

June 23, 1998

Branch Engineering
310 North 5th Street
Springfield, Oregon 97477
Attention: Loren Chilson

RE: Asphalt Testing
Bear Creek Road and Cedar Croft Road, Creswell
PSI Report No. 722-80107-1

Dear Mr. Chilson:

In accordance with PSI Proposal No. 722-8136-R1, we have completed sampling and testing of asphaltic concrete roadway for locations selected by Loren Chilson of Branch Engineering. Note that the mix type is unknown.

SAMPLING

Four (4) cores were sampled with a Milwaukee Dymodril portable core drilling rig with an 8-inch diamond bit barrel on June 19, 1998. Core locations were selected and located by Loren Chilson. Core locations were backfilled with compacted asphalt cold patch as instructed by Loren Chilson. Compaction was accomplished with a Marshall test hammer. The locations of the four cores were as follows:

1. 400 feet east of Cloverdale Road on Bear Creek Road.
2. 100 feet west of Bear Creek Cul-de-sac on Bear Creek Road.
3. 100 feet south of Bear Creek Road on Cedar Croft Road.
4. 450 feet south of Bear Creek Road on Cedar Croft Road.

TESTING

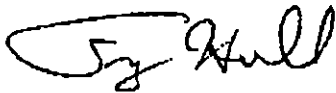
All four cores were tested for thickness and bulk specific gravity in accordance with ASTM D2726. Thickness was measured at 3 separate points for each core with a digital caliper. The readings were then averaged and recorded to the nearest hundredth of an inch. The four cores were then heated in an oven, thoroughly consolidated and then tested for a single, composite Rice Specific Gravity value in accordance with ASTM D2041. Test results are as follows:

SAMPLE #	CORE BULK SPECIFIC GRAVITY	CORE DENSITY (PCF)	COMPOSITE RICE SPECIFIC GRAVITY	CORE % COMPACTIION	CORE THICKNESS (INCHES)
1	2.223	138.4	2.461	90.3	2.46
2	2.244	139.7	2.461	91.2	2.02
3	2.233	139.0	2.461	90.7	3.48
4	2.175	135.4	2.461	88.4	2.63

Test Notes:

1. Lab Technician: Don Thornton (thickness and BSG), Ken Andrieu (Rice)
2. Bulk specific gravity and Rice specific gravity tests were performed at 25 degrees Celcius.

Respectfully Submitted,
Professional Service Industries, Inc.



Troy Hull, P.E.
Department Manager
Geotechnical and Construction Services

cc: Bill Cummings, Lane County Public Works

BASE ROCK EXPLORATION ON BEAR CREEK RD
AND CEDARCROFT RD

<u>ROADWAY</u>	<u>SAMPLE NO.</u>	<u>BASE ROCK THICKNESS</u>
BEAR CREEK	1	16"
	2	18"
CEDARCROFT	3	12"
	4	14"

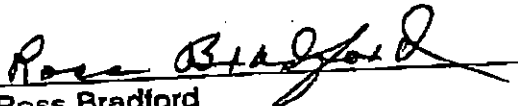
WELL COMPACTED $1\frac{1}{2}$ "-Ø AGGREGATE WAS PRESENT
AT EACH SAMPLE LOCATION.

SAMPLE LOCATIONS ARE SHOWN IN FIGURE 5.

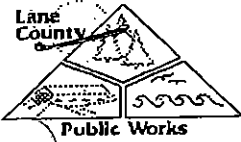
ROSS BRADFORD
82452 Bradford Rd
Creswell, OR 97426
(541) 895-2394

September 24, 1998

I, Ross Bradford, owner of Tax Lot 19-02-00-3500, Application #PA98-5144, hereby authorize BJ Equipment Company as my agent for application for rezoning of above mentioned parcel from F-1 to QM.


Ross Bradford

FILE # PA 98-5144
EXHIBIT # 2



LANE COUNTY RECEIPT

09/24/1998

RECEIPT NUMBER: R98001004

PLANNING ACTION #: PA985144
TYPE: PLAN AMEND ZONE CH
SITE ADDRESS:
PARCEL: 19-02-00-00-03500
APPLICANT: BRADFORD ROSS H TE
ETAL
82452 BRADFORD RD
CRESWELL OR 97426

Type	Method	Description	Amount
Payment	Check	2409	2,770.00

Description	Current Pymt
2000 New Technology Fee	10.00
2100 Administrative Fee	360.00
3050 Planning Plan Amendments	2,400.00



Land Use Application



REQUEST / PROPOSAL FOR: F1 TO QM OPERATIONS.

APPLICATION FOR A PLANNING AMENDMENT & ZONE CHANGE

FILE NO: PA98-5144
ACTION: PAZC FILE 2, 170

LOCATION (PLEASE PRINT)

19 02 00 (30) 3500
TOWNSHIP RANGE SECTION 1/4 SECTION TAX LOT SUBDIVISION / PARTITION LOT / PARCEL BLOCK
F1 TAX CODE 440B PLOT # 40.0 ACERAGE

LOCATION ADDRESS: 3 mi EAST OF EUGENE; SOUTH OF CLIFFORD PARK ROAD TO BEAR CREEK ROAD.

STRUCTURES NOW ON PROPERTY

APPLICANT / AGENT

BJ EQUIPMENT COMPANY DATE: 9-24-98
NAME (PLEASE PRINT)

P.O. Box 543 PHONE: 541 747-6261
ADDRESS

GOTTSCH GROVE, OR 97424 ZIP

OWNER

ROSS BRADFORD DATE: 9-24-98
NAME (PLEASE PRINT)

82452 BRADFORD TRD PHONE

CRESWELL, OR 97426 ZIP

DO YOU OWN ADJACENT PROPERTY? Yes No

MAP, PARCEL NUMBER

<u>19</u>	<u>02</u>	<u>19</u>		<u>600</u>
Township	Range	Section	1/4 Section	Tax Lot
<u>19</u>	<u>02</u>	<u>19</u>		<u>700</u>
Township	Range	Section	1/4 Section	Tax Lot
				<u>100</u>
				<u>800</u>
Township	Range	Section	1/4 Section	Tax Lot

WATER PUBLIC ON-SITE WELL COMMUNITY SYSTEM _____

SEWAGE PUBLIC ON-SITE SEPTIC COMMUNITY SYSTEM _____

ROAD STATE COUNTY PUBLIC EASEMENT

FIRE DISTRICT _____ SCHOOL DISTRICT _____

POWER COMPANY _____ PHONE COMPANY _____

I (We) have completed all the attached application requirements and certify that all statements are true and accurate to the best of my (our) knowledge and belief. I am (We are) so authorized to submit this application as evidenced by the signature of the owner below.

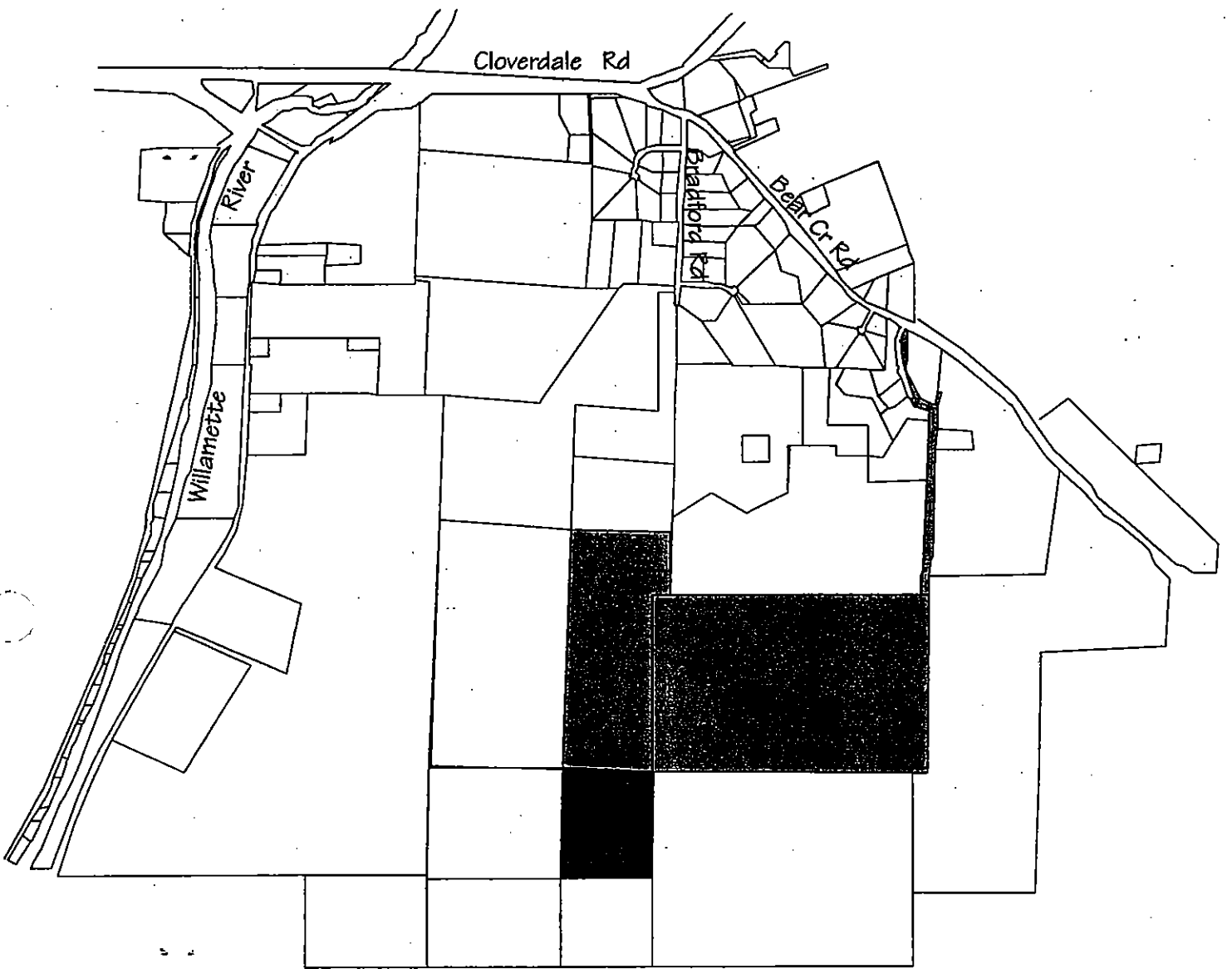
OWNER Signature: _____ Date: _____ APPLICANT Signature: Bobb Lee Date: 9/24/98

An accurate Plot Plan must be attached. Ask for a sample Plot Plan

SPECIFIC SECTION OF LANE CODE REQUIRING THIS APPLICATION _____ RELATED PERMIT # _____

STAFF COMMENTS: _____

NOTES FOR FILE (OWNERS USE)
HOW: WOULD BE FOR VESUBMENTS IS HAVING GUTTER ROAD: BJ EQUIP - HAS APPLIED
BIDDENSTABLE SOUTH END OF THIS ROAD TO CONSTRUCTION DIST.



FILE # PA 98-5144
EXHIBIT # 3

Fax Transmission

Date: 9/24/98

To: Tom Lanfear/Planning Dept
Fax Number: 682-3947



P.O. Box 543
Cottage Grove, OR 97424
541-747-6261

From: Bobbi Lee *[Signature]*

Our Phone: (541) 747-6261
Our Fax: (541) 988-4320

No. of pages including cover page: 2

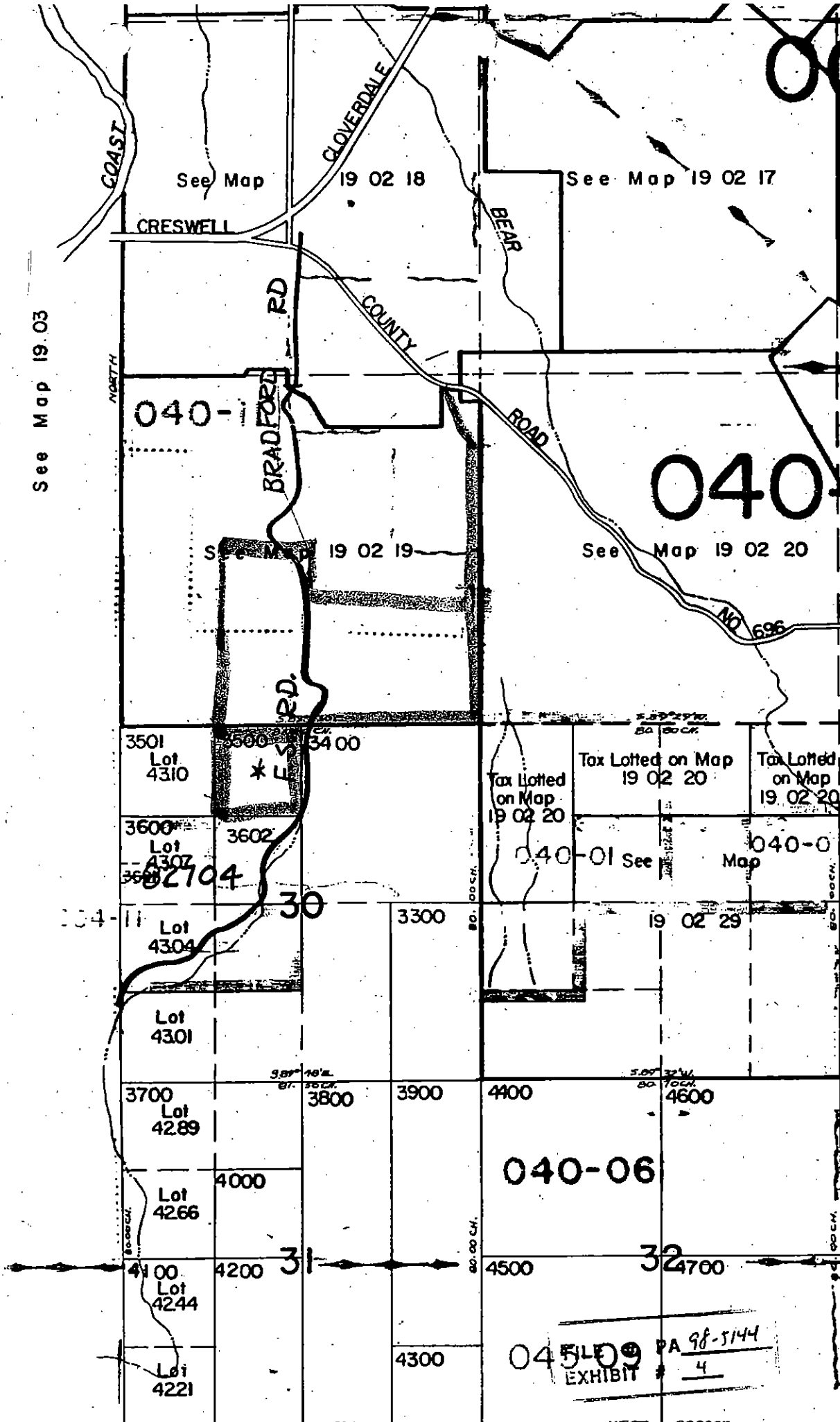
Message:

Please attach this as Ross Bradford's signature on application #PA98-5144.

Please call if you experience any transmission problems.

FOR AN

See Map 19.03



COAST

See Map

CLOVERDALE

19 02 18

See Map 19 02 17

CRESWELL

BEAR

BRADFORD RD

COUNTY

ROAD

040-

040

19 02 19

See Map 19 02 20

NO. 696

3501
Lot
4310

3500
* E

34 00

Tax Lotted
on Map
19 02 20

Tax Lotted on Map
19 02 20

Tax Lotted
on Map
19 02 20

3600
Lot
4307

3602

040-01

See

Map

040-0

3604
Lot
4304

30

3300

19 02 29

Lot
4301

3700
Lot
4289

3800

3900

4400

4600

040-06

Lot
4266

4000

4100
Lot
4244

4200

31

4500

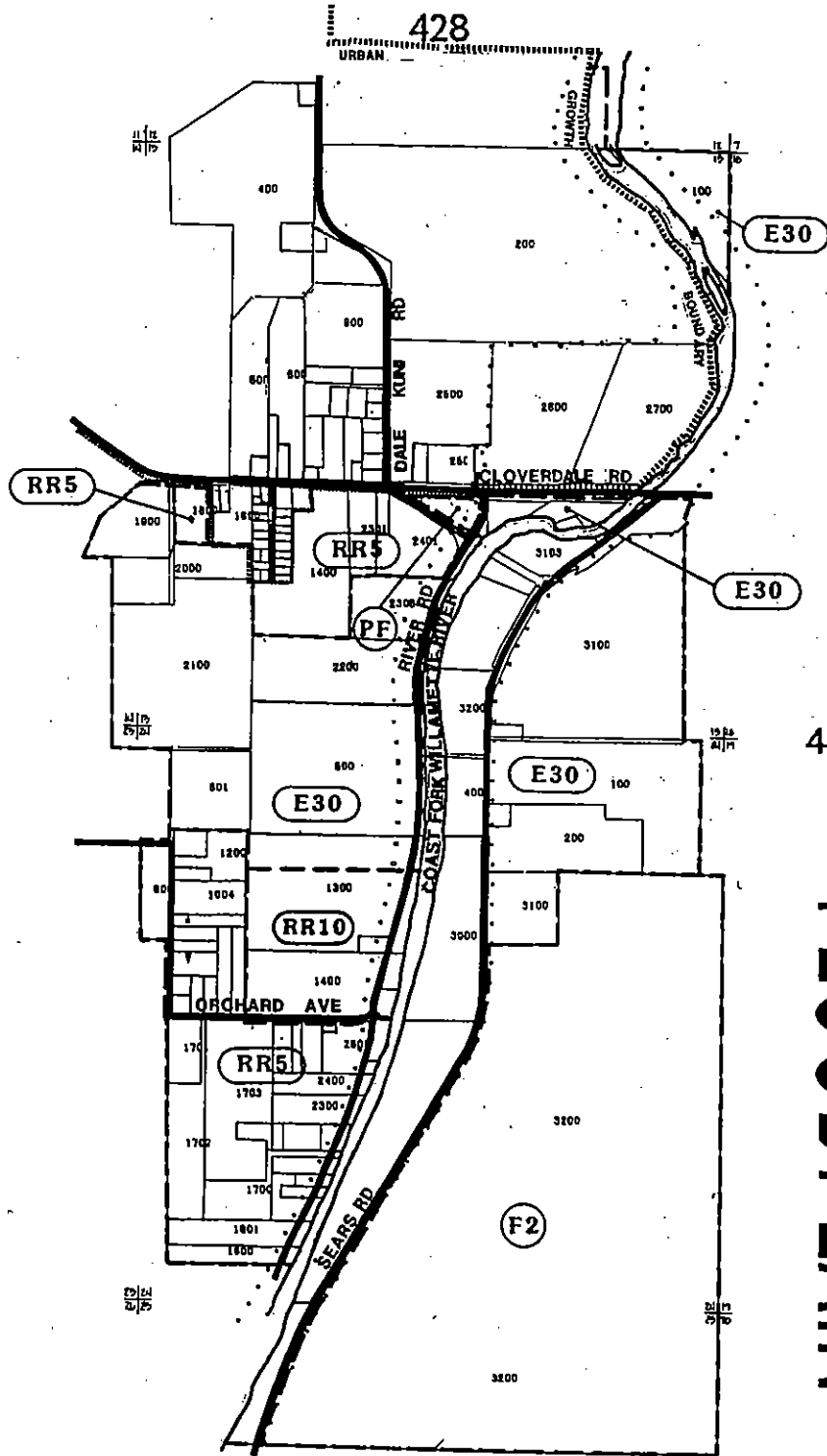
32

4700

Lot
4221

4300

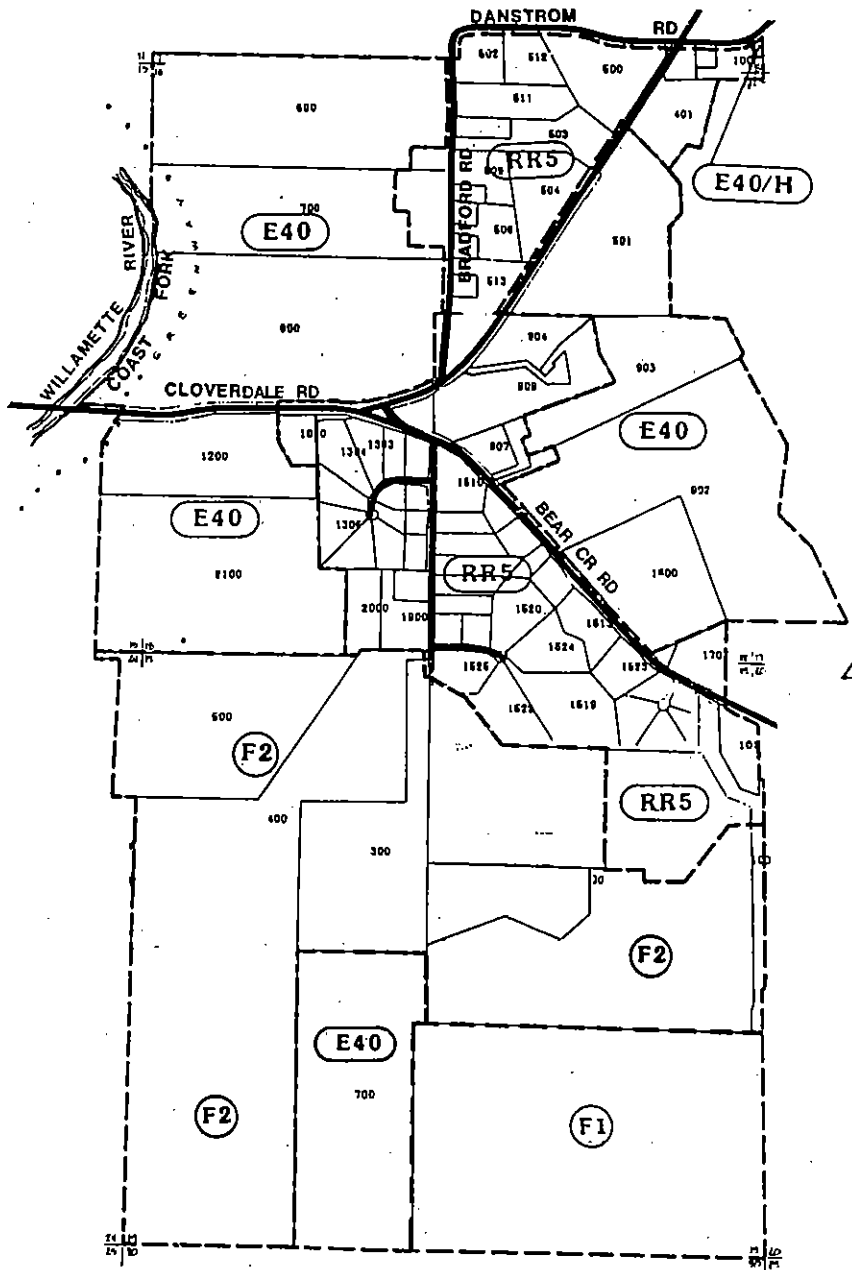
04 FILE 98-5144
EXHIBIT # 4



FLOODPLAIN

exhibits 5-46

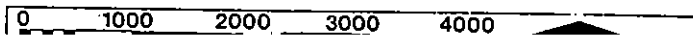
439

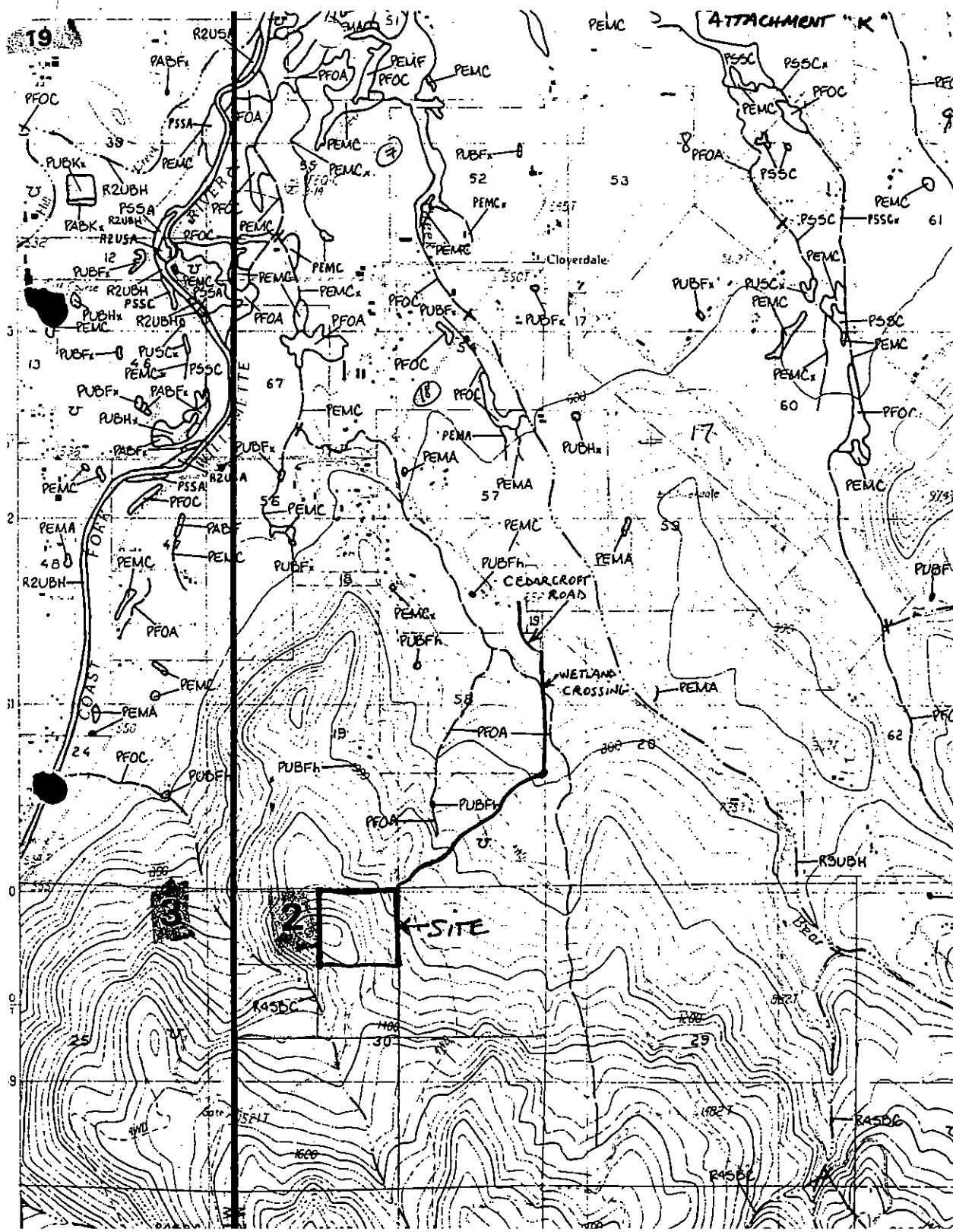


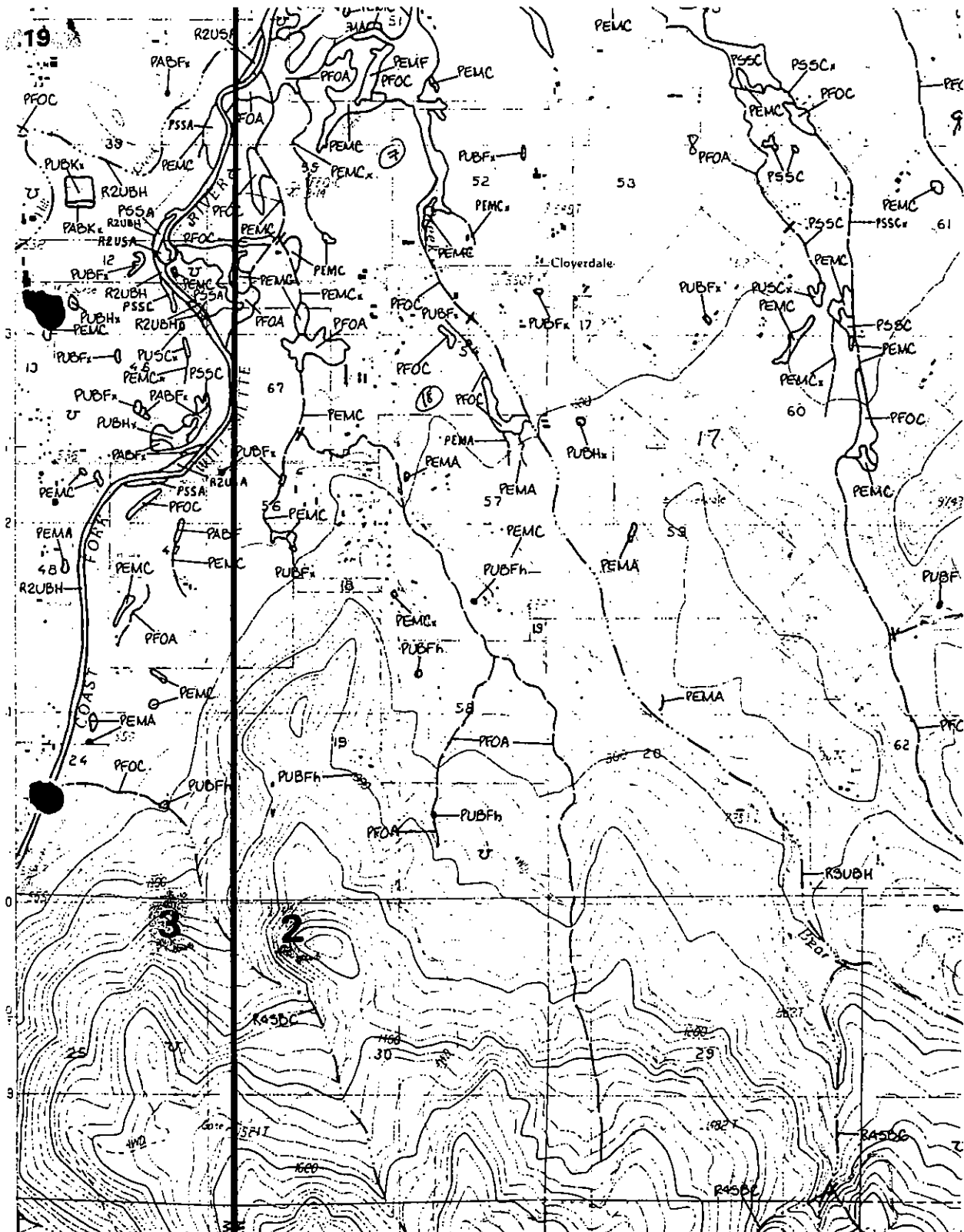
429

451

440B

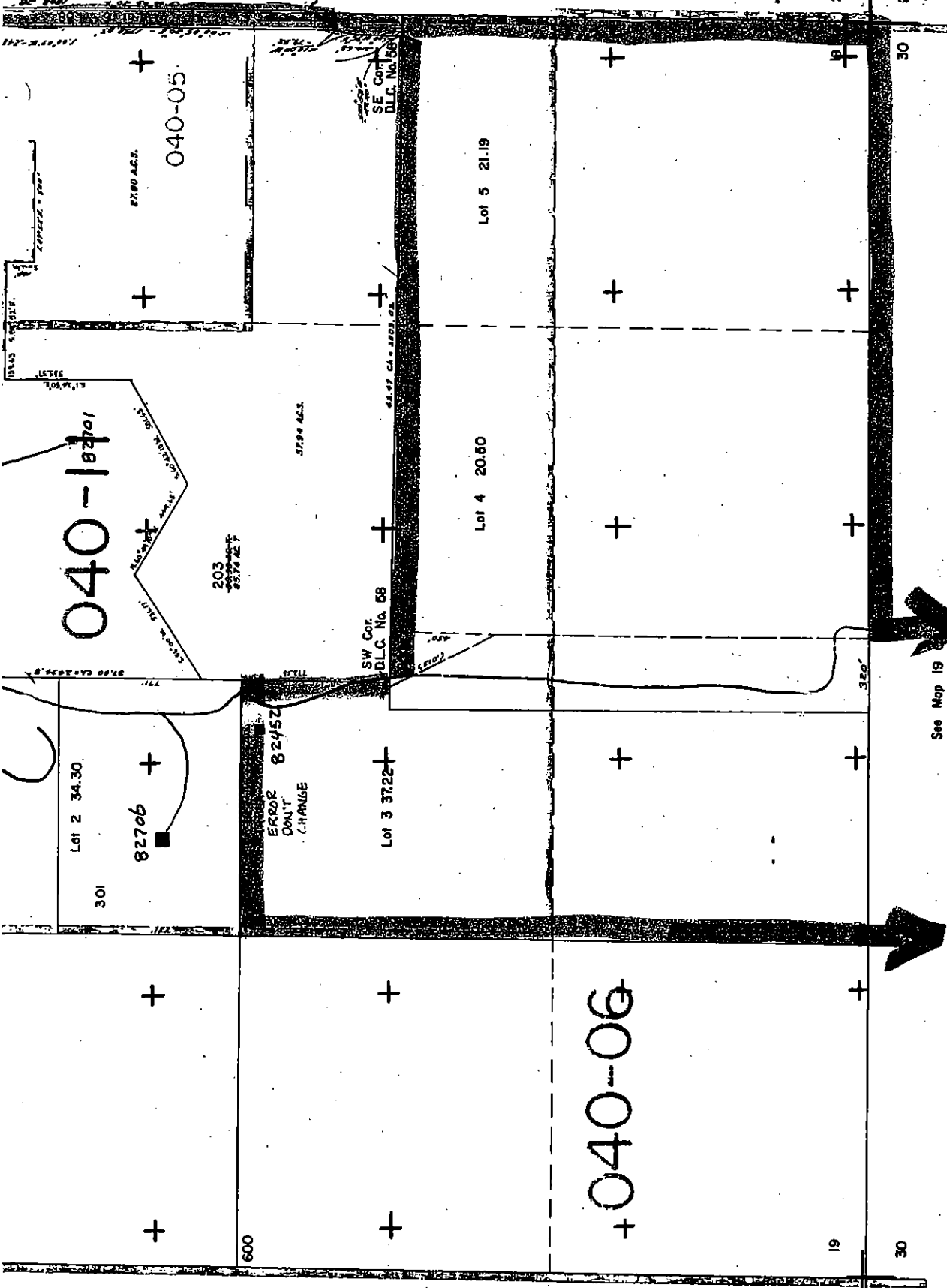






SEE MAP 19 02 20
See Map 19 02 20

Ross
1902
7
8



See Map 19 03 24

824

823

822

Exhibits
8-12

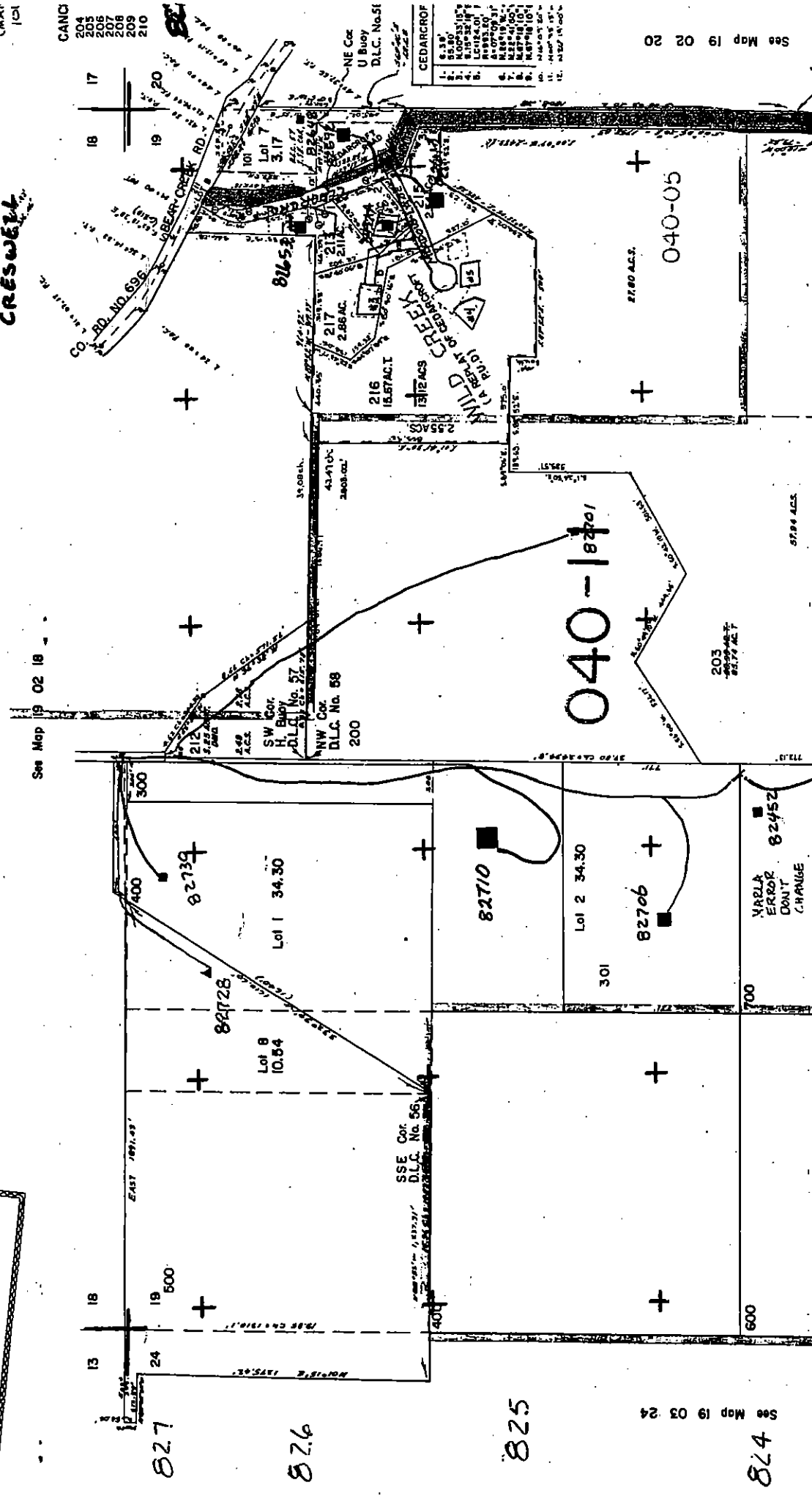
See Map 19

19
1-7-9
CANC.
INTD 1
4-13-6
- DIV. OF
(MAY)
101

CRESWELL
CRESWELL
CRESWELL

Section 9S. R2W.W.M.
LANE COUNTY
1"=400'

numbering done for addresses outside any incorporated will be initiated by Lane Addressing Only!



See Map 19 02 18

See Map 19 02 20

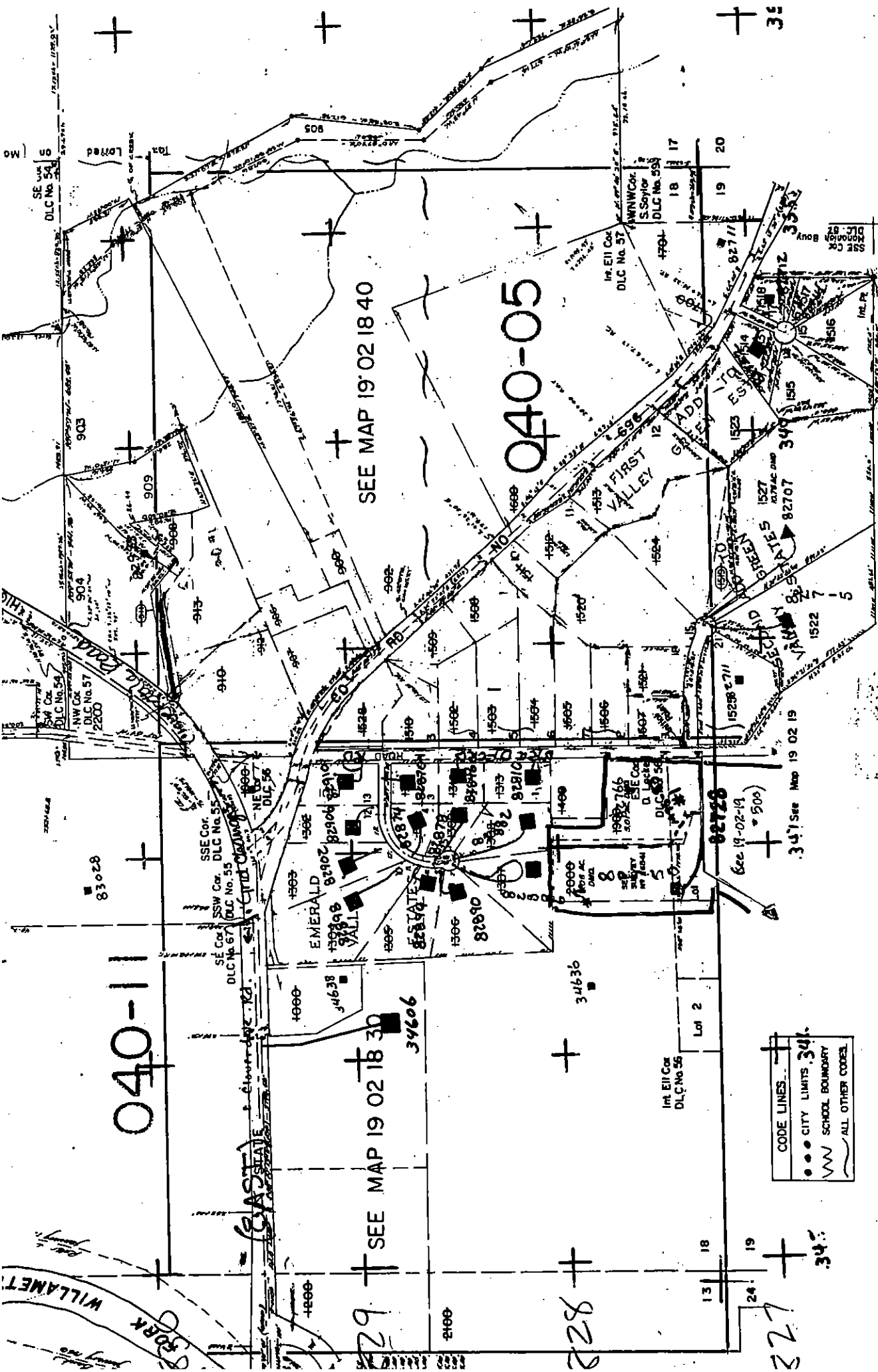
See Map 19 03 24

827

826

825

824



040-11

040-05

SEE MAP 19 02 18 30

SEE MAP 19 02 18 40

CODE LINES
 ●●● CITY LIMITS 34
 W W W SCHOOL BOUNDARY
 ALL OTHER CODES

Int. Etl. Cor.
 DLC No. 56

Lot 2

34 See Map 19 02 19

See 19-02-19
 500

(CASTA)

BORR
 WILANET

EMERALD
 VALLEY

FIRST
 VALLEY

GADDY
 RD

GREEN
 STATE

EMERALD
 VALLEY

FIRST
 VALLEY

GADDY
 RD

GREEN
 STATE

EMERALD
 VALLEY

SE Cor.
 DLC No. 54

NW Cor.
 DLC No. 57

SW Cor.
 DLC No. 55

NE Cor.
 DLC No. 56

Int. Etl. Cor.
 DLC No. 57

Int. Etl. Cor.
 DLC No. 57

Int. Etl. Cor.
 DLC No. 57

Int. Etl. Cor.
 DLC No. 57

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Int. Etl. Cor.
 DLC No. 57

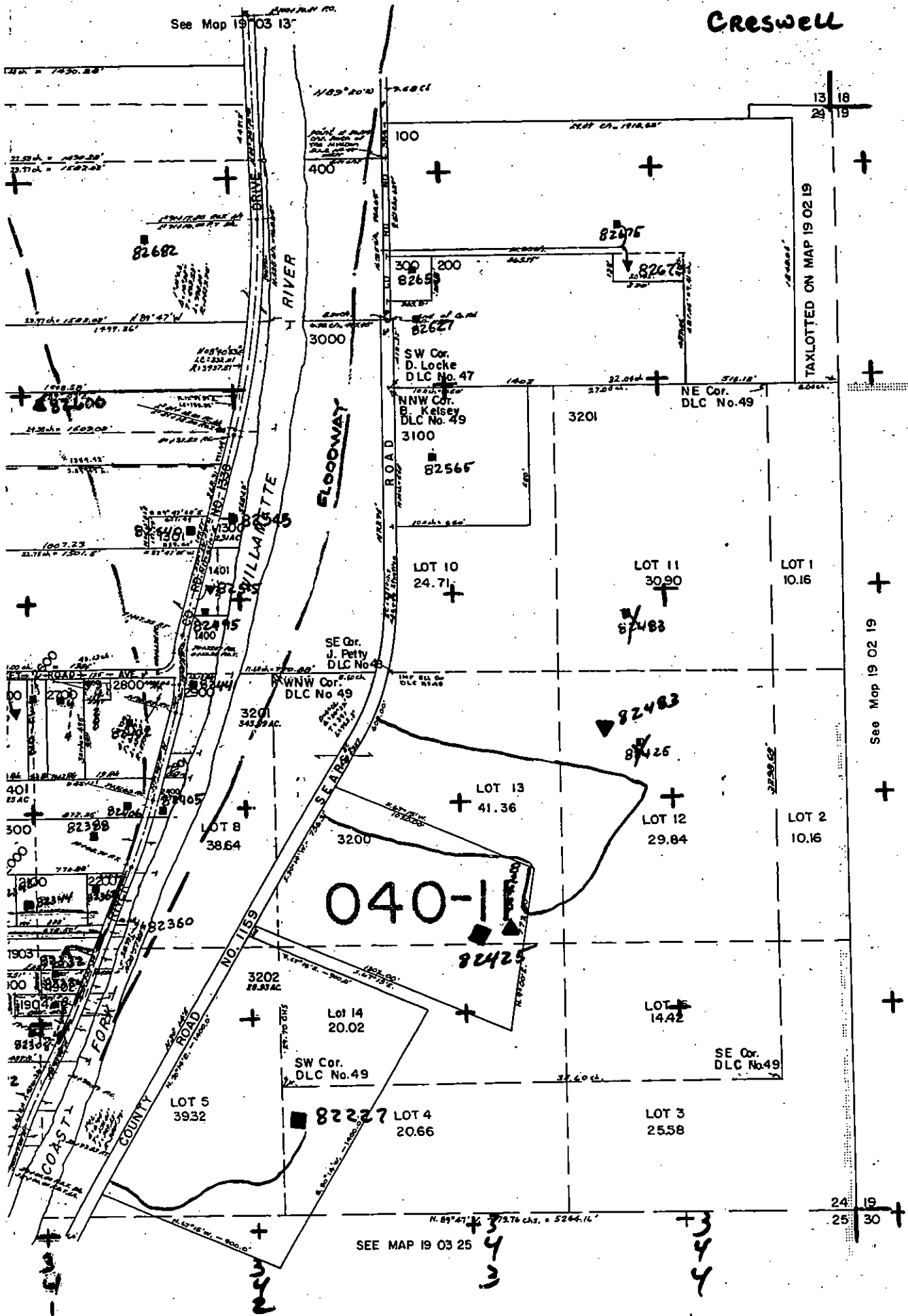
Int. Etl. Cor.
 DLC No. 57

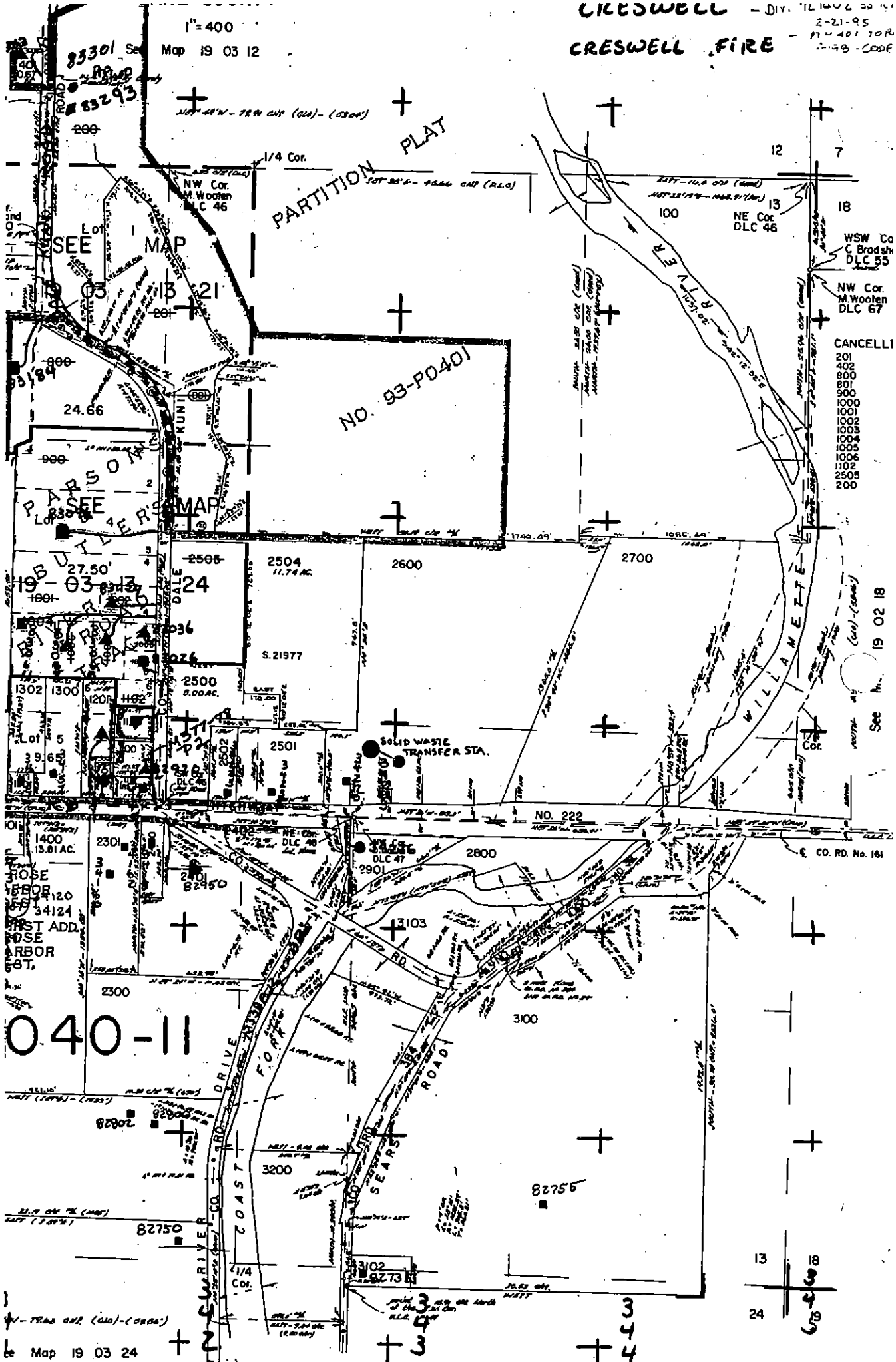
Int. Etl. Cor.
 DLC No. 57

Int. Etl. Cor.
 DLC No. 57

Int. Etl. Cor.
 DLC No. 57

See Map 19 03 13





040-11

See Map 19 02 18

FILE 73

Exhibits

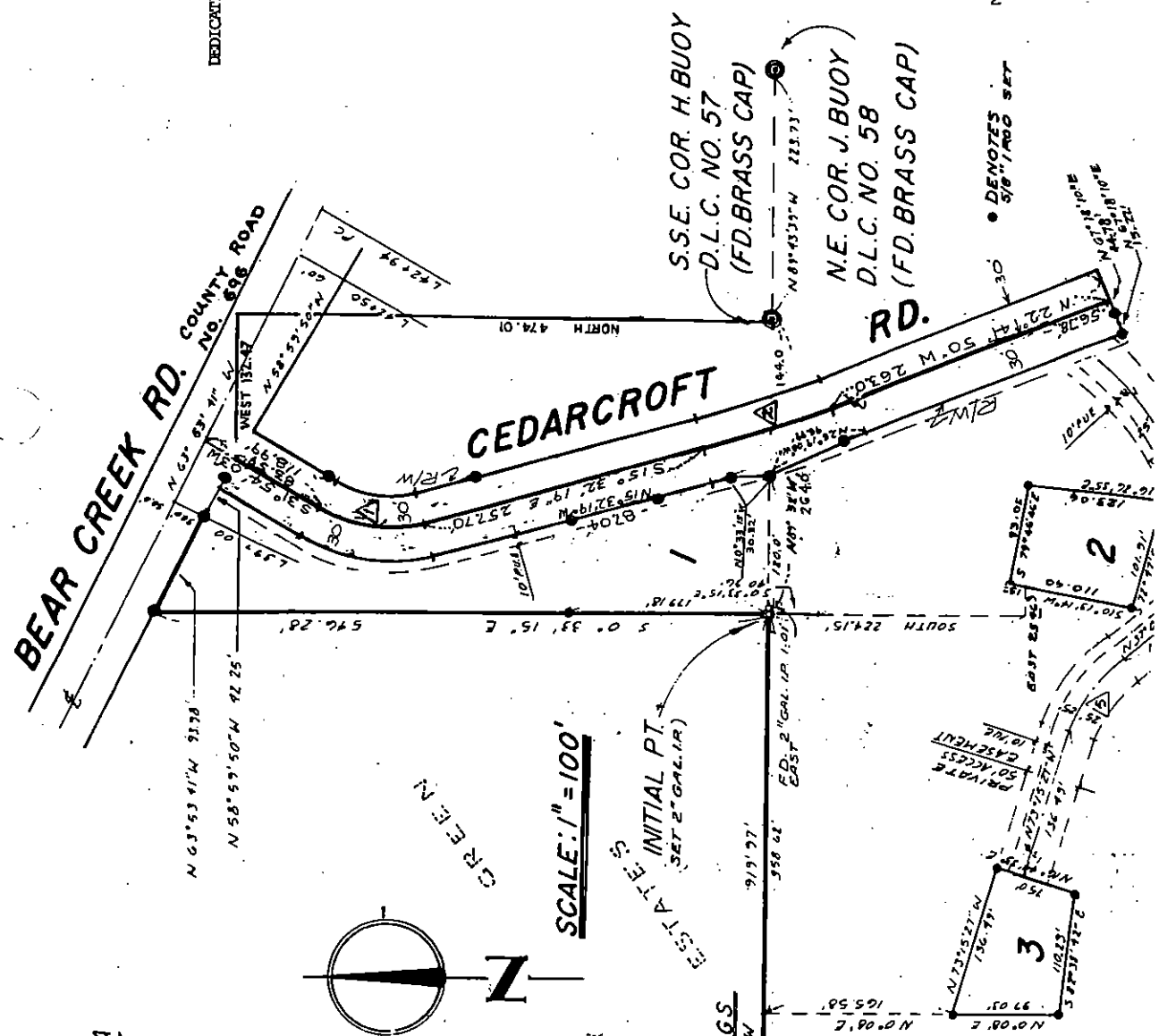
FILE 73 SLIDE 235 LANE COUNTY OREGON PLAT REC
 CEDARCROFT P.U.D. NE 1/4, SEC. 19, T.19 S.,
 W.M. LANE COUNTY, OREGON.
 REEL 993-R, RECORDER'S RECEPTION NUMBER 79277
 REEL 993-R, RECORDER'S RECEPTION NUMBER 79277
 REEL 993-R, RECORDER'S RECEPTION NUMBER 79277
 LANE COUNTY OREGON PLAT RECORDS.

DEDICATION:

ORDER NUMBER 82-3-1
 ESTABLISHES CEDARC
 AS A COUNTY ROAD.

NOTE: SURVEY MONUMENTS NOTED/AS
 FOUND AND SET BY SURVEYOR
 OF CEDARCROFT P.U.D.

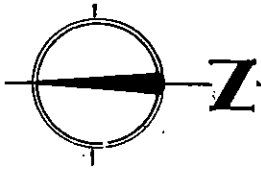
2191



TERLINE CURVE DATA

BEARING	- S 8° 10' 52" W
L.C.	- 96.53'
Δ	- 47° 26' 22"
RAD	- 119.98'
BEARING	- S 19° 07' 05" E
L.C.	- 120.27'
Δ	- 7° 09' 31"
RAD	- 963.20'
BEARING	- S 52° 45' 32" W
L.C.	- 203.42'
Δ	- 40° 30' 23"
RAD	- 405.01'
BEARING	- S 63° 40' 43" W
L.C.	- 54.07'
Δ	- 1° 40' 00"
RAD	- 259.20'
BEARING	- N 55° 17' 14" W
L.C.	- 40.54'
Δ	- 36° 06' 25"
RAD	- 130.00'

SCALE: 1" = 100'



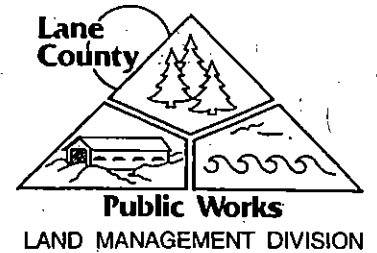
DR. H. BUOY
 NO. 57
 BRASS CAP)

BASIS OF BEARINGS
 N 89° 52' 00" W

ROFT P.U.D.
 SLIDE 235

Exhibit 13

October 13, 1998



Notice of an Incomplete Land Use Application

**Ross Bradford
82452 Bradford Road
Creswell, Oregon 97426**

**B.J. Equipment Company
P.O. Box 543
Cottage Grove, Oregon 97424**

Subject: PA 98-5144
Received on 9/24/98

Proposal: Amend the Rural Comprehensive Plan from "Forest" to "Natural Resource" and Rezoning that Land from "F-1/Non-Impacted Forest Land" to "QM/SR" ("Quarry and Mine Operations with Site Review").

Your land use application, referenced above, has been reviewed and found to be incomplete. A description of the information which your land use application lacks is attached to this letter. Please contact me at 687-4054 if you have questions regarding your application submittal.

Sincerely,

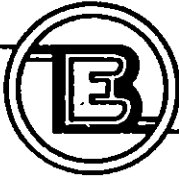
A handwritten signature in cursive script that reads "Thom Lanfear".

Thom Lanfear
Associate Planner
(541) 682-4054

FILE # PA 98-5144
EXHIBIT # 14

**INFORMATION REQUIRED TO COMPLETE LAND USE APPLICATION
PA 98-5144**

1. A copy of the Operations Plan and Reclamation Plan submitted to the Department of Geology and Mineral Industries.
2. A copy of any access agreements across the following properties: Map 19-02-19 #800, 301, 300, & 212.
3. Identification of the individual parcels within the 1500 ft. impact area and the uses that occur on them. This information should be provided in map and tabulated forms.
4. Address the requirements in OAR 660-023-0180(4)(b)(A) through (F) in your summary statements.
5. A Site Plan drawn to scale, showing dimensions, setbacks, location, hours of operation, and other pertinent information for all proposed mining and associated uses.
6. The traffic analysis must be revised to analyze the impact of the maximum number of vehicles in each direction on Cloverdale Road, not half in each direction. Refer to "Traffic Impact Analysis," Page 2, last paragraph under "Future Traffic Volumes."
7. Identify and address any impacts due to the use of blasting in the mining operations.



Branch Engineering

RECEIVED BY
LAND MANAGEMENT

310 5th Street
Springfield, Oregon 97477
(541) 746-0637
Fax (541) 746-0389

October 15, 1998

OCT 19 1998

AM 7,8,9,10,11,12,1,2,3,4,5,6 PM

Thom Lanfear
Lane County Land Management Division
125 East 8th Avenue
Eugene, OR 97401

Re: Supplement to Traffic Impact Analysis for Proposed Bradford Pit Quarry

Dear Thom,

The Traffic Impact Analysis dated June, 1998 indicated 50 percent of the site generated trips were assigned to and from the north on Cloverdale Road and 50 percent were assigned to and from the south. Per your request, Branch Engineering performed additional analysis at the Cloverdale Road/Bear Creek Road intersection. The Cloverdale Road/Bear Creek Road intersection was evaluated to determine the impact at the intersection if 100 percent of the site generated trips were assigned to and from the north or south. Level of service calculations indicate assigning 100 percent of the site generated trips to and from the south would create the greatest impact. The calculations further indicate all movements at the Cloverdale Road/Bear Creek Road intersection are projected to operate at LOS 'A' in this "worst case scenario". The revised figures and calculations are attached for your use.

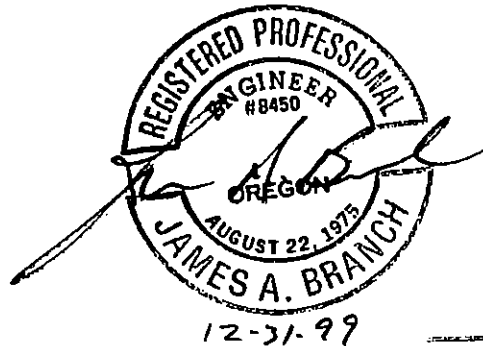
The conclusion of this analysis is the same as that stated in the Traffic Impact Analysis in that the additional trips will not have a significant adverse impact on the operating characteristics of the existing roadways and intersections.

If you have any further questions please do not hesitate to call.

Sincerely,

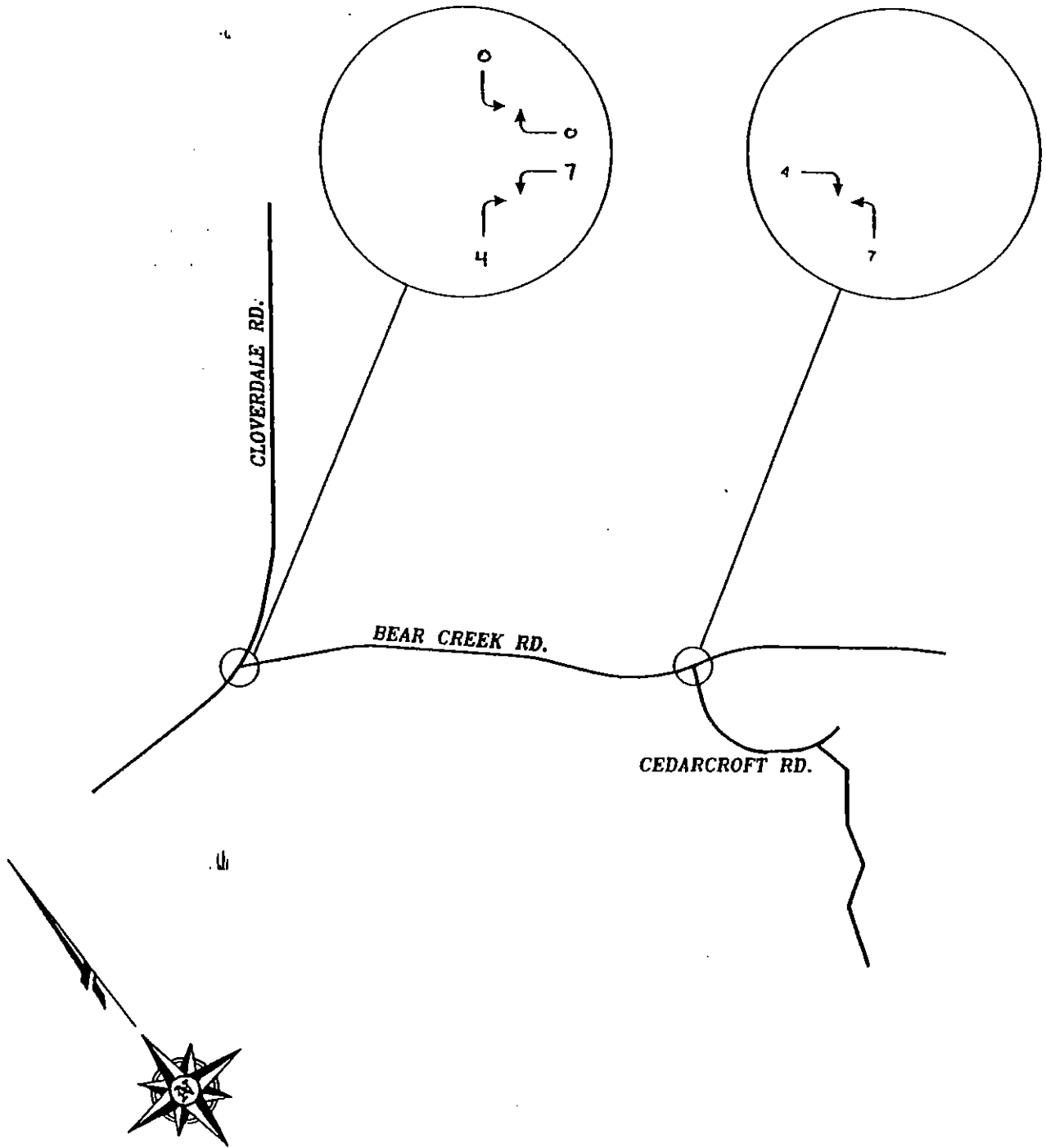
James A. Branch, P.E.

cc: B.J. Equipment Co.



FILE # PA 98-5144
EXHIBIT # 15

SIDE GENERATED TRAFFIC VOLUMES
(PM PEAK HOUR)



FILE NAME: E:\98\98141\98141.DWG

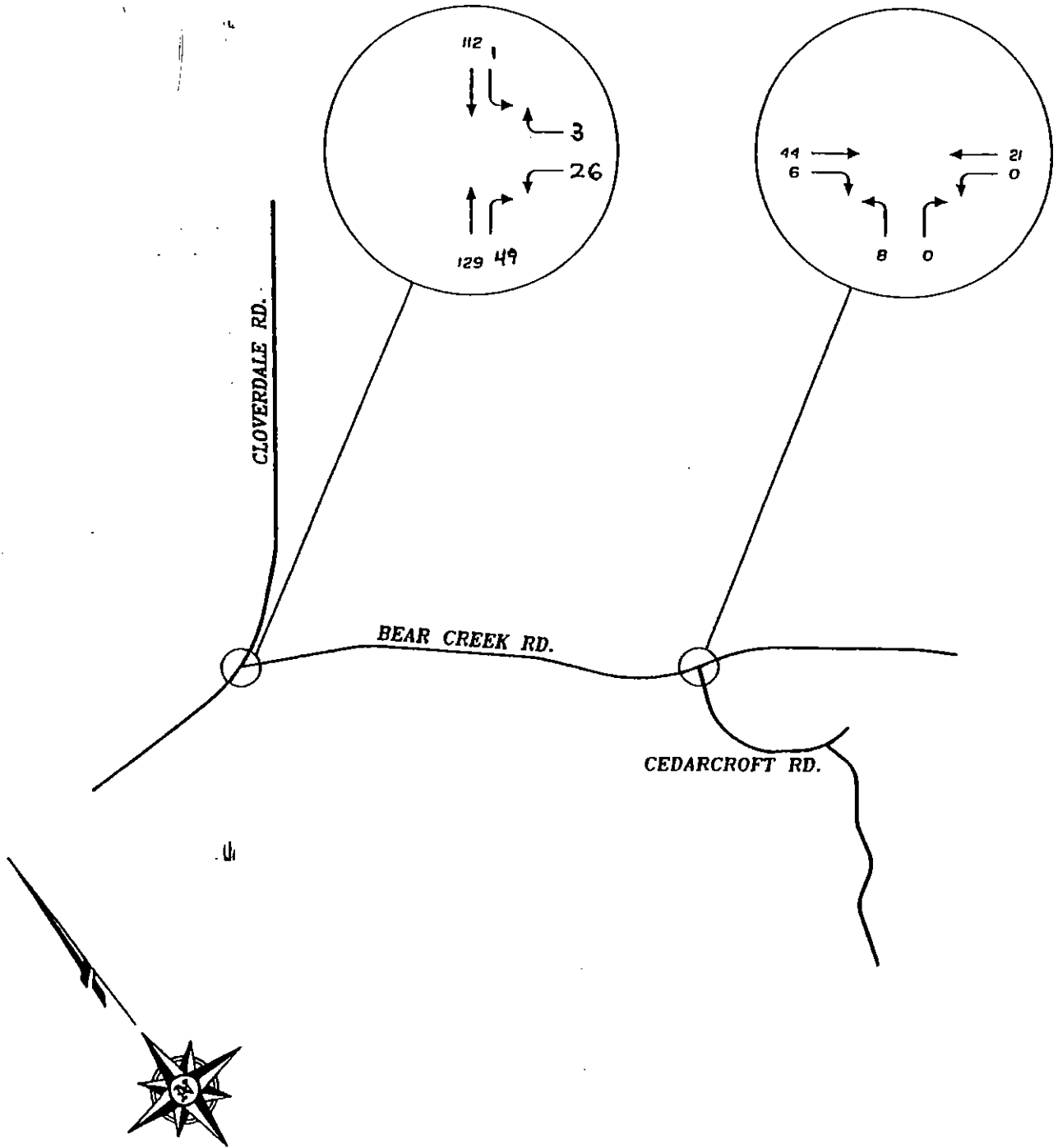
REVISED

FIGURE 3



Branch Engineering

1998 'BUILD' TRAFFIC VOLUMES
(PM PEAK HOUR)



FILE NAME: E:\98\98141\98141.DWG

REVISED

FIGURE 4

File Name
 Streets: (N-S) CLOVERDALE RD (E-W) BEAR CREEK RD
 Major Street Direction.... NS
 Length of Time Analyzed... 60 (min)
 Analyst..... CHILSON
 Date of Analysis..... 10/15/98
 Other Information..... 1998 'BUILD' TRAFFIC VOLUMES
 ALL TRAFFIC TO/FROM THE SOUTH

Two-way Stop-controlled Intersection

	Northbound			Southbound			Eastbound			Westbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1<	0	0>	1	0	0	0	0	0>	0<	0
Stop/Yield			N			N						
Volumes		129	49	1	112					26		3
PHF		.9	.9	.9	.9					.9		.9
Grade		0			0			0			0	
MC's (%)		0	0	0	0					0		0
SU/RV's (%)		0	0	0	0					0		0
CV's (%)		0	0	0	0					0		0
PCE's		1.1	1.1	1.1	1.1					1.1		1.1

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

WorkSheet for TWSC Intersection

Step 1: RT from Minor Street	WB	EB
Conflicting Flows: (vph)	154	
Potential Capacity: (pcph)	1157	
Movement Capacity: (pcph)	1157	
Prob. of Queue-free State:	1.00	
Step 2: LT from Major Street	SB	NB
Conflicting Flows: (vph)	178	
Potential Capacity: (pcph)	1410	
Movement Capacity: (pcph)	1410	
Prob. of Queue-free State:	1.00	
TH Saturation Flow Rate: (pcphpl)	1700	
RT Saturation Flow Rate: (pcphpl)		
Major LT Shared Lane Prob. of Queue-free State:	1.00	
Step 4: LT from Minor Street	WB	EB
Conflicting Flows: (vph)	266	
Potential Capacity: (pcph)	743	
Major LT, Minor TH Impedance Factor:	1.00	
Adjusted Impedance Factor:	1.00	
Capacity Adjustment Factor due to Impeding Movements	1.00	
Movement Capacity: (pcph)	742	

Intersection Performance Summary

Movement	FlowRate v (pcph)	MoveCap Cm (pcph)	SharedCap Csh (pcph)	Avg.Total Delay	LOS	Delay By App
WB L	32	742 >		>	>	
WB R	3	1157 >	766	4.9	A	4.9
SB L	1	1410		2.6	A	0.0

Intersection Delay = 0.5

Center For Microcomputers In Transportation

HCS: Unsignalized Intersection Release 2.1

File Name RD439.HC0
 Streets: (N-S) CLOVERDALE RD (E-W) BEAR CREEK RD
 Major Street Direction.... NS
 Length of Time Analyzed... 60 (min)
 Analyst..... CHILSON
 Date of Analysis..... 10/15/98
 Other Information..... 1998 'BUILD' TRAFFIC VOLUMES
 ALL TRAFFIC TO/FROM THE NORTH

Two-way Stop-controlled Intersection

	Northbound			Southbound			Eastbound			Westbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1<	0	0>	1	0	0	0	0	0>	0<	0
Stop/Yield			N			N						
Volumes		129	45	5	112					19		10
PHF		.9	.9	.9	.9					.9		.9
Grade		0			0			0			0	
MC's (%)		0	0	0	0					0		0
SU/RV's (%)		0	0	0	0					0		0
CV's (%)		0	0	0	0					0		0
PCE's		1.1	1.1	1.1	1.1					1.1		1.1

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

WorkSheet for TWSC Intersection

Step 1: RT from Minor Street	WB	EB
Conflicting Flows: (vph)	152	
Potential Capacity: (pcph)	1160	
Movement Capacity: (pcph)	1160	
Prob. of Queue-free State:	0.99	
Step 2: LT from Major Street	SB	NB
Conflicting Flows: (vph)	174	
Potential Capacity: (pcph)	1416	
Movement Capacity: (pcph)	1416	
Prob. of Queue-free State:	1.00	
TH Saturation Flow Rate: (pcphpl)	1700	
RT Saturation Flow Rate: (pcphpl)		
Major LT Shared Lane Prob. of Queue-free State:	0.99	
Step 4: LT from Minor Street	WB	EB
Conflicting Flows: (vph)	268	
Potential Capacity: (pcph)	741	
Major LT, Minor TH Impedance Factor:	0.99	
Adjusted Impedance Factor:	0.99	
Capacity Adjustment Factor due to Impeding Movements	0.99	
Movement Capacity: (pcph)	737	

Intersection Performance Summary

Movement	FlowRate v(pcph)	MoveCap Cm(pcph)	SharedCap Csh(pcph)	Avg.Total Delay	LOS	Delay By App
WB L	23	737 >		>	>	
WB R	12	1160 >	842	4.5	A	4.5
SB L	7	1416		2.6	A	0.1

Intersection Delay = 0.4

ADDENDUM TO:

PA98-5144

APPLICATION FOR A PLAN AMENDMENT AND ZONE CHANGE

Map No.: T19 R2 S00 Taxlot #3500

Submitted by: Ross Bradford
82452 Bradford Rd.
Creswell, OR 97426

Agent: BJ Equipment Company
P.O. Box 543
Cottage Grove, OR 97424
(541) 747-6261

FILE # PA 98-5144
EXHIBIT # 16

①

Operating and Reclamation Plan

For sites in sensitive locations, additional information may be required.
If more space is needed, attach additional sheets or use the blank sheet provided at the end of this form.

Oregon Department of Geology and Mineral Industries
Mined Land Reclamation Program
1536 Queen Avenue, SE
Albany OR 97321-6687
(541) 967-2039
Fax (541) 967-2075

MUCH OF THE INFORMATION REQUESTED CAN BE EXPLAINED ON THE MINE PLAN MAP. SEE PAGE 7 FOR MAP REQUIREMENTS.

1. PRE-MINE CONDITIONS

- a) Current land use and zoning Forestry F1
- b) Average depth of topsoil 2' 0'-5'
- c) Type and density of vegetation Douglas fir, black berry, as grass
- d) Are there any springs, seeps, intermittent or perennial streams on or near the site? yes no
If yes, list here and locate on mine plan map.
- e) Has a wetland delineation been completed? yes no
If yes, attach report.
- f) Has a landslide investigation been completed on this property? yes no
If yes, attach report.

2. POST-MINING LAND USE

- a) What is the planned post-mining beneficial use of the permit area?
 - Agriculture
 - Range/Open Space
 - Forestry
 - Housing/Construction
 - Wildlife/Wetland
 - Recreation
 - Other

The post-mining use must be compatible with the local comprehensive plan or have specific land-use approval. For significant aggregate sites, which are zoned for mining, local government must determine the post-mining land use.

3. RECLAMATION TIMING

Oregon law requires reclamation to be completed within 3 years after completion of mining on any segment of the mine area.

- a) How many days after mining is completed will reclamation begin? _____
- OR
- b) If reclamation will be concurrent with mining, explain the procedure for concurrent reclamation.

As soon as any area is not needed for mining purposes we will recover w/ original topsoil and replant area according to Forest Practices replanting regulations

4. OPERATING PLAN

- a) Mining method(s) to be employed (mark all that apply):
 - single bench multiple bench pond excavation
 - placer mine side hill cut hill top removal
 - other: _____
- b) Equipment to be used for mining: drills, loaders, dozers, excavators, rock crushers.
- c) Will there be on-site processing? yes no
If yes, check type of processing:
 - wash water contained in a closed system source of water: _____
 - wash water discharged off site
 - dry processing
 - other: _____
- d) Will blasting be employed? yes no
- e) Distance to closest structure not owned by permittee. 1/2 miles 2,600'
- f) Disposition of removed vegetation. burn or used as brush sediment barrier
- g) Soil types which will be disturbed by mining, processing, reclamation. forest soil
- h) Average soil salvage depth all avel. 0'-1'
- i) Overburden removal depth 0'-3'
- j) Will soil, overburden, rock waste or crusher reject dumps stockpiles be created during mining? yes no
If yes, list the estimated volume of each at the end of this form and locate on a mine plan map.

Additional information may be required for large dumps or those located on steep terrain.

- k) Will this plan require excavating across any property line? yes no
- l) How and where will soil or subsoils be stored for reclamation? Locate storage areas on mine plan map.
Vegetated berm along perimeter site
- m) What measures will be taken to reduce compaction and prevent water and wind erosion of the topsoil stockpiles and when will they be implemented?
plant w/ annual rye w/ other species as recommended by DOGAMI

n) What will be the minimum property setback:
 for the excavation 50'
 for processing or storage 50'

5. WATER RESOURCE PROTECTION

- a) Will mining occur below groundwater level? yes no
 b) Will mine site dewatering be necessary? yes no
 If yes, explain procedure and estimated depth to which water will be drawn down inside of the mine and where water will be discharged.

WRD A permit may be required from the Water Resources Department for dewatering activity. NA

- c) Will process water be contained on site? yes no
 d) Will storm water be contained on site? yes no
 e) Will a pond(s) be used to contain water? yes no

Explain containment procedures.
apply appropriate BMP's to control turbidity and control erosion to contain stormwater on site

If the answer to c) or d) is yes, please explain discharge procedures.
see above explanation.

DEQ A permit from the Department of Environmental Quality may be required for off-site discharges and is required for any discharge into public waters, wetlands, streams or lakes.

- f) Will any drainages/streams be relocated? yes no
 If yes, complete Section 11.
 g) What will be the minimum undisturbed setback(s) of the operation from all stream(s) or drainage(s)? min 500'

List the name of stream(s) or drainage(s) and setback from each at the end of this form and locate on a mine plan map.

- h) How will the buffer(s) be identified and protected during mining and reclamation?
leave berms & trees as visual screen.

i) Describe methods employed to control erosion in the permit area. Be specific, i.e., seeding and mulching, sediment basins or ponds, contour ditching, waterbars, etc.
Seeding & mulching any overburden that has been mined.
 Any access roads will be ditched and drained w/ french drains or water bars.

j) Will settling ponds/dams be constructed? yes no
 State the number and size of the impoundment(s) and how they will be built. Will the pond be excavated or will berms be constructed? Locate on a mine plan map.
Constructed as needed.

k) If dams will be constructed, how high will they be and what is the maximum amount of water (in acre feet) to be impounded behind each dam?
N/A

WRD If a dam is higher than 10 feet, and stores more than 9.2 acre feet of water, approval from the Water Resources Dept. is required prior to construction.

N/A If berms or a dam will be constructed, describe construction details and attach a sketch showing construction methods.

- m) How deep will impoundment(s) be?
 n) If the impoundment(s) are to be removed upon completion of mining, how will they be drained and/or filled?
 o) Will settling ponds, wetlands, or a water impoundment be left upon final reclamation? yes no

6. GROUNDWATER INFORMATION

- a) Proposed mine depth 120'
 b) Groundwater depth unknown
 (Under static (pre-mine) conditions)
 c) What is groundwater depth estimate based on?
no estimates
 d) Flow direction of groundwater, if known. unknown
 e) Distance to closest well outside the permit boundary,
approx 2000'

Wells within permit area must be shown on mine plan map. Attach a copy of the well log(s).

7. VISUAL AND NOISE SCREENING

Screening can be very effectively employed to isolate sites from public notice and to minimize noise from operations.

- a) Does a natural landform or vegetative screen currently exist along the permit boundary? yes no
If yes, what screen width will be maintained during mining?
outer edge maintained until quarry floor lowered
- b) Will a berm and/or vegetation be established to develop a visual screen for the operation? yes no
If yes, describe the height and width of the berms and/or the type and density of vegetation; show location on mine map.

(Crushed rock stockpiles, although not permanent, can also be used to reduce noise from the operation.)

overburden piles will be vegetated along perimeter.

8. EQUIPMENT AND STRUCTURES REMOVED

- a) Upon final reclamation, will all structures, visual berms, equipment, and refuse be removed? yes no
If no, explain what will be left.

9. RECLAMATION TECHNIQUES

- a) What will be done with oversized rock not used during mining?
Oversize will be reduced and crushed
- b) What will be the average depth of soil replaced on the area to be reclaimed? 2'

If less than 12" of topsoil is available, a substitute material may be required.

- c) Will additional material be utilized as a soil substitute to complete the revegetation? yes no
If yes, specify type(s), amount(s), and source(s).
- d) Will any waste products, such as tailings, crusher rejects, etc., be generated during mining? yes no
If yes, what will be done with them?
- e) How will processing and stockpile sites be reclaimed? If they are to be revegetated, explain procedures which will be employed to decompact areas prior to topsoiling/seeding.
yes, cover w/ soil where available or shoot floors to improve permeability

10. REVEGETATION TECHNIQUES

- a) Species to be seeded/planted by type and amount.
As recommended by DOGAMI or State Forestry Department
- b) Describe method and time of year for planned planting.
grass + stabilization - hand broadcast
tree reforestation - hand planting
- c) List fertilizers and lime to be used (include amount).
As recommended by DOGAMI or State Forestry Department
- d) List type and amount of mulch or other erosion control techniques such as erosion netting.
Mulch as required
Seed as required

Vegetative survival comparable to the density of original ground cover will normally be considered acceptable.

11. RECLAMATION PROCEDURES - POST-MINE DRAINAGE CONTROL AND RECONSTRUCTION

- a) During reclamation, will stream channel and/or bank stabilization and rehabilitation be necessary? yes no
If yes, attach plans. n/a

DSL

A Division of State Lands' permit is required for relocation of all perennial and some intermittent water courses.

- b) How will surface water runoff and erosion be controlled upon completion of mining? Describe and list structures that will be used.
apply appropriate BMP's to control surface water runoff

12. RECLAMATION PROCEDURES - IMPOUNDMENTS & POND DECOMMISSIONING

- a) Will dewatering be required? yes no
- b) Will it be necessary to backfill a water filled excavation pit or pond? yes no
- c) How will settling ponds be stabilized and revegetated?
yes where applicable
- d) How will quality of imported backfill be monitored to protect groundwater quality?
no back fill needed

Monitoring may be required to ensure groundwater protection.

**13. RECLAMATION PROCEDURES
LAND SHAPING**

Long continuous slopes should be avoided or broken up with surface contours, ditches, or complex slope shape.

- a) What will be the:
 - i) -steepest above-water *excavated* slopes left after mining? (1½:1 is generally maximum) 1½:1
 - ii) -steepest above-water *fill* slopes left after mining? (2:1 is generally maximum) 2:1
- b) What will be done to ensure the stability of excavated slopes?
Seeding and mulching and reforestation
- c) What will be done to ensure the stability of fill slopes?
Same as above
- d) Will this site be shaped or backfilled to blend in with surrounding topography? yes no

14. POST-MINING WATER IMPOUNDMENT(S)

- a) Number of impoundment(s) N/A
- b) Use of impoundment(s) N/A
- c) Total surface area in acres N/A
- d) Average depth N/A

e) How much is water level expected to fluctuate annually?
N/A

f) What will be the steepest and flattest in-water slopes left after mining?
N/A

Generally 3:1 in-water slopes are the steepest allowable, except off islands. To increase potential for wetland habitat establishment, 5:1 to 20:1 slopes are needed.

g) Will shallow ponds, shorelines, or other areas conducive to wetland plant development be left?..... yes no

h) What will be the impoundment water source?
N/A

WRD *A water right for the water source may be needed from the Water Resources Department.*

i) What will be done for wildlife & fish enhancement, e.g. fish structures, islands, peninsulas, and irregular shorelines?
N/A

j) If wetlands are to be constructed, explain the methods and final configuration.
N/A

15. OTHER PERMITS

In order to assist other agencies in the review of this plan and their ability to ascertain compliance with their laws, list all permits by type and number that are held (or applications filed) for this mine site or processing equipment (such as fill/removal permits, water rights, air quality and stormwater or waste water permits).

Agency / Permit Title	Permitting Status
Lane County / Conditional Use Permit	in process

16. LANDOWNER CONSENT

As surface or mineral rights owner, I concur with the proposed subsequent use for any mining operation and with the operating and reclamation plan as submitted. I also agree to allow access to the State Department of Geology and Mineral Industries or their contractor for reclamation of the mine site if it is declared abandoned by the Department of Geology and Mineral Industries.

Appropriate signatures are needed for EACH land parcel.

I CONCUR (Surface Rights)

Name (Please Print or Type) _____
Signature _____
Title _____
Date _____

I CONCUR (Mineral Rights):

Name (Please Print or Type) _____
Signature _____
Title _____
Date _____

COPY

17. APPLICANT'S ACCEPTANCE

Name (Please Print or Type) Kristofer R. Jernigan
Signature Kristofer R. Jernigan
Title Gen. Superintendent
Date February 4, 1998

18. PREPARED BY (IF OTHER THAN APPLICANT)

Name (Please Print or Type) _____
Signature _____
Title _____
Company _____
Date _____

Properties within 1,500 feet of purposed quarry site:

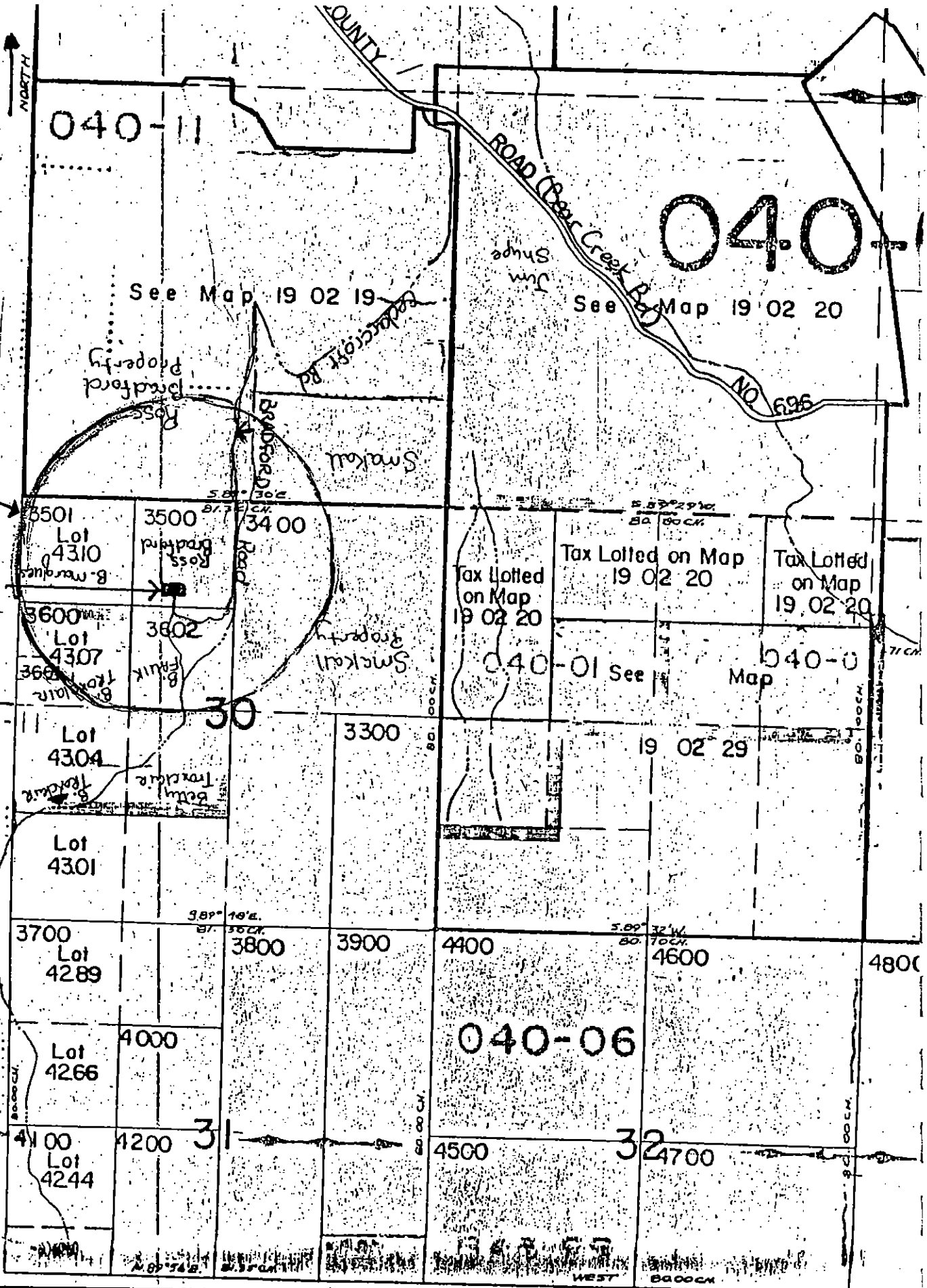
Tax Lot 3501	Bob Marques / Forest Property borders the west side of Tax Lot 3500
Tax Lot 3400	James Smakall / Forest Property borders the east side of Tax Lot 3500
Tax Lot 3600	Bettie, Robert & Ed Troxclair / Forest Property is located to the southwest of Tax Lot 3500
Tax Lot 3602	Barney Faulk / Forest Property borders the south of Tax Lot 3500

A map showing location of above tax lots and a circle indicating the 1500' impact area is attached hereto.

The tax lots listed above are the only tax lots within the 1500 feet impact area. All of these tax lots are under forest zoning. Ross and Norma Bradford own the property bordering the north side of Tax Lot 3500. As well as tax lot #800 and #100 which encompasses the access to the quarry property off of Cedarcroft Road.

NO. 11-401

See Map 19 02 19



040-11

040

See Map 19 02 19

See Map 19 02 20

Bradford Property

Shupe

Bradford Rd

ROAD (Bear Creek Rd)

Impact

1500

EXISTING QUARRY

BLM

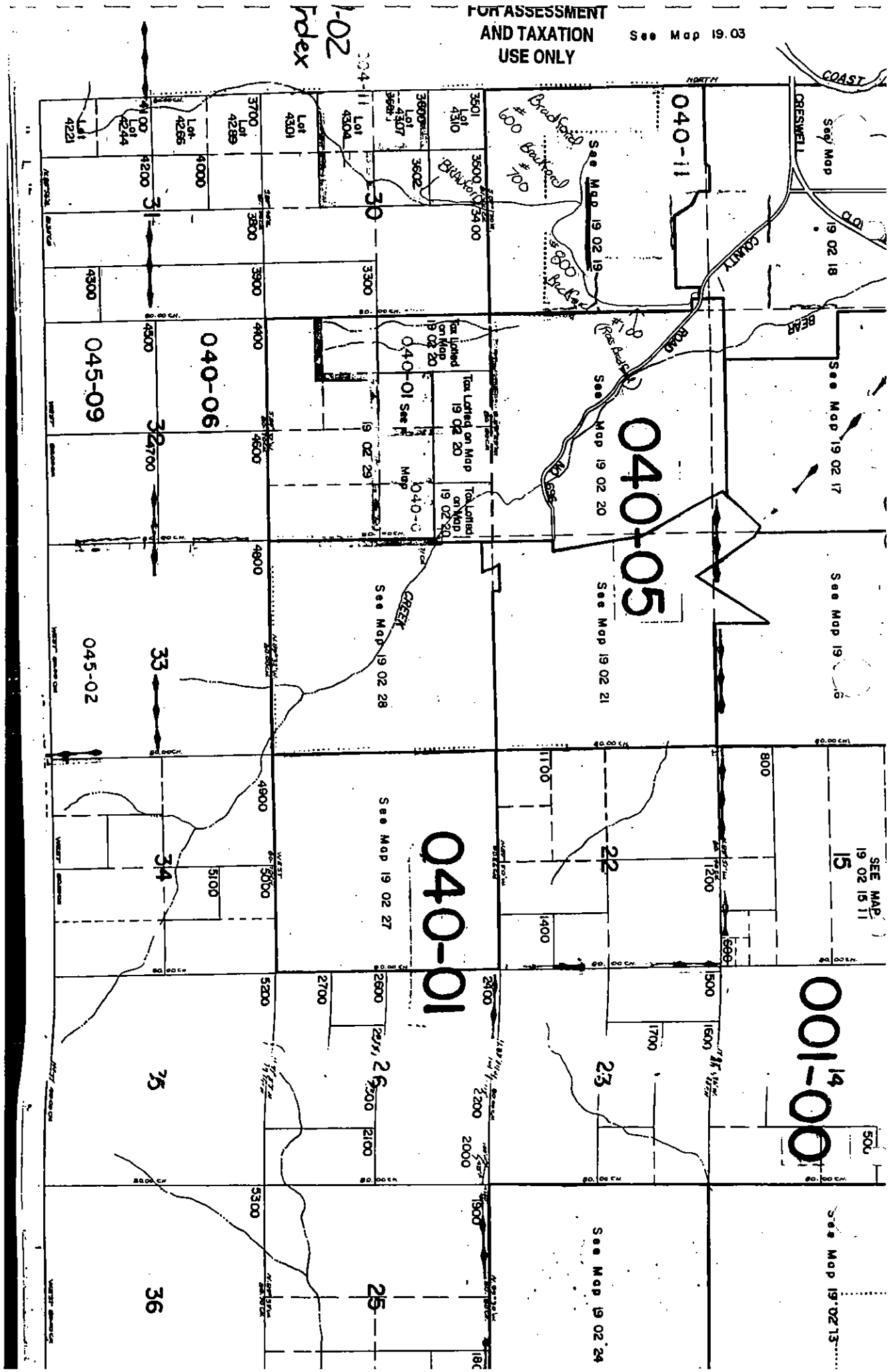
Chris Meyers

Lot 4310 B. Marquis	Lot 3500 B. Bradford	Lot 3400	Tax Lotted on Map 19 02 20	Tax Lotted on Map 19 02 20
Lot 4307 B. Frank	Lot 3602 B. Frank	Smekall Property	040-01 See Map	040-0
Lot 4304 B. Traylor	Lot 3300	19 02 29		
Lot 4301	Lot 3700 Lot 4289	Lot 3800	Lot 3900	Lot 4400
Lot 4266	Lot 4000	040-06	Lot 4500	Lot 4600
Lot 4244	Lot 4100	31	32	Lot 4700
				Lot 4800

FOR ASSESSMENT
AND TAXATION
USE ONLY

See Map 19.03

Fdrex
1-02



SEE MAP
19 02 15 11

001-14
001-00

See Map 19 02 13

040-05

See Map 19 02 20

See Map 19 02 21

040-01

See Map 19 02 27

040-06

33

045-09

045-02

34

75

36

25

23

22

15

See Map 19 02 24

See Map 19 02 17

See Map 19 02 16

See Map 19 02 18

See Map 19 02 19

3501
4310
3500

3602
4307
3601

Lot
4301

Lot
4289

Lot
4265

Lot
4244

Lot
4221

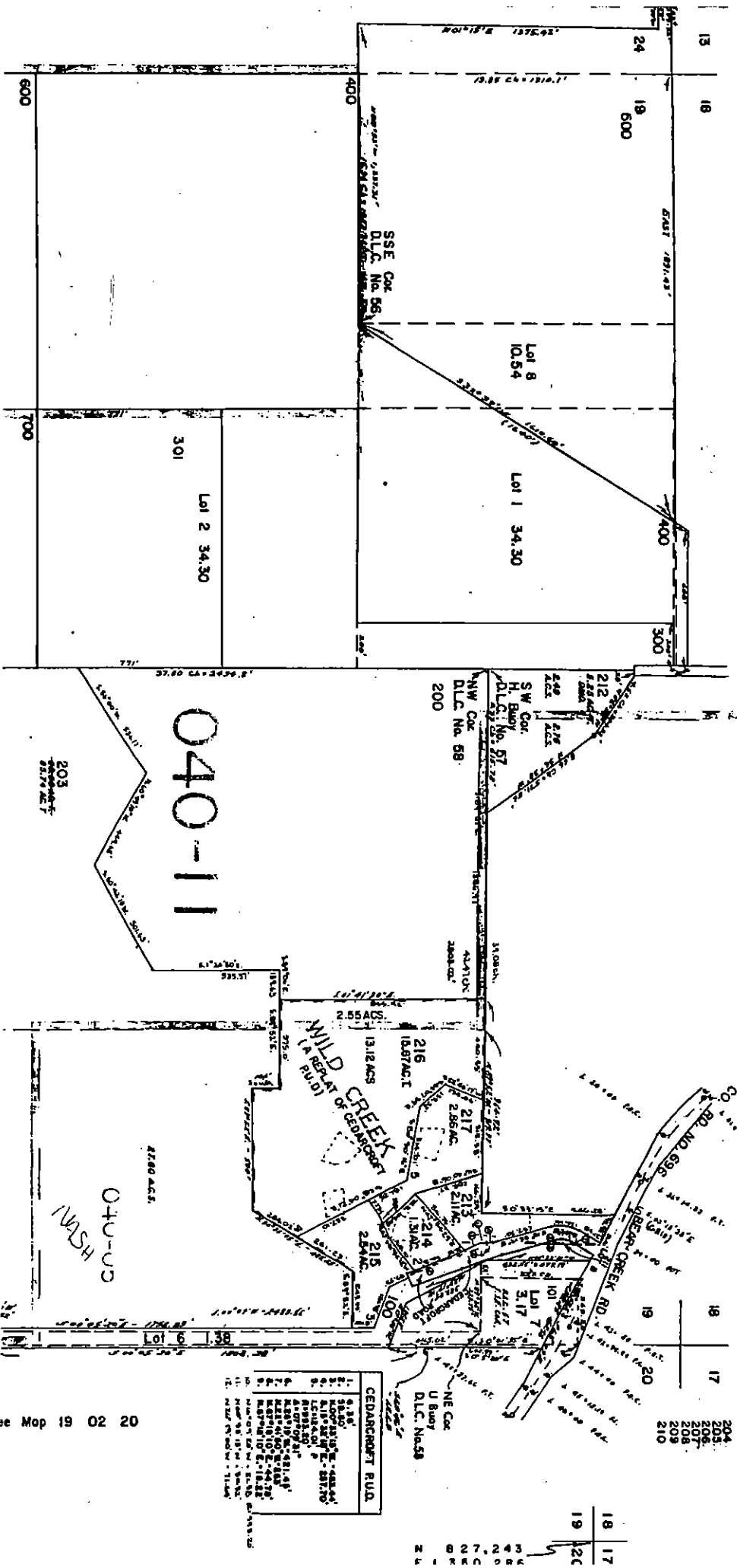
See Map 19 02 18
See Map 19 02 17
See Map 19 02 16
See Map 19 02 15

Section 19 T19S. R2W.W.M.
LANE COUNTY
1"=400'

FOR ASSESSMENT
AND TAXATION
USE ONLY

19 02 19
1-7-92
CANC. 7-204-210
INTD PLAT.
4-13-94
Div 0.1746 0.0 450
(Area 140220) in
104.

See Map 19 02 18

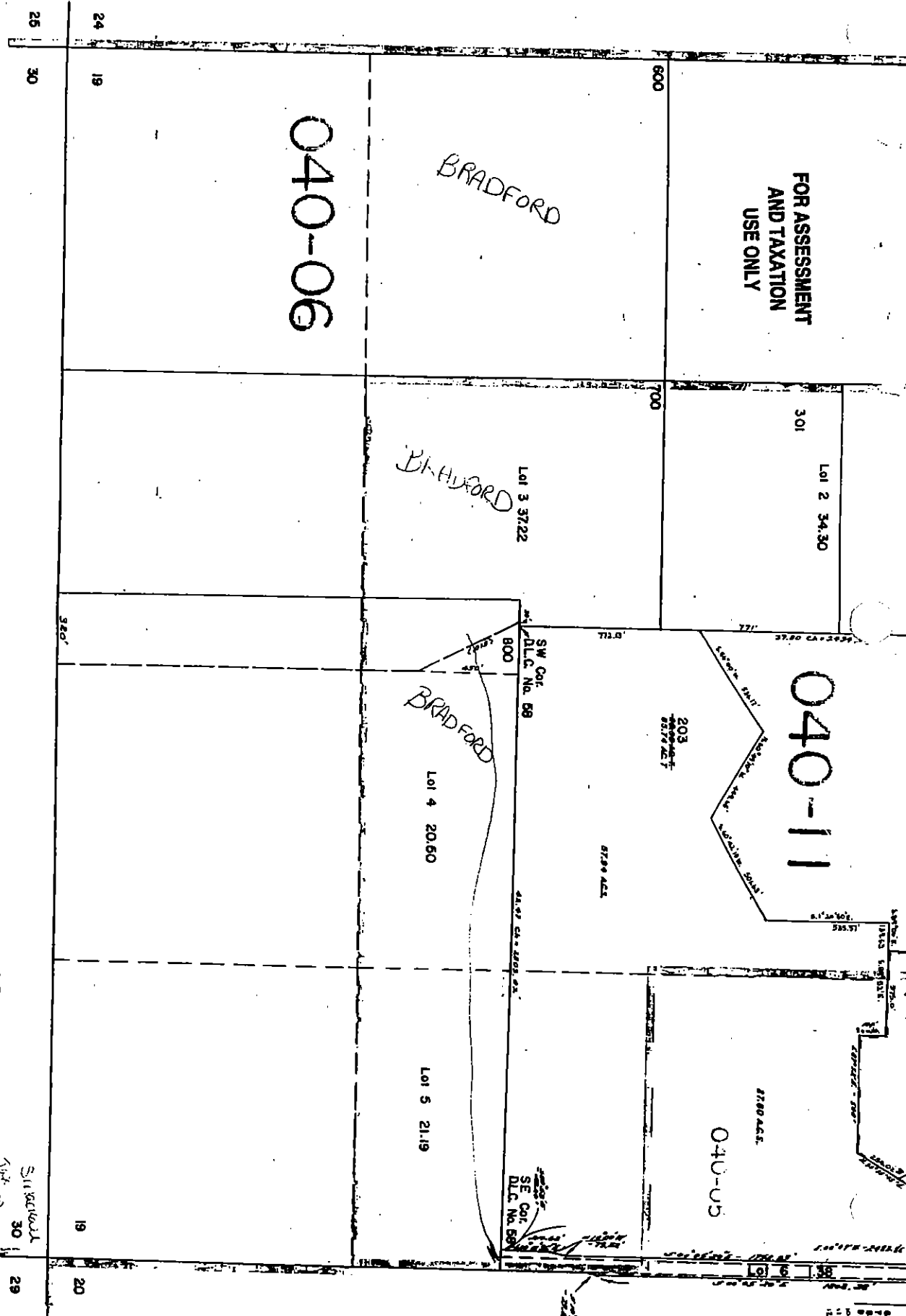


CANCELLED

- 204
- 205
- 206
- 207
- 208
- 209
- 210

CEDARCREAK RVD.	
1.	3.34
2.	3.10
3.	3.10
4.	3.10
5.	3.10
6.	3.10
7.	3.10
8.	3.10
9.	3.10
10.	3.10
11.	3.10
12.	3.10
13.	3.10
14.	3.10
15.	3.10
16.	3.10
17.	3.10
18.	3.10
19.	3.10
20.	3.10
21.	3.10
22.	3.10
23.	3.10
24.	3.10
25.	3.10
26.	3.10
27.	3.10
28.	3.10
29.	3.10
30.	3.10
31.	3.10
32.	3.10
33.	3.10
34.	3.10
35.	3.10
36.	3.10
37.	3.10
38.	3.10
39.	3.10
40.	3.10

See Map 19 02 20



FOR ASSESSMENT AND TAXATION USE ONLY

040-06

BRADFORD

301

Lot 2 34.30

Lot 3 37.22

BRADFORD

040-11

203

BRADFORD

Lot 4 20.60

SW Cor. D.L.C. No. 88

040-05

Lot 5 21.19

SE Cor. D.L.C. No. 89

See Map 19 02

19-02-19

Situated 30 19 30

BRADFORD PIT SITE PLAN:

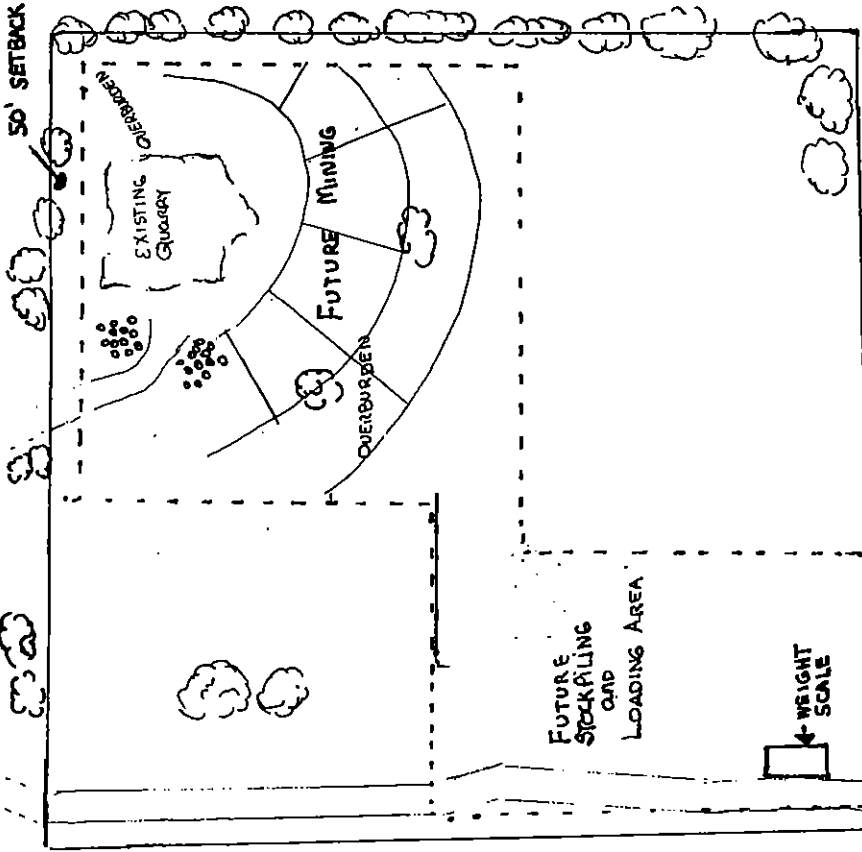
1. See attached Site Plan
2. Dimensions of proposed quarry would encompass approximately 20 acres out of the total 40 acres parcel as shown on the attached site plan. This would include loading areas and stockpiles.
3. Setbacks: 50' from property line on all quarry perimeters.
4. Location: Off of Bear Creek to Cedarcroft to private road owned by Ross and Norma Bradford.
5. Hours of operation: Monday through Saturday, 7:00 a.m to 4:30 p.m. Normally, BJ Equipment Company operates Monday through Friday; however, if a special job was in progress and needed supplies from the quarry a Saturday would be implemented.
6. Blasting Procedures attached.

BRADFORD QUARRY

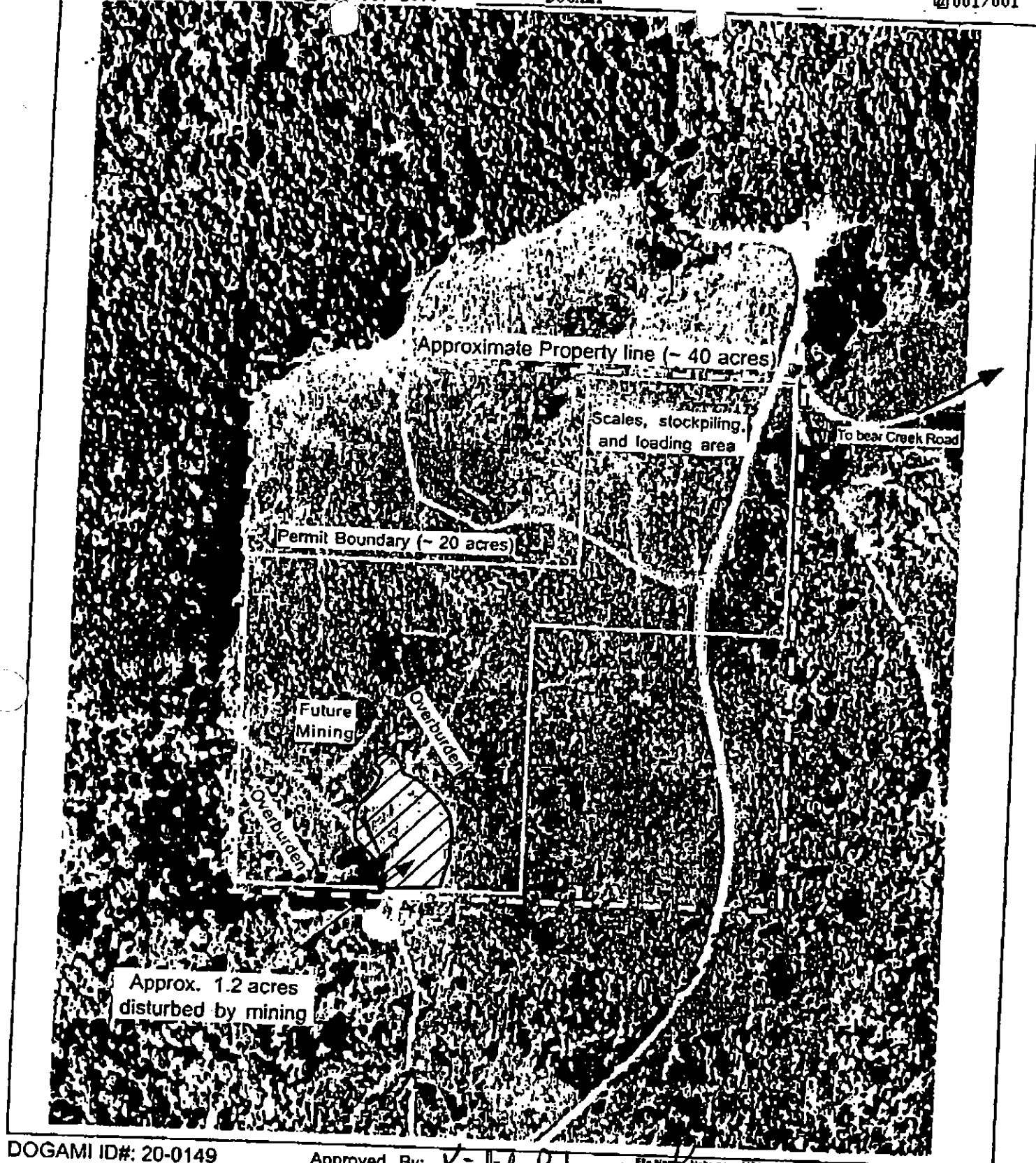
SITE PLAN
BRADFORD QUARRY
PERMIT No. DOGAMI ID #20-0149
BJ EQUIPMENT Co PO Box 543 COTTAGE GROVE OR 97124 (541) 747-6261

KEY

- ~ ~ ~ EXISTING QUARRY
- - - DOGAMI PERMIT BOUNDARY (ZONING)
- PROPERTY BOUNDARY
- ⊗ STOCK PILE
- ⋯ EXISTING ACCESS
- ⌒ SLOPE
- 50' SETBACK FROM BOUNDARIES



Scale:
1" = 200' ± 20'



DOGAMI ID#: 20-0149

Permittee: Kristofer Jeremiah

Site Name: Bradford Quarry

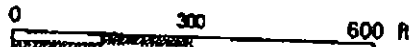
Photo Source / Date: WAC 5/7/94

Prepared By / Date: Peter Wampler 7/30/98

Approved By: *Kristofer Jeremiah*

Date: *Aug 28 1998*

File Name: b:\d\shape\b\graph\2001\p 5-98 .CVS



Approx. scale 1 in = 300 ft +/- 20 ft

Oregon Dept. of Geology and Mineral Industries
Mined Land Reclamation Program



RECEIVED
SEP 1 1998

MLR

C

**Ross & Norma Bradford
82452 Bradford Rd
Creswell, OR 97426
541-895-2394**

October 15, 1998

Dear Neighbors on Cedarcroft Rd: -

When development of the property where you now live on Cedarcroft Road was in the planning stage, the owners of the property that would tentatively border the roadway held several meetings for planning and communicated back and forth many times. The problems were not insurmountable, but were costly and beneficial.

Norma and Ross owned a 40 foot right of way from our ranch, extending for almost 1/2 mile, between Jim Shoop on the east and Buck Nash on the west, out to a parcel on Bear Creek Road with an old house on it. Shoop decided to share in the benefit of 1/2 mile of full and free access to the roadway bordering his property and donated 10 feet from his property. Nick, my son, who lives across the road from the Nash development, agreed to grant enough property from his place to complete the 60 foot wide roadway, if it bordered along the west side of his place, and it did.

Ross and Nick were at that time in another land exchange program involving where Nick now lives. Ross and Norma donated the 40 foot right of way for the purpose of creating a 60 foot right of way through to the County Road, as all owners desired. Nick wanted the building site. Buck Nash wanted a full and free access with a legal width out to the public road. Just as soon as the papers were signed, Nash immediately started subdividing his property, with the supervisory assistance of the Land Control and Development Commission.

Ross and Norma did not interfere in any manner when Nash was attempting to change the zoning of his property. Shoop was pleased to have access from the County Road clear to the south end of his property. Ross and Norma thought long and seriously about the implications of opening that area of our ranch up to development. We both knew it would immensely enhance the value of all adjoining property. We also knew we did not need the 60 foot roadway for our purposes. Ross and Norma could, if we chose, develop a roadway by our own volition, for our own purposes, on our own 40 foot roadway and tell our neighbors we were not interested in a cooperative effort. But we did not do that. We felt the other property and the owners justified as much consideration as our own. Although we did not participate in that section paved and dedicated to the County, we did construct and rock, at our own expense, the entire roadway, and still own all that is not dedicated for public use. Norma and Ross can assure you that Cedarcroft Road would not exist today if we had harbored selfish motives. Our neighbors would not be there today if we had not cooperated with other landowners on Cedarcroft Road.

October 15, 1998
Page 2

In regard to our own present venture, we are expecting very important minerals to be exposed in our mining efforts and we would appreciate your cooperation. Norma and Ross created the roadway expressly for the precise purpose of access to and from our ranch to transport our resources. We will do our best to resolve the problems and concerns you have about our ranching activities.

Thank you for your time and consideration.

Respectfully yours,
Bradford Ranch Owners

Ross Bradford

Norma Bradford

7328400

E A S E M E N T

THIS EASEMENT made by, between and among FRANK G. BRADFORD and VERA J. BRADFORD, husband and wife, ROSS H. BRADFORD and NORMA L. BRADFORD, husband and wife, JACK L. BRADFORD and GLORIA L. BRADFORD, husband and wife, and BETTIE L. TROXCLAIR, EDWARD T. TROXCLAIR and ROBERT J. TROXCLAIR, hereinafter referred to as Owners, WITNESSETH:

RECITALS

A. The parties are the owners of contiguous parcels of land over which a presently existing graveled roadway runs.

B. The parties desire to create a mutual easement and right of way for all of them so that the graveled road may be used by all of the above Owners for ingress and egress to and from their respective properties.

NOW, THEREFORE, in consideration of the mutual covenants and conditions hereinafter set forth it is agreed as follows:

1. Frank G. Bradford and Vera J. Bradford do hereby grant, bargain, sell and convey to Ross H. Bradford and Norma L. Bradford, husband and wife, to Jack L. Bradford and Gloria L. Bradford, husband and wife, and Bettie L. Troxclair, Edward T. Troxclair and Robert J. Troxclair, a non exclusive easement and right of way for roadway purposes sixty (60) feet in width extending thirty (30) feet on each side of the center line of the present existing graveled road located on the following described property:

The East 200 feet of Lot #1 of Section 19, Township 19 South Range 2 West of the Willamette Meridian and all of Lot #2 in Section 19, Township 19 South of Range 2 West of the Willamette Meridian in Lane County, Oregon.

2. Ross H. Bradford and Norma L. Bradford do hereby grant, bargain, sell and convey to Frank G. Bradford and Vera J. Bradford, husband and wife, to Jack L. Bradford and Gloria L. Bradford, husband and wife, Bettie L. Troxclair, Edward T. Troxclair and Robert J. Troxclair, a non exclusive easement and right of way for roadway purposes sixty (60) feet in width extending thirty (30) feet on each

Return to Ross B

7328400

side of the center line of the present existing graveled road located on the following described property:

T. South one-half of the Southeast one-quarter of Section 19 Township 19 South Range 2 West of the Willamette Meridian in Lane County, Oregon.

Beginning at the Quarter Corner common to Sections 19 and 30 Township 19 South Range 2 West of the Willamette Meridian in Lane County, Oregon, and running North along the center line of said Section 19 to the South line of the John Buoy D.L.C. No. 58; thence west along the said "cut" line to the southwest corner of said claim and continuing west on a line straight with said south line for a total distance of 320 feet; thence South on a line parallel to the center line of said Section 19 to the north line of said Section 20; thence east 320 feet to the point of beginning, in Lane County, Oregon.

The Northeast quarter of the Northwest quarter of Section 30 Township 19 South, Range 2 West of the Willamette Meridian, Lane County, State of Oregon.

Lot 3 of Section 19 Township 19 South Range 2 West of the Willamette Meridian in Lane County, Oregon.

3. Jack L. Bradford and Gloria L. Bradford do hereby grant, bargain, sell and convey to Frank G. Bradford and Vera J. Bradford, husband and wife, Ross H. Bradford and Norma L. Bradford husband and wife, Bettie L. Troxclair, Edward T. Troxclair and Robert J. Troxclair, a non exclusive easement and right of way for roadway purposes sixty (60) feet in width extending thirty (30) feet on each side of the center line of the present existing graveled road located on the following described property:

3602 The Southeast one-quarter of the Northwest one-quarter of Section 30 in Township 19 South, Range 2 West of the Willamette Meridian, Lane County, Oregon.

4. Bettie L. Troxclair, Edward T. Troxclair and Robert J. Troxclair do hereby grant, bargain, sell and convey to Frank G. Bradford and Vera J. Bradford, husband and wife, Ross H. Bradford and Norma L. Bradford, husband and wife, and Jack L. Bradford and Gloria L. Bradford, husband and wife, a non exclusive easement and right of way for roadway purposes sixty (60) feet in width extending thirty (30) feet on each side of the center line of the present existing graveled road located on the following described property:

Return to Ross B