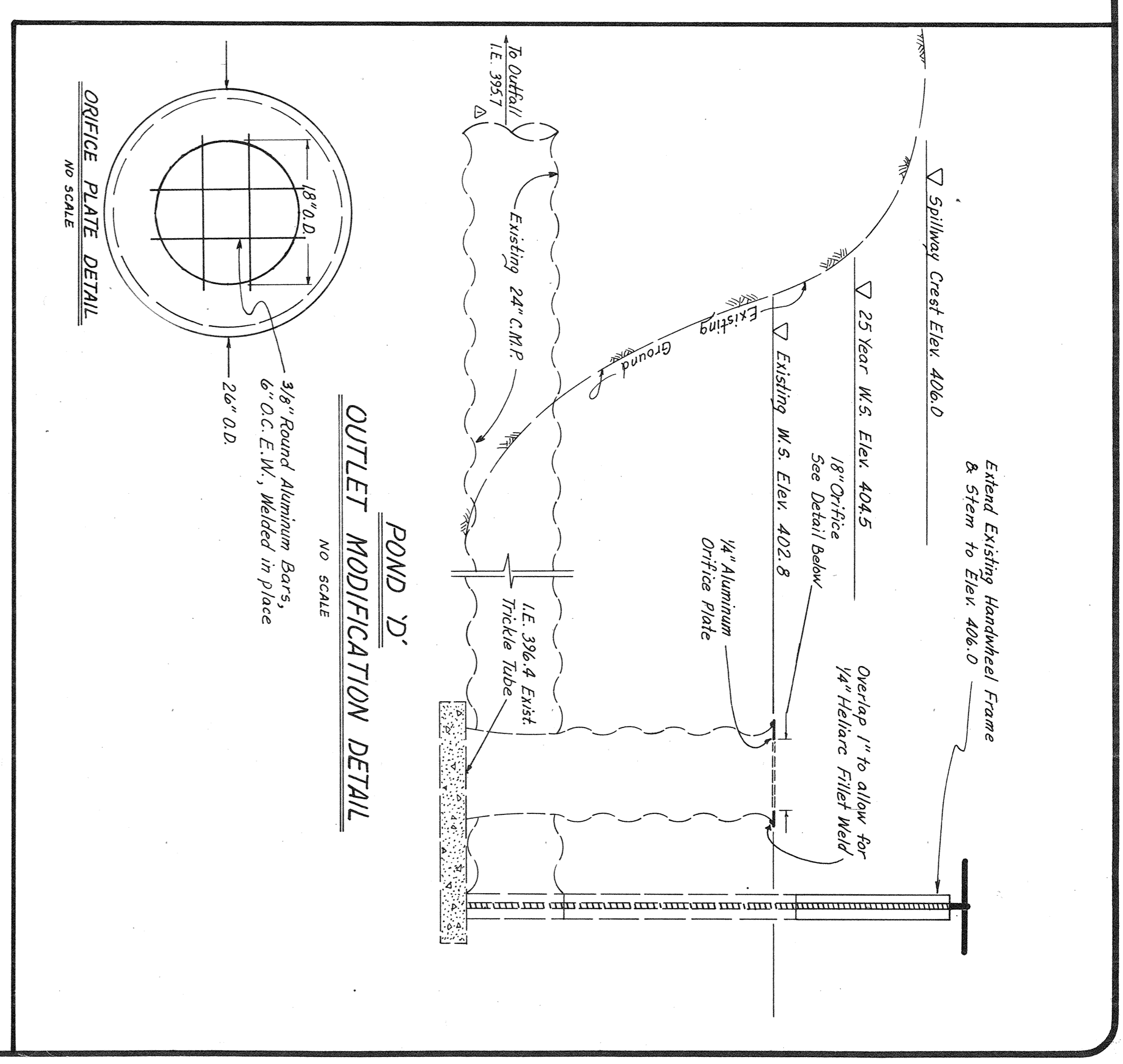


To Penny Creek via existing drainage swale. Future development of Sector 5 to provide downstream extension of Storm Drainage Improvements.

NOTE: Either 1/2" gauge aluminum or steel pipe may be used interchangeably where C.M.P. in excess of 24" diameter is called for.



PROFILE : POND 'D' INLET  
1" = 100' H. 1" = 10' V.



Drainage O.K.  
Following 2/2/1979  
Judy B. Hill  
Checked by R.B. Quisenberry Est 27,1979

DRAINAGE LINE BTWD. LAUREL / FAIRWOOD GREENS  
HDEV-266

Revisions	By	Date
General Revision Add M.H. 8813, 8814 & As Per Sno. City.		1-15-79 Coupe 2-7-79.
Date: Dec. 1978		
Scale: As Shown		
Designed: LEW		
Drawn: RWG-RLL		
Checked: LEW		
Approved: R.C.		
Dwg. Number: 3-2091-1701-202D1		
SHEET: 1 of 1		



SECTOR 4 OFF-SITE  
STORM DRAINAGE &  
MODIFICATION PLAN

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• ENVIRONMENTAL ANALYSIS •  
631 Strander Boulevard  
Seattle, Washington 98188  
Telephone  
(206) 575-1420



SEC. 31 T. 28N R. 5EWM

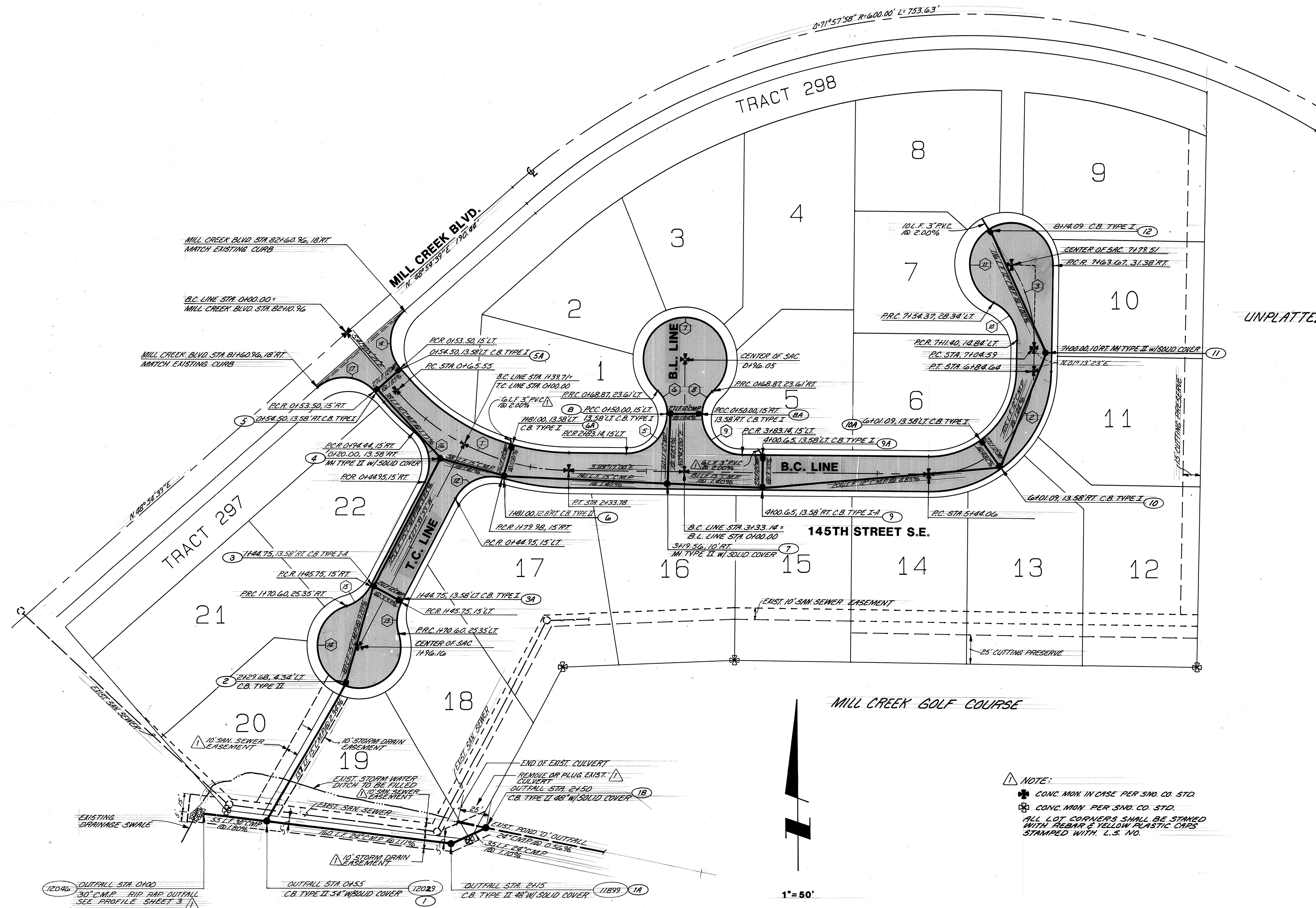
CURVE NO. CURVE DATA

Street Centerline Curve Data

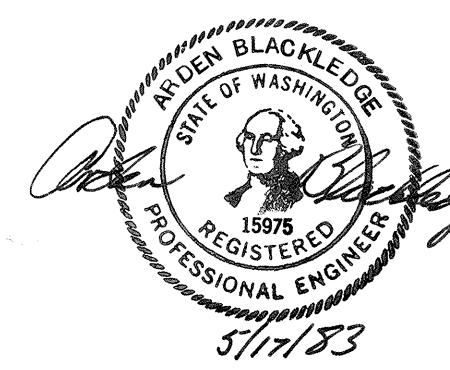
- ① R = 200'  
Delta = 48°11'39"  
L = 168.23'
- ② R = 90'  
Delta = 89°29'36"  
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Delta = 78°27'47"  
L = 47.93'
- ⑰ R = 35'  
Delta = 90°00'00"  
L = 54.98'



NOTE:  
 \* CONC. MON. IN CASE PER SNO. CO. STD.  
 \* CONC. MON. PER SNO. CO. STD.  
 ALL LOT CORNERS SHALL BE STAKED WITH RED-BAN & YELLOW PLASTIC CAPS STAMPED WITH C.S. NO.



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MILL CREEK 14  
**STREET & STORM SEWER PLAN**  
 WASHINGTON  
 SNOHOMISH COUNTY



By Date \_\_\_\_\_  
 Revisions \_\_\_\_\_  
 Date MAY 1983  
 Scale 1"=50'  
 Designed A.J.B.  
 Drawn J.L.M.  
 Checked A.J.B.  
 Approved A.J.B.  
 Dwg Number 3-592-3801-20  
 SHEET  
**2 of 5**