# MEMORANDUM

**Date:** November 10, 2011
**To:** Water Right File 96-8838
**From:** cpalmer
**Re:** Licensing Memo

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This right was permitted with three point of diversion. The permit was to cover the following wells:
Well #1-aka as the lower well and is covered by 96-8618
Well#2-aka as the upper well and is covered by 96-8619
Well #3-(D0013648) a well that was drilled in 1994

It seems that the wells have been largely unreliable so new wells were drilled as follows:

Well #4-(D0028082) this well is not currently associated with a water right, this well was completed after proof was filed for 96-8838
Well #5-(D0028084)

The field examiner found that Wells #3 and #5 are associated with 96-8838 and recommended that right 96-8838 include those two wells with a diversion rate of 0.11 cfs. He took the measurement from flow meters but I think that the diversion rate should be licensed for the full permitted rate of 0.15 cfs based on hp equation calculations:
Hp equation: 8.8 x hp x 0.7/depth to water + pressure
~Depth to water is collected from well drillers report
~Pressure = elev. from well to bottom of water tank x 0.433 or 500 x 0.433 = 216.5

Well #3: 8.8 x 5 x 0.7/50 + (216.5) = 0.11 cfs
Well #5: 8.8 x 5 x 0.7/10 + (216.5) = 0.14 cfs

(this assumes that the storage tank is empty resulting in the water not being pumped against further head)

Basing my recommendation on the hp equation is somewhat problematic because of the large gap in diversion rates. The field examiner determined that both wells are only pumping 0.11 cfs altogether. Even if there is always water in the storage tank and there is another 20ft of head, the theoretical diversion rate does not change much from the total estimate of 0.25 cfs. I don't think the discrepancy warrants a new field exam since the permitted rate of 0.15 cfs is close to the field examiners recommendation and I feel confident that the two wells can at least produce 0.15 cfs.

Overlapping rights at Sourdough Point:
96-8618-0.11 cfs, 20.40 af, and 34 homes
96-8619-0.13 cfs, 20.40 af, and 34 homes
96-9299-permit, proof has not filed on the permit yet, not relevant to this license

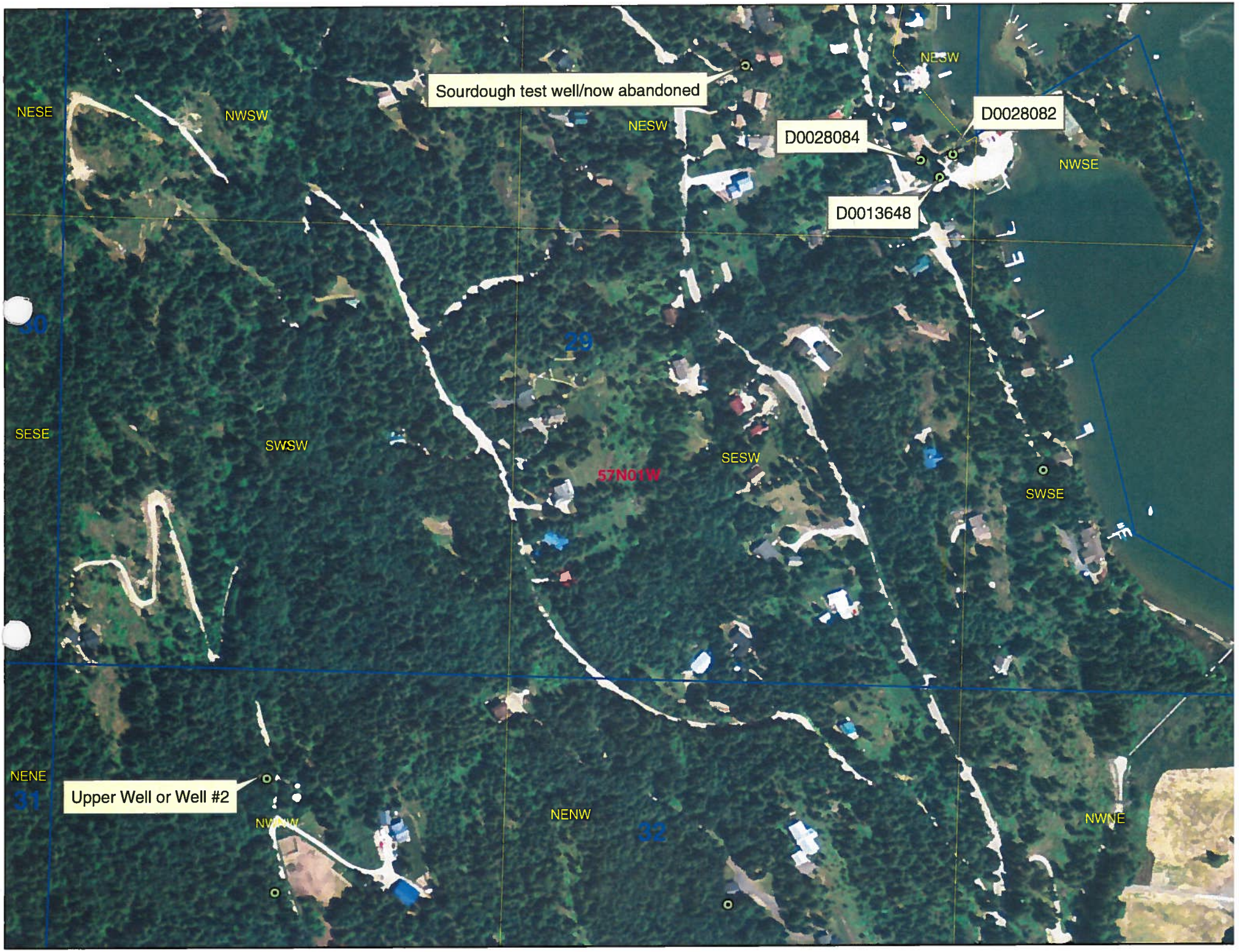
Currently 68 homes are covered by 0.24 cfs and 40.8 af. According to the attached engineering report there are 105 lots total at Sourdough Point. While this right was permitted for 88 lots, there is obviously an overlap between all rights. All rights when combined shall be limited to 105 lots total.

Domestic volume calculation: 105 lots total x 0.6 af - 68 already licensed @ 0.6 af = 22.2 af

Irrigation: it appears that the field examiner is in favor of granting the full 22 acres of irrigation under this right. The exact location of the 22 acres is unknown and I agree with the field examiner that this right should be changed to municipal use so an exact location is not necessary. The volume under irrigation will be:

0.15 cfs x 214 days x 1.9835 = 63.7 af
22 acres x 3 = 66 af

22.2 af under domestic use + 63.7 for irrigation = 86 af total


Sourdough test well/now abandoned
D0028082
D0028084
D0013648
Upper Well or Well #2
NESW
NESE
NWSW
NESW
NWSE
30
29
SESE
SWSW
SESW
57N01W
SWSE
NENE
31
NWNW
NENW
32
NWNE

Form 238-7
1/78

POSTED

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

# WELL DRILLER'S REPORT

**State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.**

gp Well #1

## 1. WELL OWNER

Name Sourdough Home Owners Ass.

Address Box 29 Sandpoint Id. 83864

Owner's Permit No. 96-82-N-103

## 2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning) _____

## 3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

## 4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

## 5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

| Thickness | | Diameter | | From | | To | |
|---|---|---|---|---|---|---|---|
| .250 | inches | 6 | inches + | 2 | feet | 31 | feet |
| | inches | | inches | | feet | | feet |
| | inches | | inches | | feet | | feet |
| | inches | | inches | | feet | | feet |

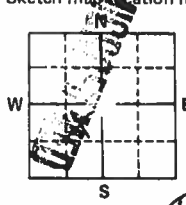
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

| Number | | From | | To | |
|---|---|---|---|---|---|
| | perforations | | feet | | feet |
| | perforations | | feet | | feet |
| | perforations | | feet | | feet |

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout ☒ Puddling clay ☒ Well cuttings
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

## 6. LOCATION OF WELL

Sketch map location must agree with written location.




Subdivision Name _____
Lot No. _____ Block No. _____

County Bonner

NE ¼ SW ¼ Sec. 29, T. 57 ☒ N/S, R. 1 ☒ E/W

## 7. WATER LEVEL

Static water level 40 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☒ Cap ☐ Plug
Temperature cold °F. Quality Excellent

## 8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

| Discharge G.P.M. | Pumping Level | Hours Pumped |
|---|---|---|
| 25 | – | 1 hr |
| | | |
| | | |
| | | |

## 9. LITHOLOGIC LOG

| Hole Diam. | Depth From | Depth To | Material | Water Yes | Water No |
|---|---|---|---|---|---|
| 8 | 0 | 8 | Gravel | | X |
| | 8 | 20 | Clay | | X |
| | 20 | 26 | Boulders | | X |
| | 26 | 31 | Shale | | X |
| 6 | 31 | 100 | Shale | X | |

0046(10)

RECEIVED OCT 1 1982
Department of Water Resources Northern District Office

RECEIVED OCT

## 10.

Work started 9/23/82 finished 9/24/82

## 11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Associated Well
Firm Name Drillers Inc Firm No. 245

Address Box 723 C.DA Date 9/27/82

Signed by (Firm Official) _____

and

(Operator) Robert F Degitz

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

Form 238-7
1/78

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER O
8ALLPOINT PEN

# WELL DRILLER'S REPORT

**State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.**

**1. WELL OWNER**

Name Sourdough Owners assoc.

Address Sandpoint Idaho

Owner's Permit No. 96-81-N-122-1

**2. NATURE OF WORK**

☐ New well ☒ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning) _____

**3. PROPOSED USE**

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

**4. METHOD DRILLED**

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

**5. WELL CONSTRUCTION**

Casing schedule: ☐ Steel ☐ Concrete ☐ Other _____

| Thickness | Diameter | From | To |
|---|---|---|---|
| _____ inches | _____ inches + | _____ feet | _____ feet |
| _____ inches | _____ inches | _____ feet | _____ feet |
| _____ inches | _____ inches | _____ feet | _____ feet |
| _____ inches | _____ inches | _____ feet | _____ feet |

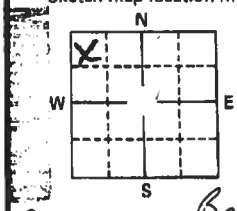
Was casing drive shoe used? ☐ Yes ☐ No
Was a packer or seal used? ☐ Yes ☐ No
Perforated? ☐ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

| Number | From | To |
|---|---|---|
| _____ perforations | _____ feet | _____ feet |
| _____ perforations | _____ feet | _____ feet |
| _____ perforations | _____ feet | _____ feet |

Well screen installed? ☐ Yes ☐ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth _____ Material used in seal: ☐ Cement grout ☐ Puddling clay ☐ Well cuttings
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☐ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

**6. LOCATION OF WELL**

Sketch map location must agree with written location.




Subdivision Name _____
Lot No. _____ Block No. _____
County Bonner
NW ¼ NW ¼ Sec. 32, T. 57 ☒N ☐S, R. 1 ☒W ☐E

**7. WATER LEVEL**

Static water level 250 feet below land surface.
Flowing? ☐ Yes ☐ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 50 °F. Quality good

**8. WELL TEST DATA**

☐ Pump ☐ Bailer ☐ Air ☐ Other _____

| Discharge G.P.M. | Pumping Level | Hours Pumped |
|---|---|---|
| 20 | air test | |
| | | |
| | | |

**9. LITHOLOGIC LOG**

| Hole Diam. | Depth From | Depth To | Material | Water Yes | Water No |
|---|---|---|---|---|---|
| 6 | 377 | 427 | Shale rock | ✓ | |

RECEIVED
MAY 18 1981
Department of Water Resources

RECEIVED
MAY 12 1981
Department of Water Resources
Northern District Office

**10.** Work started 5-5-81 finished 5-5-81

**11. DRILLERS CERTIFICATION** cb dL

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Intermountain Drilling
Firm Name Dee, Firm No. 252
Address Priest River Date 5-11-81
Signed by (Firm Official) Norman D. Hayden
and
(Operator) Norman D. Hayden

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

Form 238-7
1/94

Well #3

POSTED

# IDAHO DEPARTMENT OF WATER RESOURCES
# WELL DRILLER'S REPORT

OFFICE USE ONLY
Typed by TDK Use Typewriter or Ball Point Pen
Twp. 57N Rge. 1W Sec. 29
NW NE 1/4 SW 1/4

**1. DRILLING PERMIT NO.** 96 - 94 - N - 277
Other IDWR No. WR 96-08838

**2. OWNER:**
Name SOURDOUGH POINT OWNERS ASSOC
Address PO BOX 29
City SANDPOINT State ID Zip 83864

**3. LOCATION OF WELL by legal description:**
Sketch map location must agree with written location.

N / W / E / S — X

Twp. 57 North ☒ or South ☐
Rge. 01 East ☐ or West ☒
Sec. 29, ____ 1/4 NE 1/4 SW 1/4
(10 acres / 40 acres / 160 acres)
Gov't Lot ____ County Bonner

Address of Well Site ____
City ____
(Give at least name of road + Distance to Road or Landmark)

Lt. ____ Blk. ____ Sub. Name ____

**4. PROPOSED USE:**
☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

**5. TYPE OF WORK**
☒ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

**6. DRILL METHOD**
☐ Mud Rotary ☒ Air Rotary ☐ Cable ☐ Other ____

**7. SEALING PROCEDURES**

| SEAL/FILTER PACK Material | From | To | AMOUNT Sacks or Pounds | METHOD |
|---|---|---|---|---|
| Bentonite | 0 | 19 | 10 sacks | Crumbles |
| | | | | |
| | | | | |

Was drive shoe used? Y ☒ N ☐
Was drive shoe seal tested? Y ☐ N ☒ How? ____

**8. CASING/LINER:**

| Diameter | From | To | Gauge | Material | Casing | Liner | Welded | Threaded |
|---|---|---|---|---|---|---|---|---|
| 6" | +1½ | 18½ | 250 | Steel | ☒ | ☐ | ☒ | ☐ |
| 4" | -4 | 145 | 160 | PVC | ☐ | ☒ | ☐ | ☐ |
| | | | | | ☐ | ☐ | ☐ | ☐ |

Length of Headpipe ____ Length of Tailpipe ____

**9. PERFORATIONS/SCREENS**
☒ Perforations Method Saw Cut
☐ Screens Screen Type ____

| From | To | Slot Size | Number | Diameter | Material | Casing | Liner |
|---|---|---|---|---|---|---|---|
| 105 | 145 | 1/16 | 60 | 4" | PVC | ☐ | ☒ |
| | | | | | | ☐ | ☐ |
| | | | | | | ☐ | ☐ |

**10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:**
50 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices:
NESW 29 57N 1W

**11. WELL TESTS:**
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

| Yield gal./min. | Drawdown | Pumping Level | Time |
|---|---|---|---|
| 10 GPM | | | 2 Hrs |
| | | | |
| | | | |

Water Temp. Cold Bottom hole temp. ____
Water Quality test or comments: Clean

**12. LITHOLOGIC LOG:** (Describe repairs or abandonment)

| Bore Dia. | From | To | Remarks: Lithology, Water Quality & Temperature | Water Y | Water N |
|---|---|---|---|---|---|
| 10 | 0 | 1 | TOP SOIL BROWN SOFT | | X |
| 10 | 1 | 10 | GRAVELS CLAYS COARSE SANDS | | |
| | | | BROWNISH SOFT | | X |
| 10 | 10 | 12 | COBBLES COARSE SAND DARK | | |
| | | | BROWN MED HARD | | X |
| 10 | 12 | 15 | SHALE BLACKISH BROKEN | | X |
| 10 | 15 | 19 | SHALE BLACKISH MED HARD | | X |
| 6 | 19 | 44 | SHALE BLACKISH MED HARD | | X |
| 6 | 44 | 48 | SHALE BLACKISH FRACTURED | X | |
| 6 | 48 | 52 | SHALE BLACKISH MED | | X |
| 6 | 52 | 61 | SHALE BLACKISH GREEN MED | | X |
| 6 | 61 | 64 | SHALE BLACKISH GREEN FRACTURED | | X |
| 6 | 64 | 76 | SHALE GREENISH BLACK MED | | X |
| 6 | 76 | 81 | SHALE GREENISH BLACK FRACTURED | | X |
| 6 | 81 | 83 | SHALE BLACKISH GRAY MED | | X |
| 6 | 83 | 90 | SHALE W/CLAY LENSE GREENISH | | |
| | | | BLACK SOFT | | X |
| 6 | 90 | 96 | SHALE GREENISH BLACK MED | | X |
| 6 | 96 | 104 | SHALE GREENISH FRACTURED | | X |
| 6 | 104 | 117 | SHALE GREENISH MED | | X |
| 6 | 117 | 120 | SHALE W/CLAY LENSE GREENISH | | |
| | | | SOFT | X | |
| 6 | 120 | 145 | SHALE W/GRANITE GREENISH | | |
| | | | BLACK & WHITE SOFT BROKEN | X | |

RECEIVED
SEP 6 1994
NORTHERN REGION
IDWR

MICROFILMED
DEC 29 1998

Completed Depth 145' (Measurable)
Date: Started 08/22/94 Completed 08/22/94

**13. DRILLER'S CERTIFICATION**
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name H2O WELL SERVICE INC Firm No. 448
Firm Official [signature] Date 9-1-94
and
Supervisor or Operator Mark L. Lee Date 8/30/94
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Well #4 (not associated w/ WR) (completed after proof was file for 96-8838)

Form 238-7
11/97

7/8/03

# IDAHO DEPARTMENT OF WATER RESOURCES
# WELL DRILLER'S REPORT

OFFICE USE ONLY
Inspected by
Twp. ____ Rge. ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat. : : Long : :

**1. WELL TAG NO.** D 0028082
DRILLING PERMIT NO. 96-08838
Other IDWR No. 804364

**2. OWNER**
Name SOURDOUGH POINT
Address P.O.BOX 29
City SANDPOINT State ID Zip 83864

PLOTTED

**3. LOCATION OF WELL** by legal description
Sketch map location must agree with written location.

N / W / E / S

Twp. 57 North ◉ or South ○
Rge. 1 East ○ or West ◉
Sec. 29 NE 1/4 (10 acres) NW 1/4 (40 acres) ____ 1/4 (160 acres)
Gov't Lot ____ County BONNER
Lat. : :
Long : :

Address of Well Sourdough
Point Home Owners Common Area City ____
(Give at least name of road + Distance to Road or Landmark)

Lt. ____ Blk. ____ Sub. Name ____

**4. Use**
○Domestic ◉Municipal ○Monitor ○Irrigation
○Thermal ○Injection ○Other ____

**5. TYPEOF WORK** check all that apply (Replacement etc.)
◉New Well ○ Modify ○Abandonment ○Other ____

**6. DRILL METHOD**
◉Air Rotary ○Cable Tool ○Mud Rotary ○Other ____

**7. SEALING PROCEDURES**

| SEAL / FILTER PACK Material | From | To | AMOUNT Sacks or pounds | Method |
|---|---|---|---|---|
| Bentonite Slurry | 0 | 30 | 6 sacks | Temp. Surface Casing |
| | | | | |
| | | | | |
| | | | | |

Was drive shoe used? ◉ Y ○ N Shoe Depths(s) 200'
Was drive shoe seal tested? ○ Y ◉ N How? ____

**8. Casing / Liner**

| Diameter | From | To | Gauge | Material | Casing | Liner | Welded | Threaded |
|---|---|---|---|---|---|---|---|---|
| 6 | +2 | 156 | .250 | STEEL | ◉ | ○ | ◉ | ○ |
| | | | | | ○ | ○ | ○ | ○ |
| | | | | | ○ | ○ | ○ | ○ |
| | | | | | ○ | ○ | ○ | ○ |

Length of Headpipe N/A Length of Tailpipe N/A

**9. PERFORATIONS / SCREENS**
Perforations Method Star Perforator
Screens Screen Type N/A

| From | To | Slot Size | Number | Diameter | Material | Casing | Liner |
|---|---|---|---|---|---|---|---|
| 80 | 110 | 1/8*1 | 900 | 6" | STEEL | ◉ | ○ |
| 125 | 150 | 1/8*1 | 200 | 6" | STEEL | ◉ | ○ |
| | | | | | | ○ | ○ |

**10. STATIC WATER LEVEL OR ARTESIAN PRESSURE**
10 ft. below ground Artesian pressure ____ lb.

Depth flow encountered ____ ft. Describe access port or control devices: ____

57N, 1W, 29

**11. WELL TESTS**
○Pump ○Bailer ◉Air ○Flowing

| Yield Gal. / Min. | Drawdown | Pumping Level | Time |
|---|---|---|---|
| 9 | | 225 | 1 hour |
| | | | |
| | | | |

Water Temp. 50 Bottom Hole Temp.
Water Quailty test or comments: Clear
Depth first Water 25

**12. LITHOLOGIC LOG:** (Describe repairs or abandonment)

| Bore Dia. | From | To | Remarks: Lithology, Water Quality & Temperature | Water Y | Water N |
|---|---|---|---|---|---|
| 10 | 0 | 25 | SILTY CLAY | ✓ | |
| 8 | 25 | 53 | SILTY CLAY | ✓ | |
| 8 | 53 | 94 | SHALE - SOFT GRAY | | ✓ |
| 8 | 94 | 97 | SHALE - GRAY WATER | ✓ | |
| 8 | 97 | 105 | SHALE - SOFT GRAY | | ✓ |
| 8 | 105 | 110 | SHALE - GRAY WATER | ✓ | |
| 8 | 110 | 133 | SHALE - SOFT GRAY | | ✓ |
| 8 | 133 | 163 | GRANITE - GRAY MEDIUM | | ✓ |
| 8 | 163 | 170 | GRANITE GRAY FRAC - WATER | ✓ | |
| 8 | 170 | 186 | GRANITE - GRAY MEDIUM | | ✓ |
| 8 | 186 | 225 | GRANITE GRAY FRAC | ✓ | |

RECEIVED
JUN 19 2003
IDWR/North

Completed Depth 225' (Measurable)
Date Started 3-10-03 Completed 6-10-03

**13. DRILLER'S CERTIFICATION**
I/we certify that all minimum well construction standards were complelied with at the time the rig was removed.
Company Name Intermountain Drilling Firm No. 513
Firm Official Glen Frachiseur Date 6-16-03
and
Driller or Operator ____ Date ____
(Sign once if Firm Official & operator)

Well #5

Form 238-7
11/97

7/8/03 b

# IDAHO DEPARTMENT OF WATER RESOURCES
# WELL DRILLER'S REPORT

OFFICE USE ONLY
Inspected by
Twp_____ Rge. _____ Sec_____
_____ 1/4 _____ 1/4 _____ 1/4
Lat. : : Long : :

TK

**1. WELL TAG NO.** D 0028084
DRILLING PERMIT NO. 96-08838
Other IDWR No. 795173

**2. OWNER**
Name SOURDOUGH POINT
Address P.O.BOX 29
City SANDPOINT State ID Zip 83864

**3. LOCATION OF WELL by legal description**
Sketch map location must agree with written location.

N / W / E / S

Twp. 57 North ◉ or South ○
Rge. 1 East ○ or West ◉
Sec. 29 NE 1/4 (10 acres) NW 1/4 (40 acres) ___ 1/4 (160 acres)
Gov't Lot _____ County Bonner
Lat. : :
Long : :

Address of Well Sourdough
Point Home Owners Common Area City _____
(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

**4. Use**
○Domestic ◉Municipal ○Monitor ○Irrigation
○Thermal ○Injection ○Other _____

**5. TYPEOF WORK** check all that apply (Replacement etc.)
◉New Well ○ Modify ○Abandonment ○Other _____

**6. DRILL METHOD**
◉Air Rotary ○Cable Tool ○Mud Rotary ○Other _____

**7. SEALING PROCEDURES**

| SEAL / FILTER PACK Material | From | To | AMOUNT Sacks or pounds | Method |
|---|---|---|---|---|
| Bentonite Slurry | 0 | 60 | 6 sacks | Temp. Surface Casing |
| | | | | |
| | | | | |

Was drive shoe used? ◉ Y ○ N Shoe Depths(s) 156
Was drive shoe seal tested? ○ Y ◉ N How? _____

**8. Casing / Liner**

| Diameter | From | To | Gauge | Material | Casing | Liner | Welded | Threaded |
|---|---|---|---|---|---|---|---|---|
| 6 | +1 | 200 | .250 | STEEL | ◉ | ○ | ◉ | ○ |
| | | | | | ○ | ○ | ○ | ○ |
| | | | | | ○ | ○ | ○ | ○ |
| | | | | | ○ | ○ | ○ | ○ |

Length of Headpipe N/A Length of Tailpipe N/A

**9. PERFORATIONS / SCREENS**
Perforations Method Star Perforator
Screens Screen Type N/A

| From | To | Slot Size | Number | Diameter | Material | Casing | Liner |
|---|---|---|---|---|---|---|---|
| 80 | 110 | 1/8*1 | 900 | 6" | STEEL | ◉ | ○ |
| 150 | 175 | 1/8*1 | 600 | 6" | STEEL | ◉ | ○ |
| | | | | | | ○ | ○ |

**10. STATIC WATER LEVEL OR ARTESIAN PRESSURE**
10 ft. below ground Artesian pressure _____ lb.

Depth flow encountered _____ ft. Describe access port or control devices: _____

57N 1W 29

**11. WELL TESTS**
○Pump ○Bailer ◉Air ○Flowing

| Yield Gal. / Min. | Drawdown | Pumping Level | Time |
|---|---|---|---|
| 20 | 78 | 200 | 4 hours |
| | | | |
| | | | |

Water Temp. 50 Bottom Hole Temp. _____
Water Quailty test or comments: Clear
Depth first Water 4

**12. LITHOLOGIC LOG:** (Describe repairs or abandoment)

| Bore Dia. | From | To | Remarks: Lithology, Water Quality & Temperature | Water Y | Water N |
|---|---|---|---|---|---|
| 10 | 0 | 10 | SILTY CLAY | ✓ | |
| 8 | 10 | 20 | SILTY CLAY | ✓ | |
| 8 | 20 | 100 | SHALE - SOFT GRAY | | ✓ |
| 8 | 100 | 122 | SHALE - GRAY WATER | ✓ | |
| 8 | 122 | 171 | GRANITE - GRAY MED | | ✓ |
| 8 | 171 | 200 | GRANITE - GRAY - FRAC | ✓ | |

RECEIVED
JUN 19 2003
IDWR North

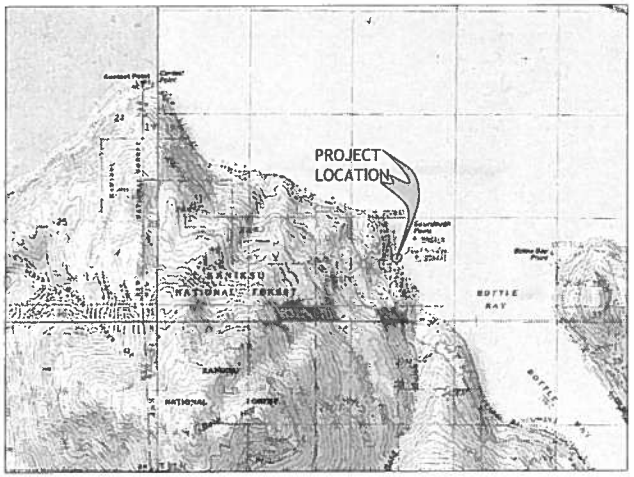
Completed Depth 200' (Measurable)
Date Started 3-12-03 Completed 3-13-03

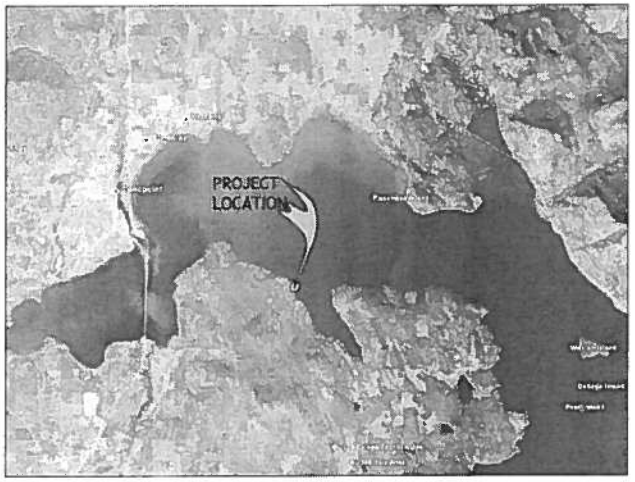
**13. DRILLER'S CERTIFICATION**
I/we certify that all minimum well construction standards were complelied with at the time the rig was removed.
Company Name Intermountain Drilling Firm No. 513
Firm Official Glen Frachiseur Date 6-16-03
and
Driller or Operator _____ Date _____
(Sign once if Firm Official & operator)

Supplemental Info. for Licensing 96-8838
-pulled from www.tate-engineering.com 11-10-11

# Sourdough Point Homeowners Association
# Water Treatment Facility

TWP 57 N, R 01 W, SECTIONS 29 & 32
Bonner County, Idaho




## OWNER

Sourdough Point Owners Association
P.O. Box 29
Sandpoint, ID 83864

## ENGINEER

TATE
ENGINEERING INC.
1103 N. 4th Street Coeur d' Alene
Idaho, 83814 (208)676-8708
Fax: (208)667-2129
E-mail: rtate@tate-eng.com

## NOTE

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

CALL 48 HOURS BEFORE YOU DIG
1-800-626-4950

## INDEX OF SHEETS

1. Title
2. Notes
3. Existing System Overview
4. Existing Site Overview
5. Proposed Site Overview
6. Filter Building Layout
7. Filter Building Cross Sections
8. Water Line Cross Sections
9. Raw Water Lake Intake
9A. Raw Water Lake Intake Profiles
10. Details
11. Details
12. Details

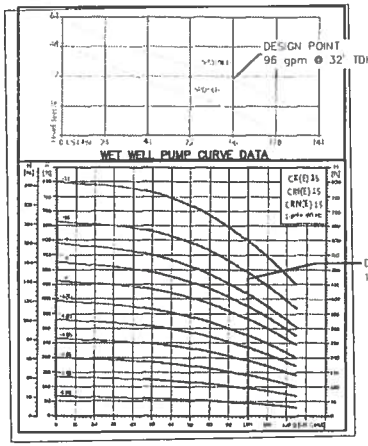
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8/4/2008 7:31 AM Tate Engineering T:\PROJECTS\08.005 Sourdough Point\dwg 8005 Title Sheet(7-30-08).dwg

## GENERAL NOTES

1. All work shall conform to the "Idaho Standards for Public Works Construction" current edition.
2. The Contractor shall notify the appropriate utility company prior to starting work near any facilities and shall coordinate his work with company representatives. All utility services shall be installed underground. For existing utility locations, contact CALL BEFORE YOU DIG at 1-800-626-4950 at least 48 hours prior to starting any excavations.
3. Work shall not begin until a Permit and Notice to Proceed is issued by the Design Engineer and IDEQ.
4. The Contractor shall notify the Design Engineering Inspector 48 hours prior to starting work.
5. The Contractor shall have an approved set of improvement plans on the job site at all times.
6. Concrete shall be portland concrete cement with a minimum 28 day compressive strength of 3000 psi.
7. All underground utility laterals shall be installed and approved before construction of curbs, cross gutter, or surfacing of the streets.
8. Where trenches are within public easements, compaction test results shall be submitted to the Engineer of Record.
9. All operations conducted on the premises, including the warming up, repair, arrival, departure or running of trucks, earthmoving equipment, construction equipment and any other associated equipment shall generally BE limited to the period between 6:00 a.m. and 10:00 p.m. everyday unless otherwise approved by SPOA.
10. All existing improvements including curb and gutter, sidewalks, asphalt, concrete or P.C.C. paving, which are being joined or matched in connection with this project, shall be joined or matched in a manner satisfactory to the Design Engineer, including necessary sawcutting, removal, replacement and capping.
11. No revisions shall be made to these plans without the approval of the Design Engineer.

## WATER SYSTEM NOTES

1. The minimum water service shall be one (1) inch.
2. Water mains shall be AWWA C-900 pipe (DR-18), and shall be constructed with the top of the pipe at a minimum of 60 inches below finish grade except where otherwise indicted with specific elevations and approved by the Design Engineer.
3. No disruption of existing water services while making connection to existing mains shall be allowed without specific approval from the SPOA. All affected properties must be notified at least 48 hours prior to shut-off. Failure to comply with noticing or other requirements could result in a stop-work notice, fines, and/or other penalties.
4. No connections for the purpose of obtaining water supply during construction shall be made without first obtaining approval from the SPOA.
5. The existence and location of water facilities shown on the plans were obtained by a search of available SPOA records. Location and elevation of existing water facilities shall be confirmed by field measurements and excavation exploration by the contractor prior to beginning of new work. This will allow time to permit revision of plans, as necessary, because of conflicts with other facilities.
6. The Design Engineering Inspector shall be notified at least 48 hours prior to any inspection.
7. All fittings or appurtenances removed from the water lines shall be returned by the contractor to the SPOA.
8. All water mains, valves, fire hydrants, services, and appurtenances shall be returned by the contractor to the SPOA.
9. All water mains shall be tested in accordance with SPOA requirements. Hydrostatic testing shall be witnessed by the design engineer. Results of chlorination and bacteria tests shall be submitted to the design engineer for approval.




DISTRIBUTION PUMP CURVE DATA

DESIGN CRITERIA BROKEN DOWN

| | |
|---|---|
| Ultimate SPOA Lot Build-Out | 105 Lots |
| Design Flow Used per Connection | 800 gallons Domestic/Day |
| | 700 gallons Irrigation/Day |
| Total | 1,500 gallons/Connection/Day |
| Current Lots | 58 |
| Flows needed to meet Design Requirements | 80.4 gpm |
| Gallons per Day to Meet Design Requirements | 87,000 |
| XP-6/12 Unit Capacity | 7.2 gpm/Module |
| Each Unit @ 6 Modules | 43.2 gpm |
| Both Units Combined @ 6 Modules | 86.4 gpm |
| Total gallons per Day | 124,416 gallons |
| (2) XP-6/12 Units Lot Capacity (6 Modules Each) | 82.9 Lots |
| Build-Out Capacity Needed | 109.3 gpm |
| Build-Out Gallons per Day Needed | 157,500 gallons |
| XP-6/12 Expandable Capacity | 172.8 gpm |
| XP-6/12 Total Daily Capacity | 248,832 gallons |

Table 4: Key Elevations

| | |
|---|---|
| Intake Structure | EL. 2466 |
| Remove & Re-Use Exist. Hydrant Assembly | EL. 2467.81 |
| Remove 6" CMP Pipe Extension | EL. 2469.81 |
| Remove Current Outlet | EL. 2469.15 |
| Outlet Invert Temp - Cross of Ladder | EL. 2462.93 |
| Temporary Chamber Overlook Plate | EL. 2462.23 |
| Pipe Outlet Control Plate | EL. 2461.13 |
| 10" Vent Pipe Flow Elevation | EL. 2461.00 |
| High Lake Water Level | EL. 2462.00 |
| Low Lake Water Level | EL. 2460.00 |
| Intake Pump Centerline | EL. 2456.00 |
| Intake Sweep | EL. 2452.00 |

Table 3: Design Criteria for Dry Wastewater Treatment System

| | |
|---|---|
| Design Connection | 105 |
| Filtration Rate | 7.2 gpm per module |
| Proposed Wetlands Load Rate | 100 gpm |
| Disinfection Dose | 0.5 mg/l |
| Contact Time Required | 0.5 log removal/inactivation |


TATE ENGINEERING
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Sourdough Point Owners Association
Bonner County
Notes

PROJECT: 08.005
DRAWING: WASTEWATER
DESIGN BY: BLC
DRAWN BY: DPS
CHK. BY: PMT
LAST EDIT DATE: 7/30/08


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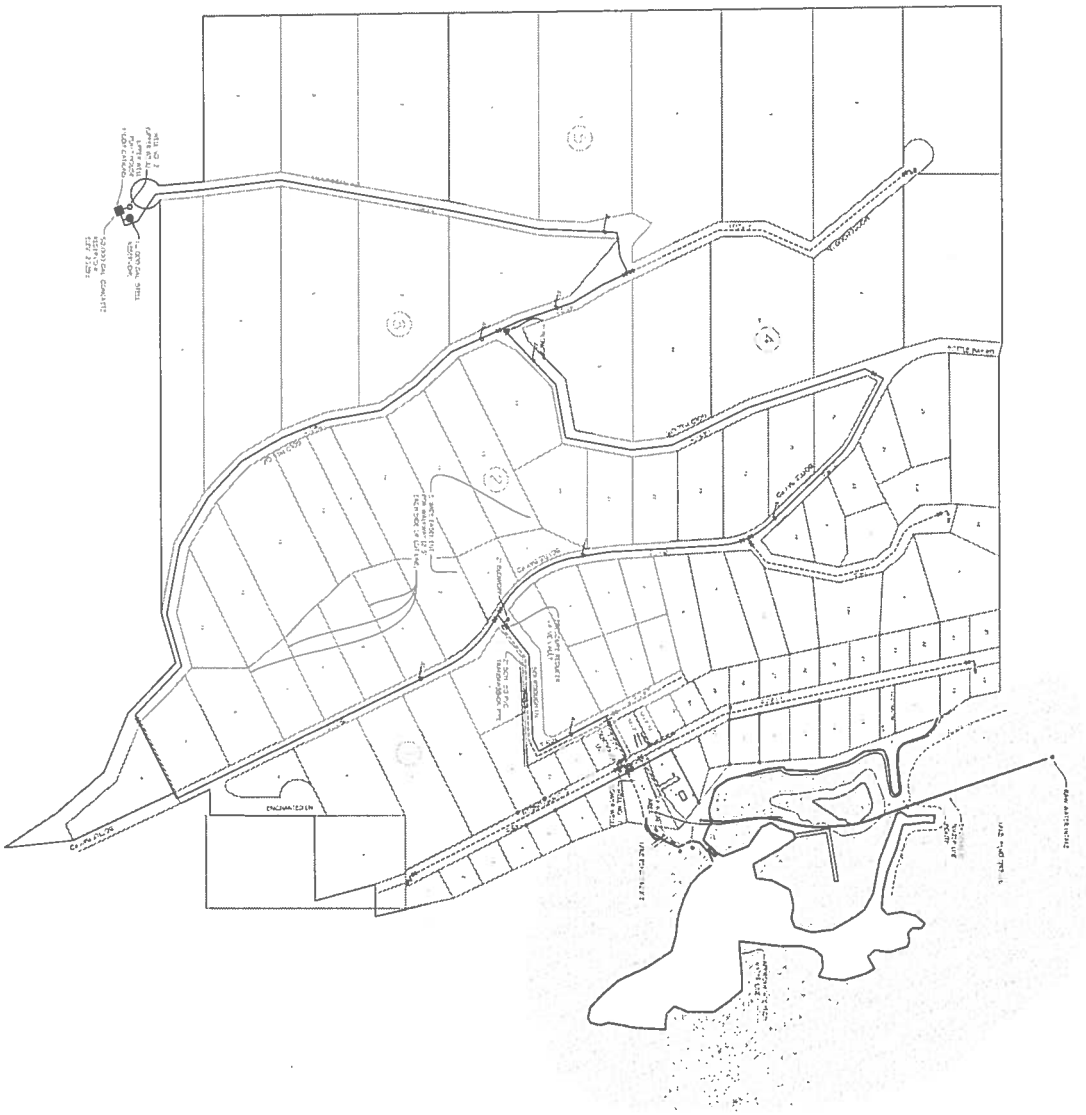

| NO. | REVISION/ISSUE | BY | DATE |
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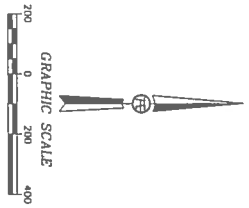
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SHEET 3 of 13

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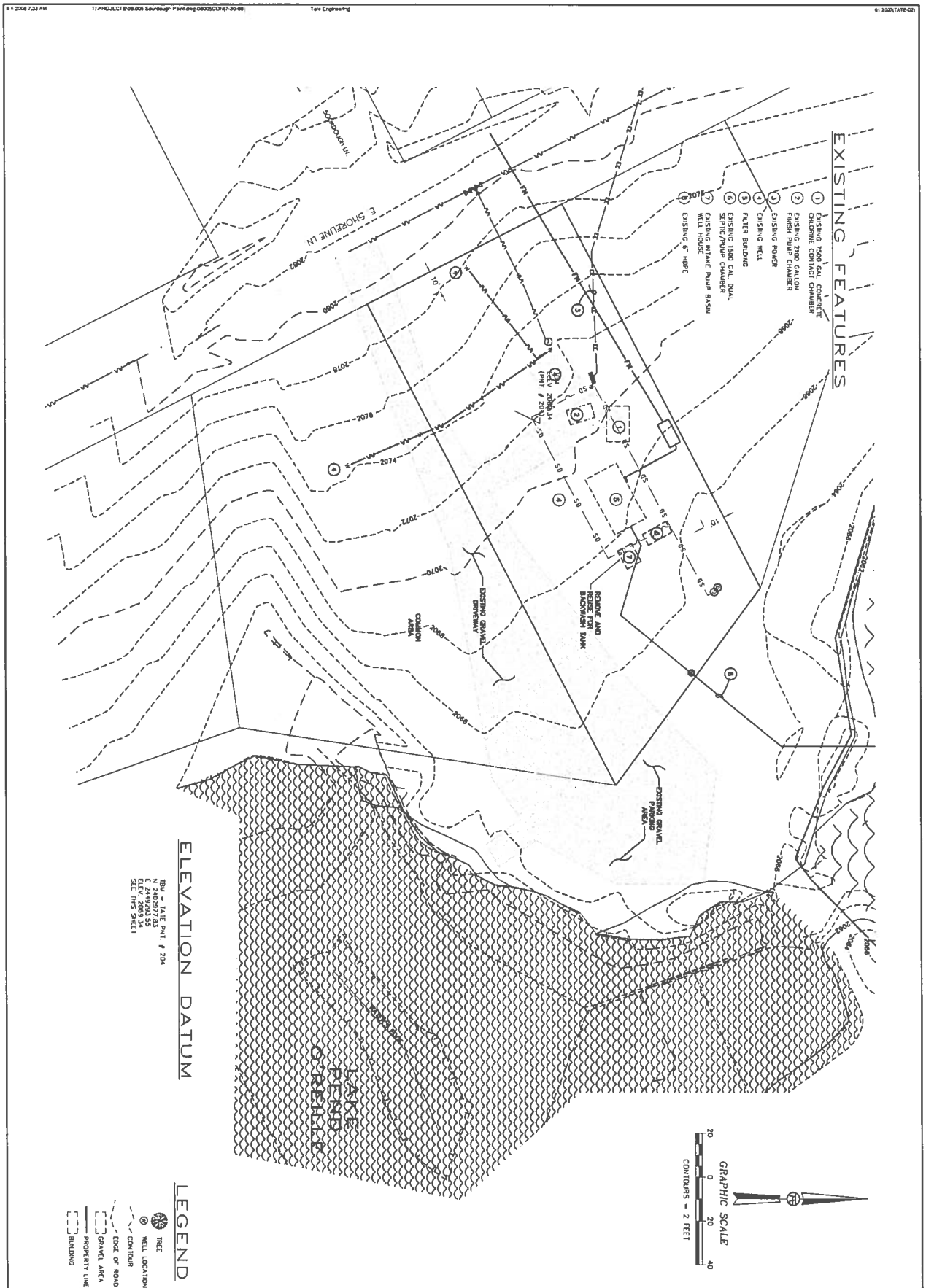
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| PROJECT: | Tate # |
| DRAWING: | |
| DESIGN BY: | |
| DRAWN BY: | |
| CHK. BY: | |
| LAST EDIT DATE: | 7/29/08 |

# Sourdough Point Owners Association
## Bonner County
## Existing System Overview

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SHEET 4 OF 13


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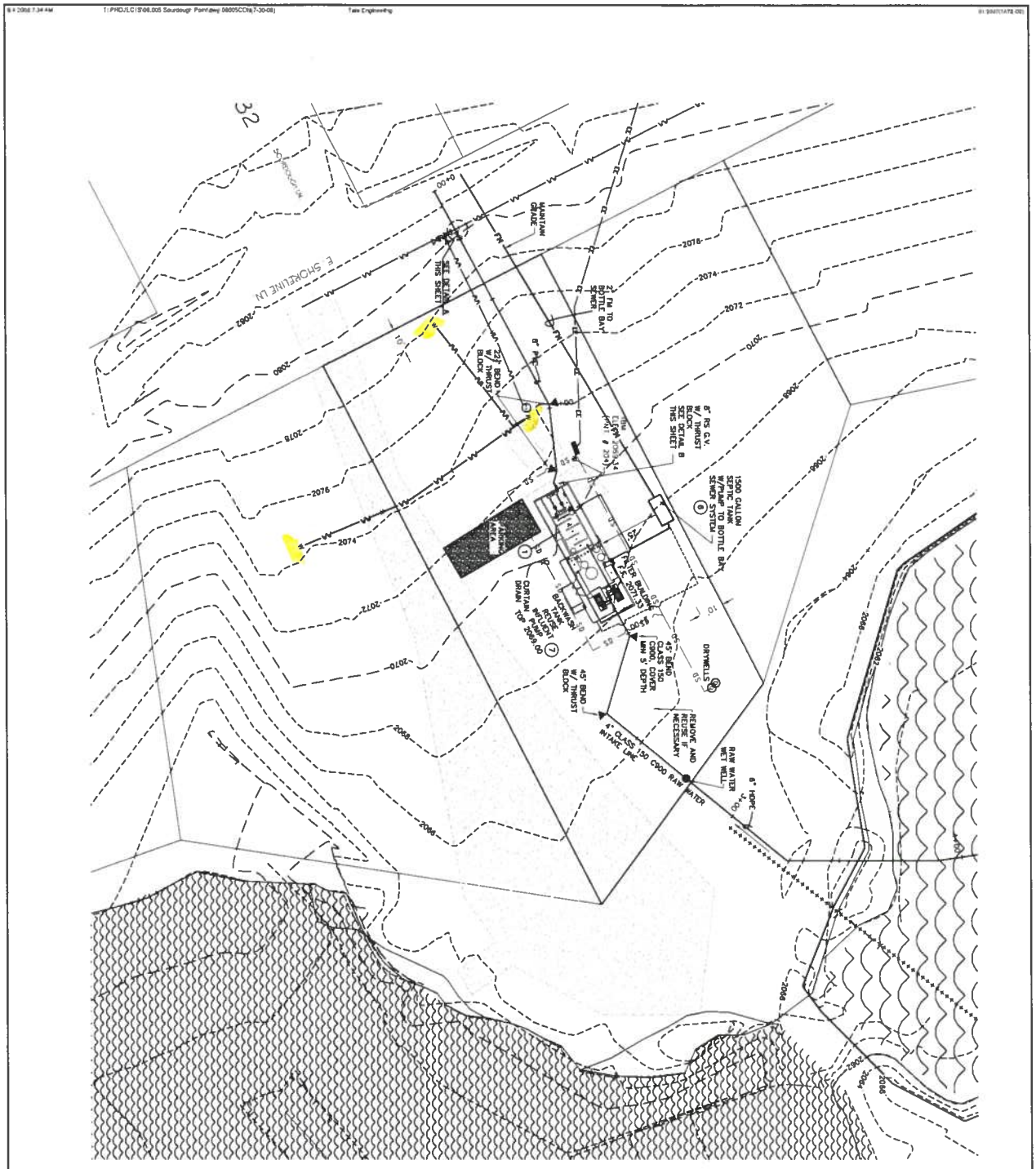
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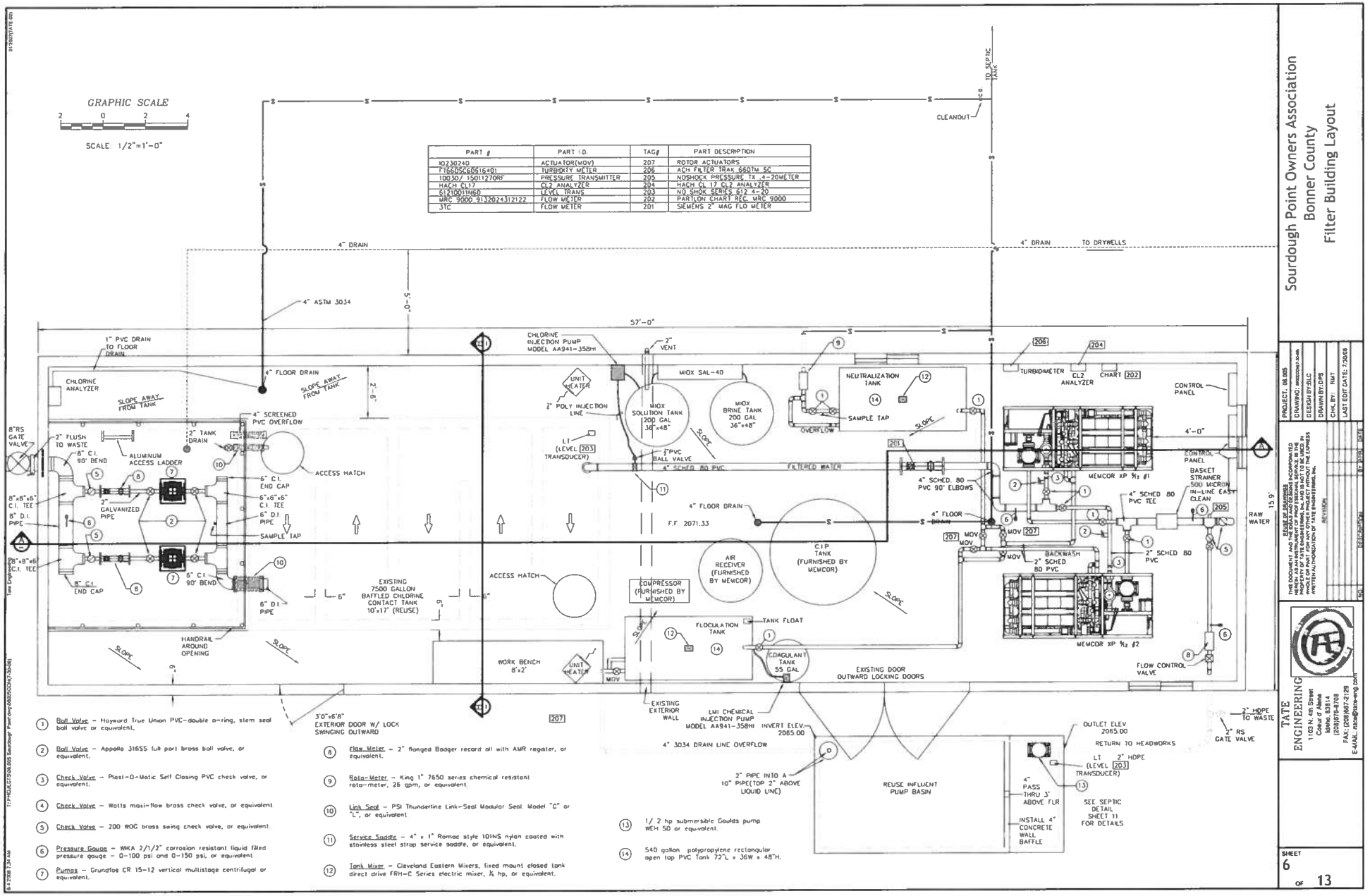

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| NO. | DESCRIPTION | BY | APP. | DATE |
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| PROJECT: | 08.005 |
| DRAWING: | 08005CON(7-30-08) |
| DESIGN BY: | BLC |
| DRAWN BY: | DPS |
| CHK. BY: | RMT |
| LAST EDIT DATE: | 7/30/08 |

Sourdough Point Owners Association
Bonner County
Existing Site Overview


32
E SHORELINE LN
MAINTAIN GRADE
SEE DETAIL B THIS SHEET
TIE TO BOTTLE BAY SEWER
6" PVC
22½° BEND W/ THRUST BLOCK
6" RS G.V. W/ THRUST BLOCK SEE DETAIL B THIS SHEET
1500 GALLON SEPTIC TANK W/PUMP TO BOTTLE BAY SEWER SYSTEM
PARKING AREA
CURTAIN DRAIN
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| PART # | PART I.D. | TAG# | PART DESCRIPTION |
|---|---|---|---|
| 10230240 | ACTUATOR(MOV) | 207 | ROTOR ACTUATORS |
| FT6605C6D516401 | TURBIDITY METER | 206 | ACH FILTER TRAK 660TM SC |
| 10030/ 15011270RF | PRESSURE TRANSMITTER | 205 | NOSHOCK PRESSURE TX .4-20METER |
| HACH CL17 | CL2 ANALYZER | 204 | HACH CL 17 CL2 ANALYZER |
| 61210011N60 | LEVEL TRANS | 203 | NO SHOK SERIES 612 4-20 |
| MRC 9000 9132024312122 | FLOW METER | 202 | PARTLON CHART REC. MRC 9000 |
| 3TC | FLOW METER | 201 | SIEMENS 2" MAG FLO METER |

1. Ball Valve – Hayward True Union PVC–double o–ring, stem seal ball valve or equivalent.
2. Ball Valve – Appolo 316SS full port brass ball valve, or equivalent.
3. Check Valve – Plast–O–Matic Self Closing PVC check valve, or equivalent.
4. Check Valve – Watts masi–flow brass check valve, or equivalent.
5. Check Valve – 200 WOG brass swing check valve, or equivalent.
6. Pressure Gauge – WKA 2/1/2" corrosion resistant liquid filled pressure gauge – 0–100 psi and 0–150 psi, or equivalent.
7. Pumps – Grundfos CR 15–12 vertical multistage centrifugal or equivalent.
8. Flow Meter – 2" flanged Badger record dll with AMR register, or equivalent.
9. Rota–Meter – King 1" 7650 series chemical resistant rota–meter, 26 gpm, or equivalent.
10. Link Seal – PSI Thunderline Link–Seal Modular Seal. Model "C" or "L", or equivalent.
11. Service Saddle – 4" x 1" Romac style 101NS nylon coated with stainless steel strap service saddle, or equivalent.
12. Tank Mixer – Cleveland Eastern Mixers, fixed mount closed tank direct drive FRH–C Series electric mixer, ¼ hp, or equivalent.
13. 1/ 2 hp submersible Goulds pump WEM 50 or equivalent.
14. 540 gallon polypropylene rectangular open top PVC Tank 72"L x 36W x 48"H.

Sourdough Point Owners Association
Bonner County
Filter Building Layout

PROJECT: 08.005
DRAWING: M0000M1.dwg
DESIGN BY: BLC
DRAWN BY: DPS
CHK. BY: RMT
LAST EDIT DATE: 7/30/08

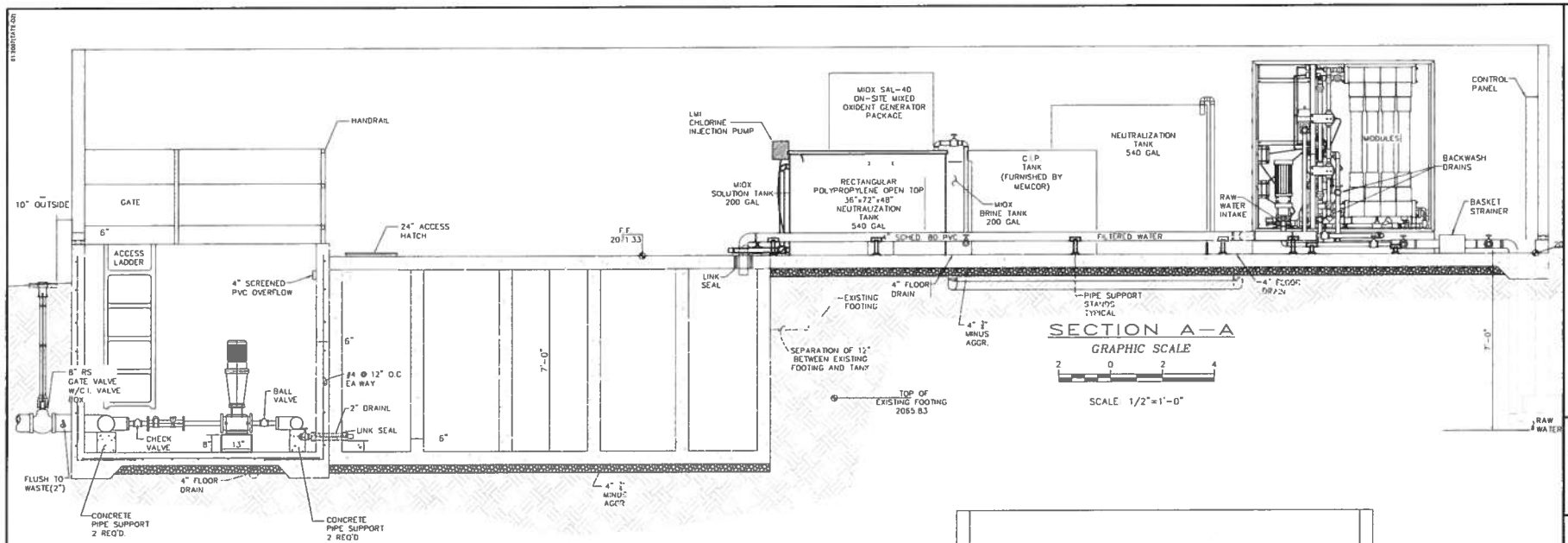
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REVISION

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E-MAIL: mail@tate-eng.com

SHEET 6 OF 13

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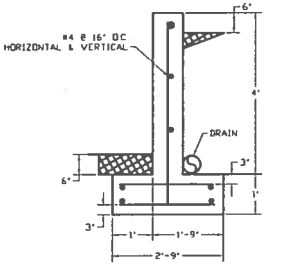

SECTION A–A

*GRAPHIC SCALE*

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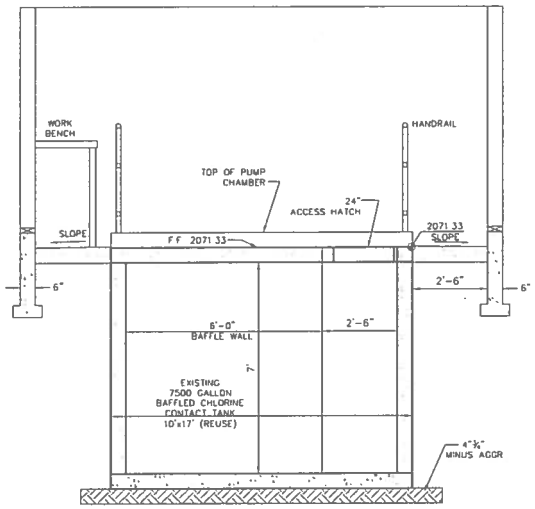
SCALE: 1/2"=1'-0"

NOTE:
CONTRACTOR SHALL VERIFY INLET AND OUTLET ELEVATION WITH SUBMITTED PUMP PRIOR TO INSTALLATION OF PIPING.




FOOTING/WALL

NOT TO SCALE




SECTION B–B

*GRAPHIC SCALE*

2 0 2 4

SCALE: 1/2"=1'-0"

Sourdough Point Owners Association
Bonner County
Filter Building Cross Sections

PROJECT: 08.005
DRAWING: CROSSSECT.dwg
DESIGN BY: BLC
DRAWN BY: DPS
CHK. BY: RMT
LAST EDIT DATE: 7/30/08

REVISIONS

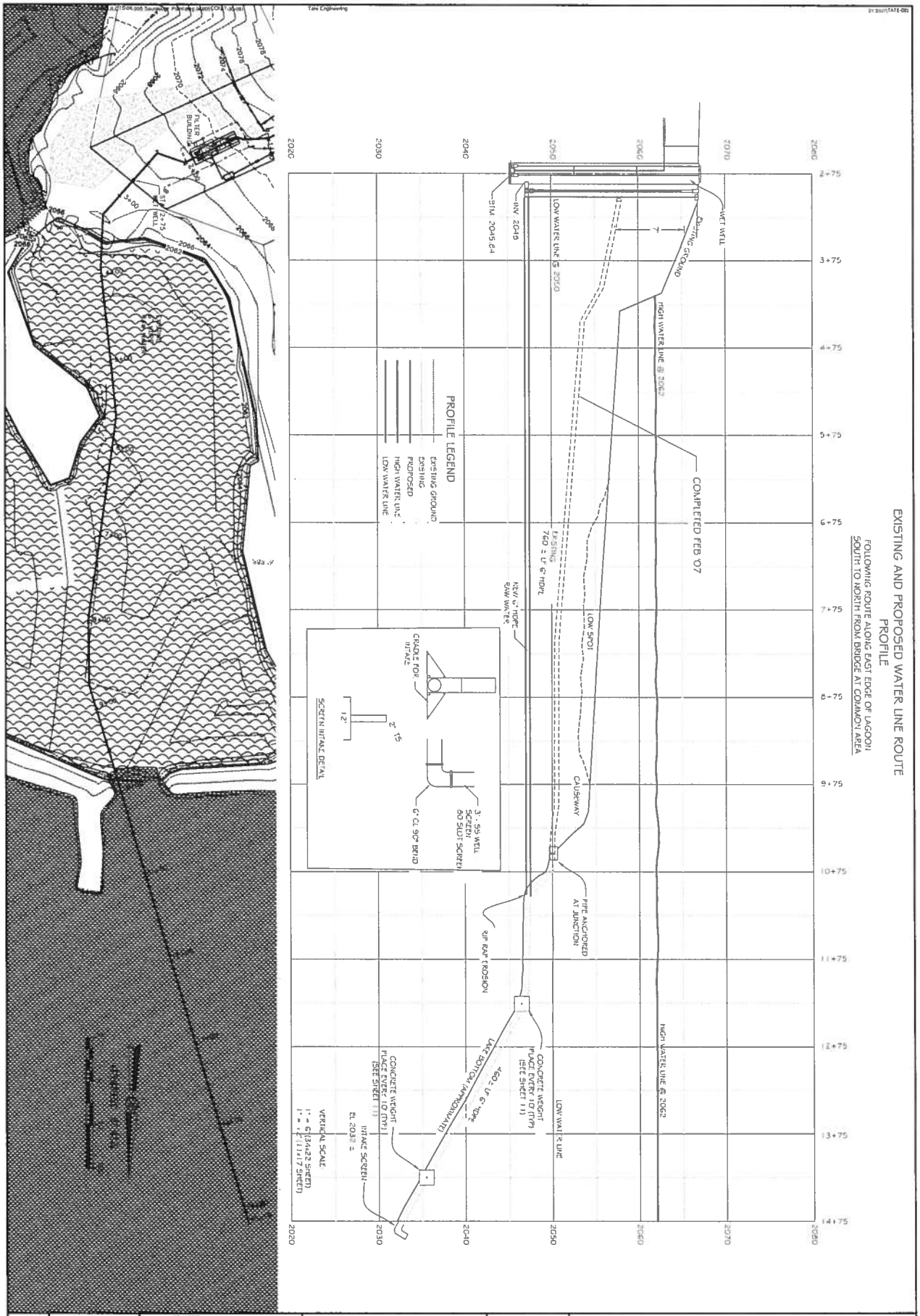
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SHEET 7 OF 13

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SHEET 8 OF 13

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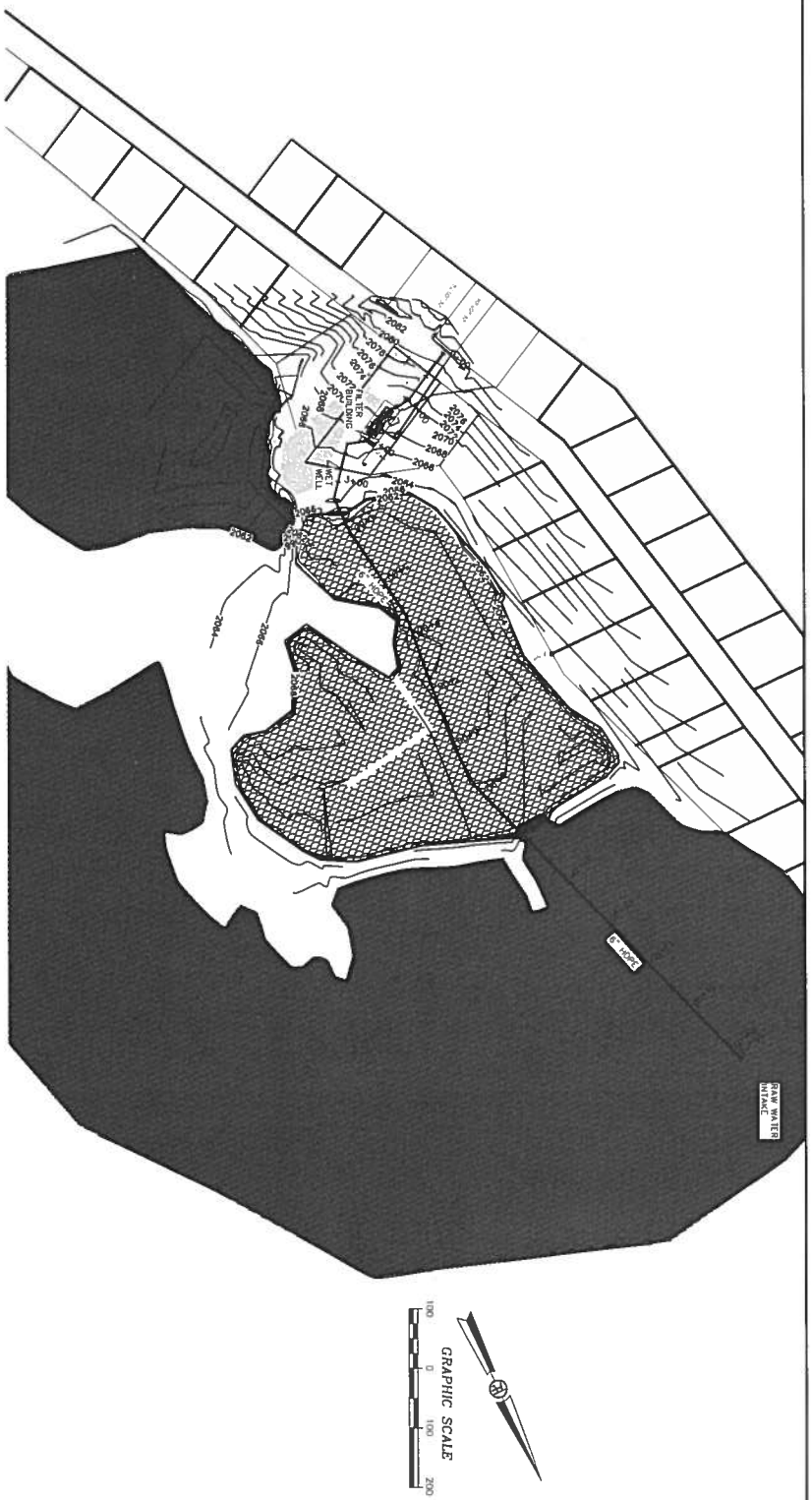
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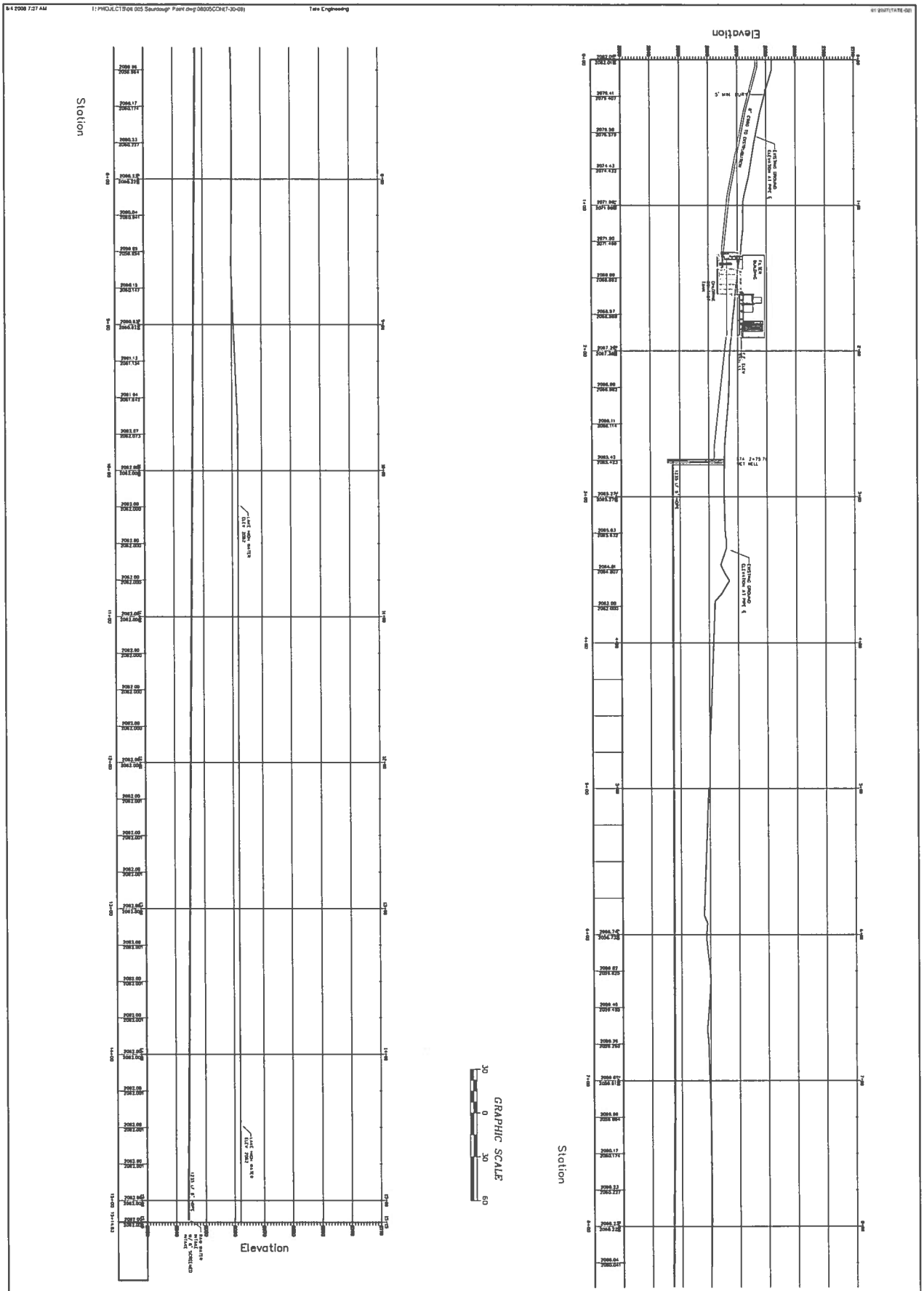
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| DRAWING: | 08005CON(7-30-08) |
| DESIGN BY: | BLC |
| DRAWN BY: | DPS |
| CHK. BY: | RMT |
| LAST EDIT DATE: | 7/30/08 |

Sourdough Point Owners Association
Bonner County
Water Line Cross Section


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SHEET 9A OF 13

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REVISION

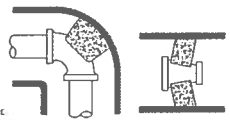
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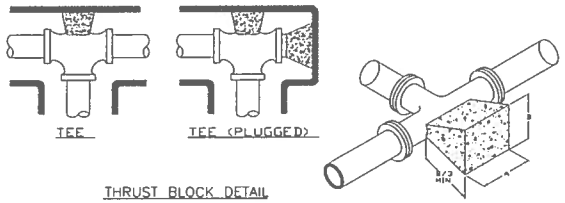
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| LAST EDIT DATE: | 7/30/08 |

Sourdough Point Owners Association
Bonner County
Raw Water Lake Intake
Profiles

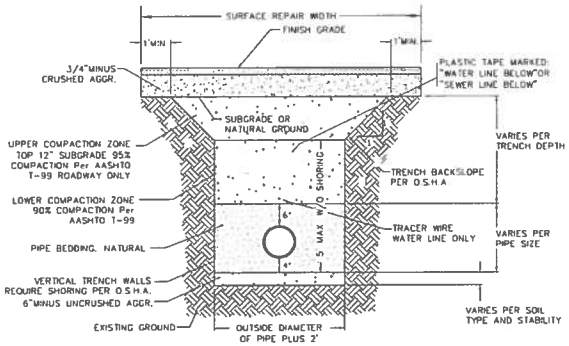
| DIMENSION FOR THRUST BLOCKING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FITTING SIZES | TEES & PLUGS | | 90 BEND | | 45 BEND & WYES | | REDUCERS & 22 1/2 BEND | |
| | A | B | A | B | A | B | A | B |
| 4" | 1'-7" | 1'-8" | 1'-9" | 1'-6" | 1'-8" | 8'-10" | 1'-7" | 8'-6" |
| 6" | 2'-0" | 1'-11" | 2'-5" | 2'-2" | 1'-10" | 1'-7" | 1'-9" | 8'-10" |
| 8" | 2'-8" | 2'-6" | 3'-2" | 3'-0" | 2'-5" | 2'-1" | 1'-9" | 1'-6" |
| 10" | 3'-4" | 3'-3" | 4'-0" | 3'-10" | 3'-0" | 2'-9" | 2'-2" | 1'-11" |
| 12" | 4'-0" | 3'-10" | 4'-8" | 4'-5" | 3'-6" | 3'-2" | 2'-7" | 2'-3" |
| 14" | 5'-5" | 3'-10" | 6'-4" | 4'-11" | 4'-9" | 3'-5" | 3'-5" | 2'-5" |

THIS TABLE BASED ON 150 PSI MAIN PRESSURE 2000 PSF SOIL BEARING PRESSURE

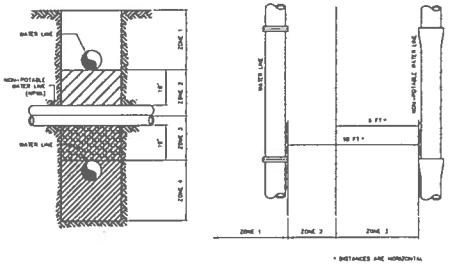



THRUST BLOCK DETAIL
N.T.S.




PIPE BEDDING DETAIL
N.T.S




VERTICAL SEPARATION REQUIREMENTS

ZONE 1. A) WATER AND NPWL MUST BE SEPARATED BY AT LEAST
AND
B) ONE FULL LENGTH LENGTH OF WATER PIPE MUST BE CENTERED OVER THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE NPWL.

ZONE 2 A) ONE FULL LENGTH LENGTH OF WATER PIPE MUST BE CENTERED OVER THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE NPWL.

AND EITHER B) NPWL MAIN MUST BE CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS FOR A HORIZONTAL DISTANCE OF 10 FEET ON BOTH SIDES OF CROSSING

OR C) EITHER THE NPWL OR WATER MAIN OR BOTH MUST BE ENCASED WITH A SLEEVING MATERIAL ACCEPTABLE TO DEQ FOR A HORIZONTAL DISTANCE OF 10 FEET ON BOTH SIDES OF THE CROSSING

ZONE 3 SAME REQUIREMENTS AS ZONE 2 EXCEPT THE NPWL MUST ALSO BE SUPPORTED ABOVE THE CROSSING TO PREVENT SETTLING

ZONE 4 SAME REQUIREMENTS AS ZONE 1 EXCEPT THE NPWL MUST ALSO BE SUPPORTED ABOVE THE CROSSING TO PREVENT SETTLING

HORIZONTAL SEPARATION REQUIREMENTS

ZONE 1: A) NO SPECIAL REQUIREMENTS

ZONE 2 A) WATER AND NPWL SEPARATED BY AT LEAST 9 FEET AT OUTSIDE WALLS

AND B) WATER AT LEAST 10 INCHES HIGHER IN ELEVATION THAN THE NPWL

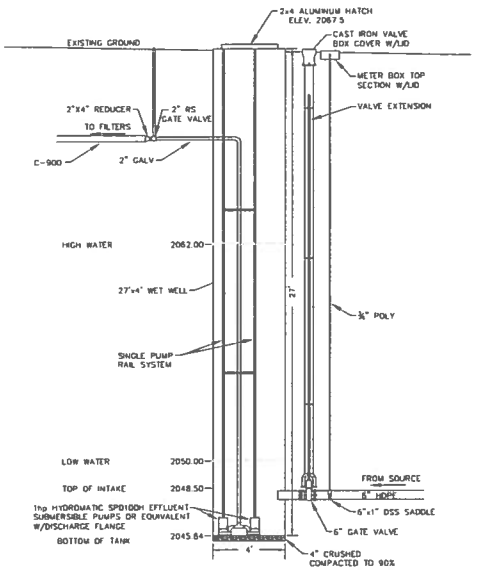
AND EITHER C) NPWL CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS

OR D) NPWL ENCASED IN AT LEAST 6 INCHES OF CONCRETE MEASURED AT THE BELL

OR E) SITE SPECIFIC REQUIREMENTS APPROVED BY DEQ

ZONE 3 NOT ALLOWED

NOTE: SANITARY SEWER FORCE MAINS MUST HAVE MIN 10' HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION FROM ZONE 2 AND ZONE 3 PLACEMENTS ARE NOT ALLOWED




WET WELL
NTS

Sourdough Point Owners Association
Bonner County
Details

PROJECT: 08.005
DRAWING: PIPEDETAILS.dwg
DESIGN BY: BLC
DRAWN BY: DPS
CHK. BY: RWT
LAST EDIT DATE: 7/30/08

| NO. | DESCRIPTION | BY | DATE |
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| | REVISIONS | | |

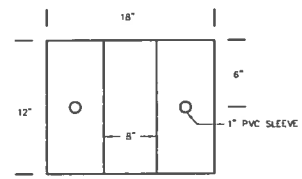

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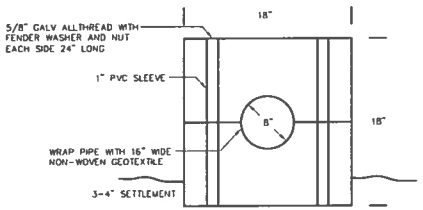


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SHEET
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OF 13

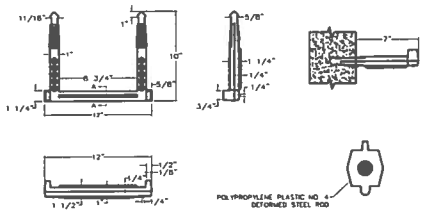

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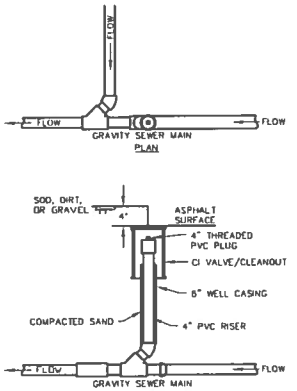

NOTE, CONCRETE IS CAST INTO TWO PIECES AND ONE WEIGHT IS REQUIRED FOR EVERY 10 FEET OF LINE.

CONCRETE WEIGHT DETAIL
N.T.S.

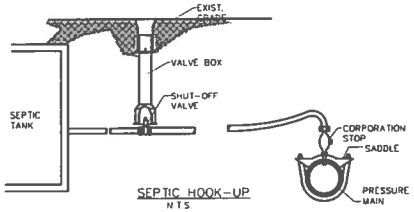



1. STEPS SHALL BE PLACED INTO WET CONCRETE WALL DURING MANUFACTURE OR MORTARED INTO HOLES AFTER CONCRETE HAS SET
2. PLASTIC COATED STEPS SHALL BE AS PER THIS STANDARD DRAWING OR AS APPROVED BY THE ENGINEER.

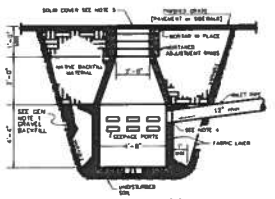
MANHOLE STEPS DETAIL
NOT TO SCALE



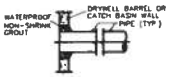

CLEANOUT DETAIL
NOT TO SCALE



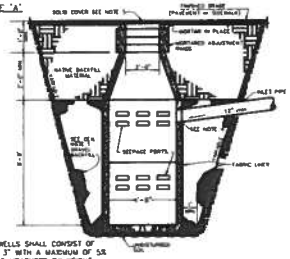

SEPTIC HOOK-UP
N.T.S




DRYWELL - TYPE 'A'




GROUTING




DRYWELL - TYPE 'B'

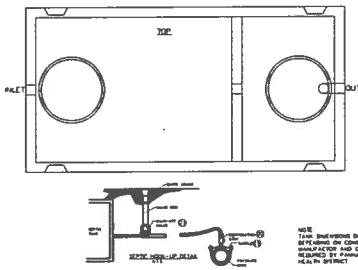
GENERAL NOTES

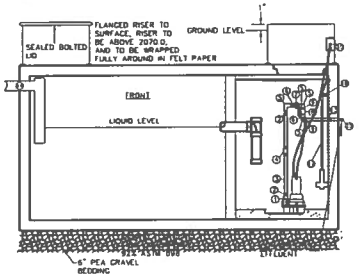
1. SPECIAL BACKFILL MATERIAL FOR DRYWELLS SHALL CONSIST OF WASHED GRAVEL GRADED FROM 1" TO 3" WITH A MAXIMUM OF 5% PASSING THE U.S. No. 200 SCREEN, AS MEASURED BY WEIGHT.

   GRAVEL BACKFILL QUANTITY FOR DRYWELLS.
   TYPE "A" - 30 CUBIC YARDS MINIMUM / 42 TONS.
   TYPE "B" - 40 CUBIC YARDS MINIMUM / 56 TONS.
   OR AS SPECIFIED ON ROAD PLANS.

2. ADJUSTMENT BLOCKS SHALL BE CEMENT CONCRETE
3. WHEN PVC PIPE IS USED A PVC ADAPTER SHALL BE INSTALLED
4. PIPES SHALL BE GROUTED INTO DRYWELLS.
5. SEE STANDARD DRAWING SS-2 FOR FRAME AND COVER DETAIL.

SEPTIC TANK PRESSURE SYSTEMS




NOTE
TANK DIMENSIONS DIFFER DEPENDING ON CONCRETE TANK MANUFACTOR AND OF WHAT IS REQUIRED BY PANHANDLE HEALTH DISTRICT

PRESSURE SYSTEMS:
1. 1500 GALLON CONCRETE TANK (1000/500) OR AS REQUIRED BY PANHANDLE HEALTH DISTRICT FOR GREATER THAN 3 BEDROOMS
2. 2 QTY RISER 24" OR 26" DIAMETER 1 EACH ON TANK AND PUMP CHAMBER
3. 000 LBS (2) 24" or 30" DIAMETER (CONCFL24012 OR (CONCFL26012
4. 000 SEALANT, (SPHAT)
5. GOULDS WE3512M PUMP OR WE3512MH PUMP FOR SEWER BAY
6. CONTROL PANEL OR SERIES RVSP1154CB
7. PRESSURE RELIEF O/FFOLLING DIAPHRAM

TRACE WIRE: 12 GAGE, SOLID LOCATE WIRE SHALL BE PLACED ON ALL PIPE RUNS WITH ENDS ACCESSIBLE FOR USE. (ONE END ADJACENT RISER, OTHER END IN CAPPED STAND PIPE AT MAIN CONNECTION) MAGENTIC DETECTABLE CONDUCTOR, GREEN COLORED, PLASTIC COATED SEWER TAPE SHALL BE PLACED 6 INCHES OVER THE TOP OF ALL PIPE RUNS.

SEALING: TANKS SHALL BE SEALED IN ACCORDANCE TO SPECIFICATIONS AND QTY SHALL BE PROVIDED WITH 5 YEAR WARRANTY

EFFLUENT LINE:
1. (1) 1" x 1" TYPE MIPT BUSHING (REDUCER)
2. (2) 1 1/2 PVC WALL ADAPTER
3. (2) 1 1/2" PVC SCHED 80 PIPE
4. (1) 1 1/2" PVC CHECK VALVE (SLIP X SLIP)
5. (2) 1 1/2" PVC 90 DEGREE FITTINGS (THREAD X THREAD)
6. (2) 1 1/2" x 3" PVC THREADED NIPPLES
7. (1) PVC BALL-UNION VALVE (THREAD X THREAD)
8. (1) 1 1/2" PVC BALL VALVE (THREAD X THREAD)
9. (1) 1 1/2" x 24" STAINLESS STEEL NIPPLE
10. (1) SPLICE BOX
11. (3) SPICE KIT (SELL PIECES)
12. (1) 1" GROMMET
13. (1) 1 1/2" GROMMET
14. PIPE FROM HOUSE TO SEPTIC TANK SHALL BE 4" ABS
15. PIPE FROM SEPTIC TANK TO MAIN SHALL BE 1 1/2" SCHED 40 PVC OR 200# POLYETHYLENE WITH PACK JOINTS AND STAINLESS STEEL INSERTS
16. STAINLESS STEEL MOUNTING BRACKET
17. EXTERIOR RISER W/ PRESSURE SEAL
18. FELT PAPER TO FULLY WRAP AROUND FLANGES RISER TO SURFACE

MAIN LINE CONNECTIONS:
19. SADDLE TAP SHALL CAST IRON WITH STAINLESS STEEL STRAPS
20. CORPORATION STOP SHALL BE BRASS OR STAINLESS STEEL
21. SHUT OFF VALVE FOR PRESSURE LATERAL AND VALVE BOX

Sourdough Point Owners Association
Bonner County
Details

PROJECT: 08.005
DRAWING: SHEET01.dwg
DESIGN BY: BLC
DRAWN BY: DPS
CHK. BY: RMT
LAST EDIT DATE: 7/30/08

| NO | DESCRIPTION | BY | DATE |
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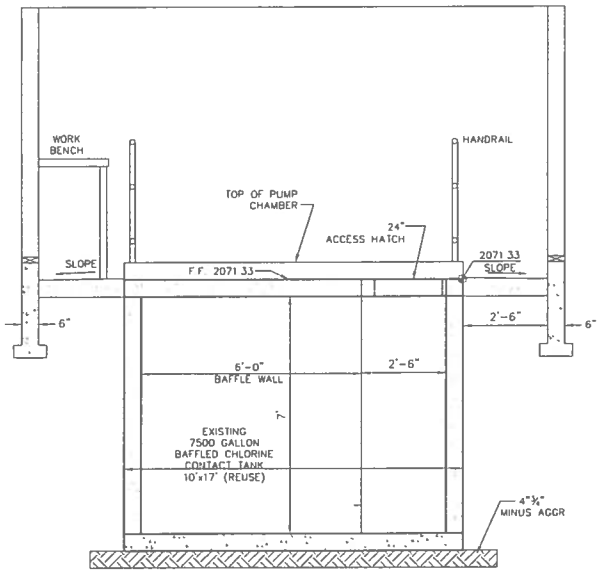

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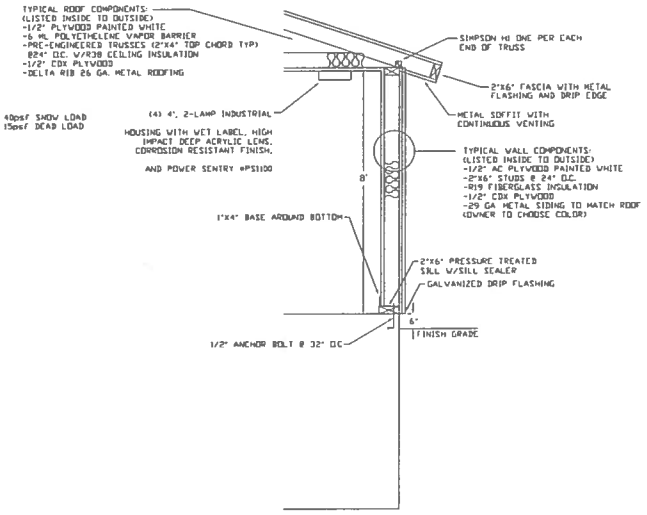


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SHEET 11 OF 13


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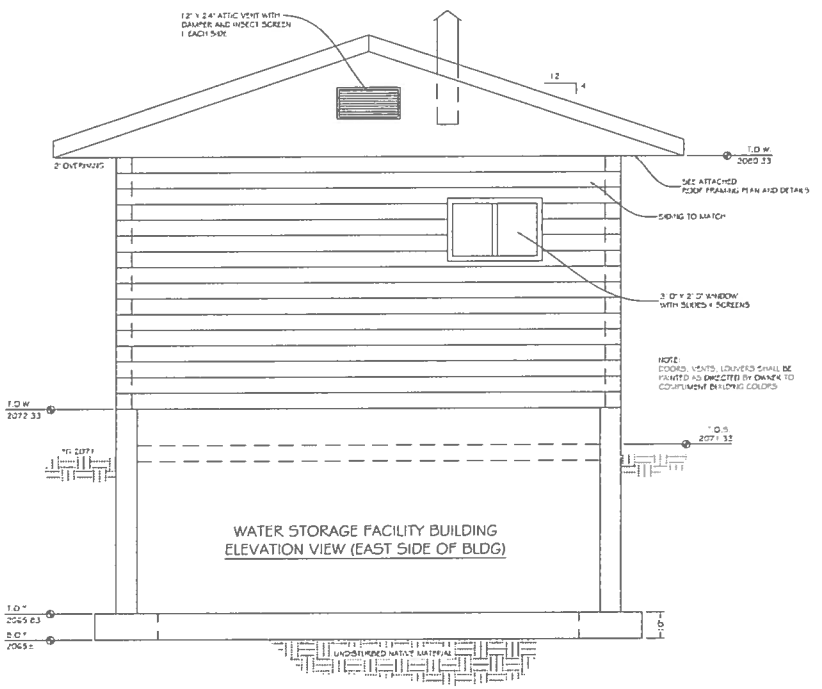



NOTES:

1. ALL WORKMANSHIP SHALL CONFORM TO THE LASTEST EDITION I.B.C. AND ALL LOCAL CODES.
2. MIN. CONCRETE COMPRESSION STRENGTH AT 28 DAYS = 3000 p.s.i.
3. STEEL REBAR Fy = 40,000 p.s.i.
4. ALL DIMENSION LUMBER: D.F. NO. 2 OR BETTER UNLESS OTHERWISE NOTED.

CONTROL BUILDING WALL DETAIL
NOT TO SCALE




STRUCTURAL SECTION
NOT TO SCALE

GRAPHIC SCALE
2 0 2 4
SCALE: 1/2"=1'-0"

Sourdough Point Owners Association
Bonner County
Details/Structural Section

PROJECT: 08.005
DRAWING: #4DETAILS.dwg
DESIGN BY: BLC
DRAWN BY: DPS
CHK. BY: PMT
LAST EDIT DATE: 7/30/08

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SHEET 12 OF 13

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