

Rancho Seco
Final Status Survey Summary Report
March 7, 2008
Clean Drain System Piping
Survey Unit F8990054

Prepared By: *Eric L. Brown* Date: *3/7/2008*
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Reviewed By: *[Signature]* Date: *3/11/08*
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Approved By: *[Signature]* Date: *4-8-08*
Dismantlement Superintendent, Radiological

FINAL STATUS SURVEY SUMMARY REPORT

Survey Unit:

F8990054, Clean Drain System Piping, Storm Drain Non-Discharge Piping

Survey Unit Description:

Operating History: This system provided a pathway for clean system leakage to be routed into the drain system prior to discharge at the Industrial Area fence. The system was slightly contaminated by leakage from systems that had become contaminated as a result of steam generator primary to secondary tube leaks. Operating records and the HSA document occurrences of radioactive contamination associated with this system piping.

Site Characterization: Direct measurements were made of the interior surfaces of the system piping at the catch basins. The surface activity mean value was 196 dpm/100cm² and the maximum value was 380 dpm/100cm². Sediment activity mean value for Cs-137 was 0.15 pCi/g and a trace level of Co-60 in one sample. Based on the classification procedure (DSIP-0020) and levels of gross activity reported in the remaining sections of pipe, the remaining system was determined to be a class 3 system.

HSA Events: LER-7505, 8304, 8335.

Survey Unit Design Information:

The Survey Unit Design Parameters are presented in Table 1 below. The survey unit and measurement locations are depicted on the maps in Attachment 1. Direct measurement locations were spaced at 15 cm intervals and 87.5 m² were scanned for approximately 2% coverage. The instrumentation used for the survey along with the MDC values are listed in Tables 2-1 and 2-2 in Attachment 2.

Table 1. Survey Unit Design Parameters

Survey Design Parameter	Value	Comment
Survey Area:	F899	Clean Drain System Piping Structure Surface LTP Table 5-4
Survey Unit:	0054	
Class:	3	
SU Area (m²):	4644	
Evaluator:	Erin L. Brown	
DCGL (dpm/100 cm²):	100000	Gross Activity DCGL
Area Factor:	N/A	Class 3
Design DCGL_{mc} (dpm/100 cm²):	N/A	Class 3
LBGR (dpm/100 cm²):	50000	Default = 50% DCGL
Design Sigma (dpm/100 cm²):	392	
Type I Error:	0.05	
Type II Error:	0.05	
Predominant Nuclide:	Cs-137	
Sample Area (m²):	N/A	Class 3
Scan Area (m²):	87.5	
Scan Coverage (%):	2%	Class 3
Z_{1-α}:	1.645	
Z_{1-β}:	1.645	
Sign P:	0.99865	
Calculated Relative Shift:	127.5	
Relative Shift Used:	3	Uses 3.0 if Relative Shift is >3
N-Value:	11	
Design N-Value + 20%:	14	NUREG-1575 Table 5-5
Design Min Samples N:	14	Class 3
Grid Spacing L:	N/A	Class 3

Survey Results:

A total of 402 direct measurements were made in F8990054. The results including mean, median, standard deviation and range are shown in Table 2. All direct measurements were less than the DCGL. None of the measurements indicated areas of elevated activity. Survey activity ranged from 6516 to 9997 dpm/100 cm², based on pipe detector efficiency.

Table 2. Direct Measurement Results

Measurement ID	Gross Activity (dpm/100 cm ²)
F8990054-M0001GI	9090
F8990054-M0002GI	8448
F8990054-M0003GI	8284
F8990054-M0004GI	8161
F8990054-M0005GI	8203
F8990054-M0006GI	7972
F8990054-M0007GI	8219
F8990054-M0008GI	8098
F8990054-M0009GI	8070
F8990054-M0010GI	8105
F8990054-M0011GI	7944
F8990054-M0012GI	7933
F8990054-M0013GI	8118
F8990054-M0014GI	8109
F8990054-M0015GI	8118
F8990054-M0016GI	8192
F8990054-M0017GI	8139
F8990054-M0018GI	8050
F8990054-M0019GI	8158
F8990054-M0020GI	8045
F8990054-M0021GI	8062
F8990054-M0022GI	7957
F8990054-M0023GI	8024
F8990054-M0024GI	7873
F8990054-M0025GI	7954
F8990054-M0026GI	7754
F8990054-M0027GI	7819
F8990054-M0028GI	7750
F8990054-M0029GI	7882
F8990054-M0030GI	7786
F8990054-M0031GI	7629
F8990054-M0032GI	7534
F8990054-M0033GI	7234
F8990054-M0034GI	7506
F8990054-M0035GI	7847
F8990054-M0036GI	8178
F8990054-M0037GI	8175
F8990054-M0038GI	8331
F8990054-M0039GI	8308
F8990054-M0040GI	8242

F8990054-M0041GI	8259
F8990054-M0042GI	8129
F8990054-M0043GI	8164
F8990054-M0044GI	8011
F8990054-M0045GI	7967
F8990054-M0046GI	7949
F8990054-M0047GI	7952
F8990054-M0048GI	7991
F8990054-M0049GI	7916
F8990054-M0050GI	7836
F8990054-M0051GI	7901
F8990054-M0052GI	7999
F8990054-M0053GI	7865
F8990054-M0054GI	7912
F8990054-M0055GI	8061
F8990054-M0056GI	8064
F8990054-M0057GI	8100
F8990054-M0058GI	8097
F8990054-M0059GI	8262
F8990054-M0060GI	8250
F8990054-M0061GI	8320
F8990054-M0062GI	8231
F8990054-M0063GI	8378
F8990054-M0064GI	8326
F8990054-M0065GI	8274
F8990054-M0066GI	8261
F8990054-M0067GI	8324
F8990054-M0068GI	8349
F8990054-M0069GI	8461
F8990054-M0070GI	8492
F8990054-M0071GI	8238
F8990054-M0072GI	8432
F8990054-M0073GI	8277
F8990054-M0074GI	8254
F8990054-M0075GI	8226
F8990054-M0076GI	8530
F8990054-M0077GI	8729
F8990054-M0078GI	8787
F8990054-M0079GI	8860
F8990054-M0080GI	8915
F8990054-M0081GI	9039
F8990054-M0082GI	8983
F8990054-M0083GI	9031
F8990054-M0084GI	8994
F8990054-M0085GI	8962
F8990054-M0086GI	9121
F8990054-M0087GI	9034
F8990054-M0088GI	9108
F8990054-M0089GI	9062
F8990054-M0090GI	9104
F8990054-M0091GI	9362
F8990054-M0092GI	9102
F8990054-M0093GI	9167
F8990054-M0094GI	9307
F8990054-M0095GI	9196
F8990054-M0096GI	9306

F8990054-M0097GI	9094
F8990054-M0098GI	9201
F8990054-M0099GI	9298
F8990054-M0100GI	9163
F8990054-M0101GI	9208
F8990054-M0102GI	9033
F8990054-M0103GI	8996
F8990054-M0104GI	9204
F8990054-M0105GI	9155
F8990054-M0106GI	8937
F8990054-M0107GI	9107
F8990054-M0108GI	8963
F8990054-M0109GI	8894
F8990054-M0110GI	8974
F8990054-M0111GI	8880
F8990054-M0112GI	8896
F8990054-M0113GI	8698
F8990054-M0114GI	8462
F8990054-M0115GI	8377
F8990054-M0116GI	8334
F8990054-M0117GI	8935
F8990054-M0118GI	8932
F8990054-M0119GI	8956
F8990054-M0120GI	8879
F8990054-M0121GI	9253
F8990054-M0122GI	9328
F8990054-M0123GI	9354
F8990054-M0124GI	9192
F8990054-M0125GI	9322
F8990054-M0126GI	9517
F8990054-M0127GI	9453
F8990054-M0128GI	9484
F8990054-M0129GI	9428
F8990054-M0130GI	9530
F8990054-M0131GI	9481
F8990054-M0132GI	9442
F8990054-M0133GI	9470
F8990054-M0134GI	9579
F8990054-M0135GI	9574
F8990054-M0136GI	9622
F8990054-M0137GI	9456
F8990054-M0138GI	9521
F8990054-M0139GI	9570
F8990054-M0140GI	9604
F8990054-M0141GI	9552
F8990054-M0142GI	9580
F8990054-M0143GI	9461
F8990054-M0144GI	9652
F8990054-M0145GI	9450
F8990054-M0146GI	9518
F8990054-M0147GI	9510
F8990054-M0148GI	9377
F8990054-M0149GI	9320
F8990054-M0150GI	9351
F8990054-M0151GI	9377
F8990054-M0152GI	9378

F8990054-M0153GI	9258
F8990054-M0154GI	9217
F8990054-M0155GI	9098
F8990054-M0156GI	8827
F8990054-M0157GI	8811
F8990054-M0158GI	9019
F8990054-M0159GI	9383
F8990054-M0160GI	9430
F8990054-M0161GI	9609
F8990054-M0162GI	9782
F8990054-M0163GI	9822
F8990054-M0164GI	9997
F8990054-M0165GI	9698
F8990054-M0166GI	9751
F8990054-M0167GI	9685
F8990054-M0168GI	9953
F8990054-M0169GI	9847
F8990054-M0170GI	9785
F8990054-M0171GI	9984
F8990054-M0172GI	9760
F8990054-M0173GI	9855
F8990054-M0174GI	9776
F8990054-M0175GI	9757
F8990054-M0176GI	9990
F8990054-M0177GI	9841
F8990054-M0178GI	9844
F8990054-M0179GI	9760
F8990054-M0180GI	9758
F8990054-M0181GI	9868
F8990054-M0182GI	9668
F8990054-M0183GI	9873
F8990054-M0184GI	9749
F8990054-M0185GI	9731
F8990054-M0186GI	9619
F8990054-M0187GI	9620
F8990054-M0188GI	9662
F8990054-M0189GI	9372
F8990054-M0190GI	9516
F8990054-M0191GI	9397
F8990054-M0192GI	9490
F8990054-M0193GI	9311
F8990054-M0194GI	9284
F8990054-M0195GI	9247
F8990054-M0196GI	9213
F8990054-M0197GI	9007
F8990054-M0198GI	8885
F8990054-M0199GI	8755
F8990054-M0200GI	8608
F8990054-M0201GI	8920
F8990054-M0202GI	9170
F8990054-M0203GI	8534
F8990054-M0204GI	7805
F8990054-M0205GI	7680
F8990054-M0206GI	7974
F8990054-M0207GI	8029
F8990054-M0208GI	8075

F8990054-M0209GI	7950
F8990054-M0210GI	8054
F8990054-M0211GI	8107
F8990054-M0212GI	8024
F8990054-M0213GI	8004
F8990054-M0214GI	8097
F8990054-M0215GI	8295
F8990054-M0216GI	8401
F8990054-M0217GI	8225
F8990054-M0218GI	8438
F8990054-M0219GI	8175
F8990054-M0220GI	8363
F8990054-M0221GI	8390
F8990054-M0222GI	8336
F8990054-M0223GI	8222
F8990054-M0224GI	8168
F8990054-M0225GI	8247
F8990054-M0226GI	7942
F8990054-M0227GI	8185
F8990054-M0228GI	7959
F8990054-M0229GI	7730
F8990054-M0230GI	7996
F8990054-M0231GI	8267
F8990054-M0232GI	8372
F8990054-M0233GI	8278
F8990054-M0234GI	8383
F8990054-M0235GI	8447
F8990054-M0236GI	8421
F8990054-M0237GI	8483
F8990054-M0238GI	8353
F8990054-M0239GI	8455
F8990054-M0240GI	8520
F8990054-M0241GI	8338
F8990054-M0242GI	8183
F8990054-M0243GI	8042
F8990054-M0244GI	7762
F8990054-M0245GI	7646
F8990054-M0246GI	7531
F8990054-M0247GI	7567
F8990054-M0248GI	8644
F8990054-M0249GI	8448
F8990054-M0250GI	8224
F8990054-M0251GI	8438
F8990054-M0252GI	8407
F8990054-M0253GI	8312
F8990054-M0254GI	8235
F8990054-M0255GI	7940
F8990054-M0256GI	7723
F8990054-M0257GI	7655
F8990054-M0258GI	7504
F8990054-M0259GI	7442
F8990054-M0260GI	7591
F8990054-M0261GI	7450
F8990054-M0262GI	7406
F8990054-M0263GI	7176
F8990054-M0264GI	7062

F8990054-M0265GI	6919
F8990054-M0266GI	7075
F8990054-M0267GI	7212
F8990054-M0268GI	7379
F8990054-M0269GI	7349
F8990054-M0270GI	7285
F8990054-M0271GI	7370
F8990054-M0272GI	7518
F8990054-M0273GI	7563
F8990054-M0274GI	7767
F8990054-M0275GI	7897
F8990054-M0276GI	7968
F8990054-M0277GI	8121
F8990054-M0278GI	7869
F8990054-M0279GI	8003
F8990054-M0280GI	7907
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F8990054-M0284GI	7868
F8990054-M0285GI	7849
F8990054-M0286GI	7773
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F8990054-M0290GI	7620
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F8990054-M0292GI	7507
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F8990054-M0294GI	7623
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F8990054-M0296GI	7315
F8990054-M0297GI	7313
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F8990054-M0299GI	7270
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F8990054-M0316GI	7086
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F8990054-M0319GI	7237
F8990054-M0320GI	7293

F8990054-M0321GI	7257
F8990054-M0322GI	7419
F8990054-M0323GI	7355
F8990054-M0324GI	7366
F8990054-M0325GI	7307
F8990054-M0326GI	7411
F8990054-M0327GI	7225
F8990054-M0328GI	7167
F8990054-M0329GI	7292
F8990054-M0330GI	7088
F8990054-M0331GI	7063
F8990054-M0332GI	6810
F8990054-M0333GI	6930
F8990054-M0334GI	7028
F8990054-M0335GI	6960
F8990054-M0336GI	6949
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F8990054-M0338GI	6745
F8990054-M0339GI	6516
F8990054-M0340GI	6584
F8990054-M0341GI	6791
F8990054-M0342GI	7024
F8990054-M0343GI	7034
F8990054-M0344GI	7058
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F8990054-M0346GI	7106
F8990054-M0347GI	7095
F8990054-M0348GI	7181
F8990054-M0349GI	7262
F8990054-M0350GI	7430
F8990054-M0351GI	7239
F8990054-M0352GI	7324
F8990054-M0353GI	7416
F8990054-M0354GI	7309
F8990054-M0355GI	7304
F8990054-M0356GI	7458
F8990054-M0357GI	7184
F8990054-M0358GI	7045
F8990054-M0359GI	7284
F8990054-M0360GI	7363
F8990054-M0361GI	7346
F8990054-M0362GI	7369
F8990054-M0363GI	7271
F8990054-M0364GI	7165
F8990054-M0365GI	7265
F8990054-M0366GI	7205
F8990054-M0367GI	7138
F8990054-M0368GI	7134
F8990054-M0369GI	7004
F8990054-M0370GI	7205
F8990054-M0371GI	7418
F8990054-M0372GI	7513
F8990054-M0373GI	7654
F8990054-M0374GI	7598
F8990054-M0375GI	7745
F8990054-M0376GI	7570

F8990054-M0377GI	7926
F8990054-M0378GI	7752
F8990054-M0379GI	7678
F8990054-M0380GI	7652
F8990054-M0381GI	7516
F8990054-M0382GI	7489
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F8990054-M0384GI	7546
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F8990054-M0386GI	7384
F8990054-M0387GI	7475
F8990054-M0388GI	7652
F8990054-M0389GI	7536
F8990054-M0390GI	7398
F8990054-M0391GI	7367
F8990054-M0392GI	7177
F8990054-M0393GI	7072
F8990054-M0394GI	6948
F8990054-M0395GI	6967
F8990054-M0396GI	7161
F8990054-M0397GI	7305
F8990054-M0398GI	7618
F8990054-M0399GI	7576
F8990054-M0400GI	7746
F8990054-M0401GI	7783
F8990054-M0402GI	7883
Mean:	8211
Median:	8097
Standard Deviation:	873
Range:	6516 - 9997

Survey Unit Data Assessment:

The survey design required 402 direct measurements for the Sign Test. The critical value and the results of the Sign Test are presented in Table 4. The sample mean and median values were less than the DCGL. The sample standard deviation was greater than the design standard deviation. Since both values of sigma resulted in a relative shift greater than three (3), no additional samples were required.

Table 4. Data Assessment Results

Survey Results Parameter	Value	Comment
Material Background Used (dpm/100 cm ²):	N/A	Average Ambient BKG = 0
Ambient Background Used (dpm/100 cm ²):	N/A	
Actual Direct Measurements (N):	402	
Median (dpm/100 cm ²):	8097	
Mean (dpm/100 cm ²):	8211	
Direct Measurement Standard Deviation	873	
(dpm/100 cm ²):		
Total Standard Deviation (dpm/100 cm ²):	873	
Maximum (dpm/100 cm ²):	9997	
Material Type:	N/A	
Sign Test Final N Value:	402	Background Subtract Not Applied
S+ Value:	402	
Critical Value:	217	
Sufficient Samples Collected:	Yes	
Maximum Value < DCGL:	Yes	
Median Value < DCGL:	Yes	
Mean Value < DCGL:	Yes	
Maximum Value < DCGL_{emc}:	N/A	
Total Standard Deviation <= Sigma:	Investigate	
Pass the Sign Test?	Yes	
Reject the Null Hypothesis?	Yes	Class 3
Does the Survey Unit Pass All Criteria?	Investigate	No additional samples required
		The SU passes

Survey Unit Investigations and Results:

No investigations were required and no investigation results are reported.

ALARA Statement:

As stated in Chapter 4 of the LTP, as long as the residual activity within the survey unit is less than the DCGL (i.e. the survey unit average activity is less than the DCGL), the ALARA criterion has been met.

Changes in Initial Survey Unit Assumptions:

The survey unit was designed as a Class 3 structure survey and the sample results are consistent with that classification. The variability of the survey results was greater than the characterization data used for survey design. However, no additional samples were required. No potential areas of elevated activity were detected.

Conclusion:

The FSS of this survey unit was properly designed as a Class 3 survey based on Table 5-4 of the LTP. The required number of direct measurements was made and the scan coverage met the requirement of Table 5-6 of the LTP. No direct measurements exceeded the DCGL of 100000 dpm/100 cm² or the grout limit of 21,000dpm/100cm². No investigations were required.

The direct measurement data support rejection of the null hypothesis, providing high confidence that the survey unit satisfied the release criteria and that the data quality objectives were met.

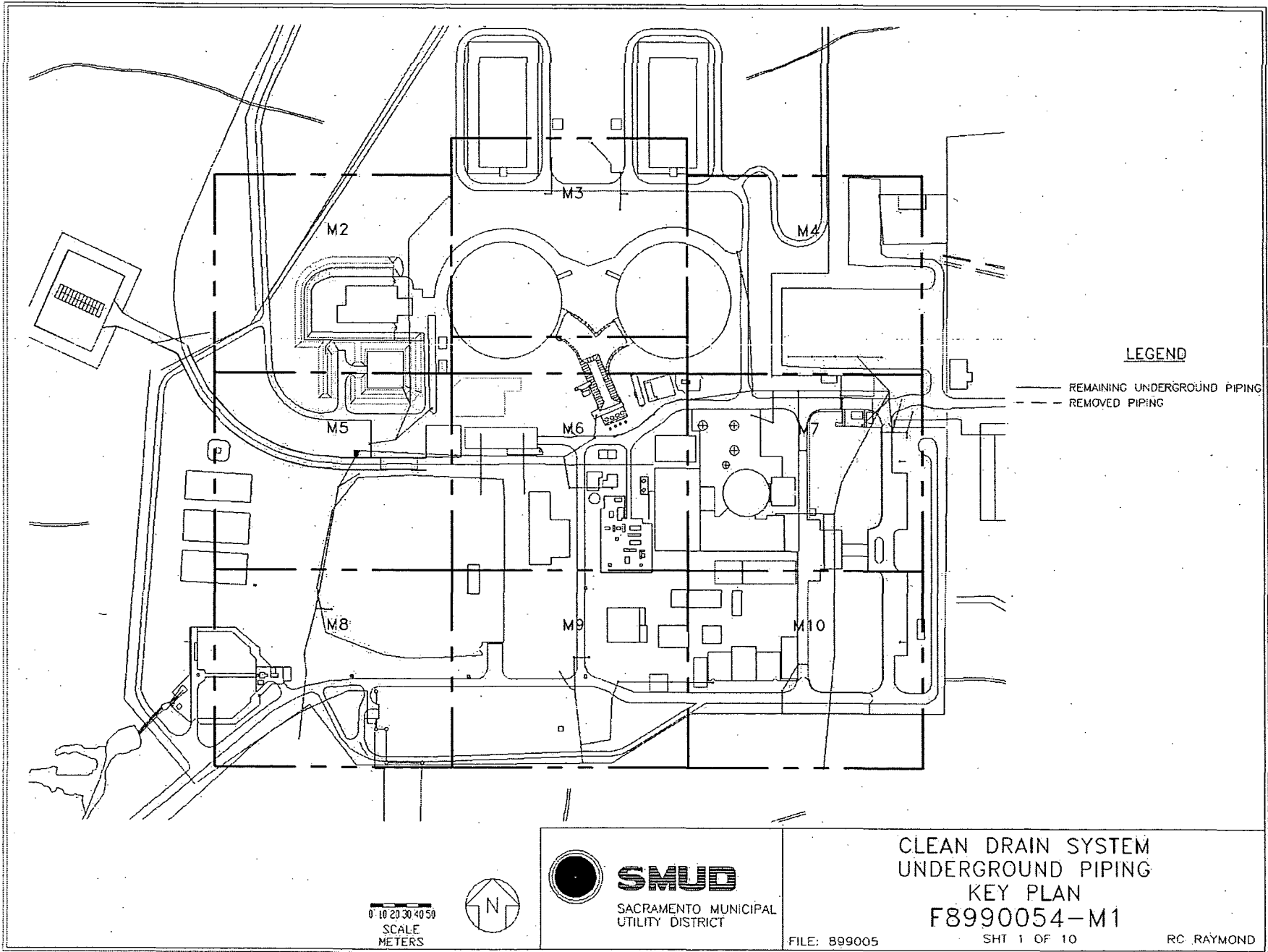
It is concluded that survey unit F8990054 meets the release criteria of 10CFR20.1402.

Attachment 1

Maps

March 7, 2008

Survey Unit F8990054



LEGEND

- REMAINING UNDERGROUND PIPING
- - - REMOVED PIPING

0 10 20 30 40 50
SCALE
METERS



SMUD

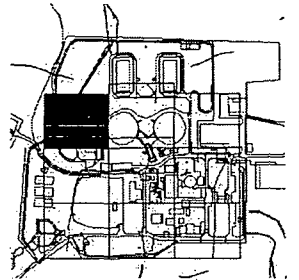
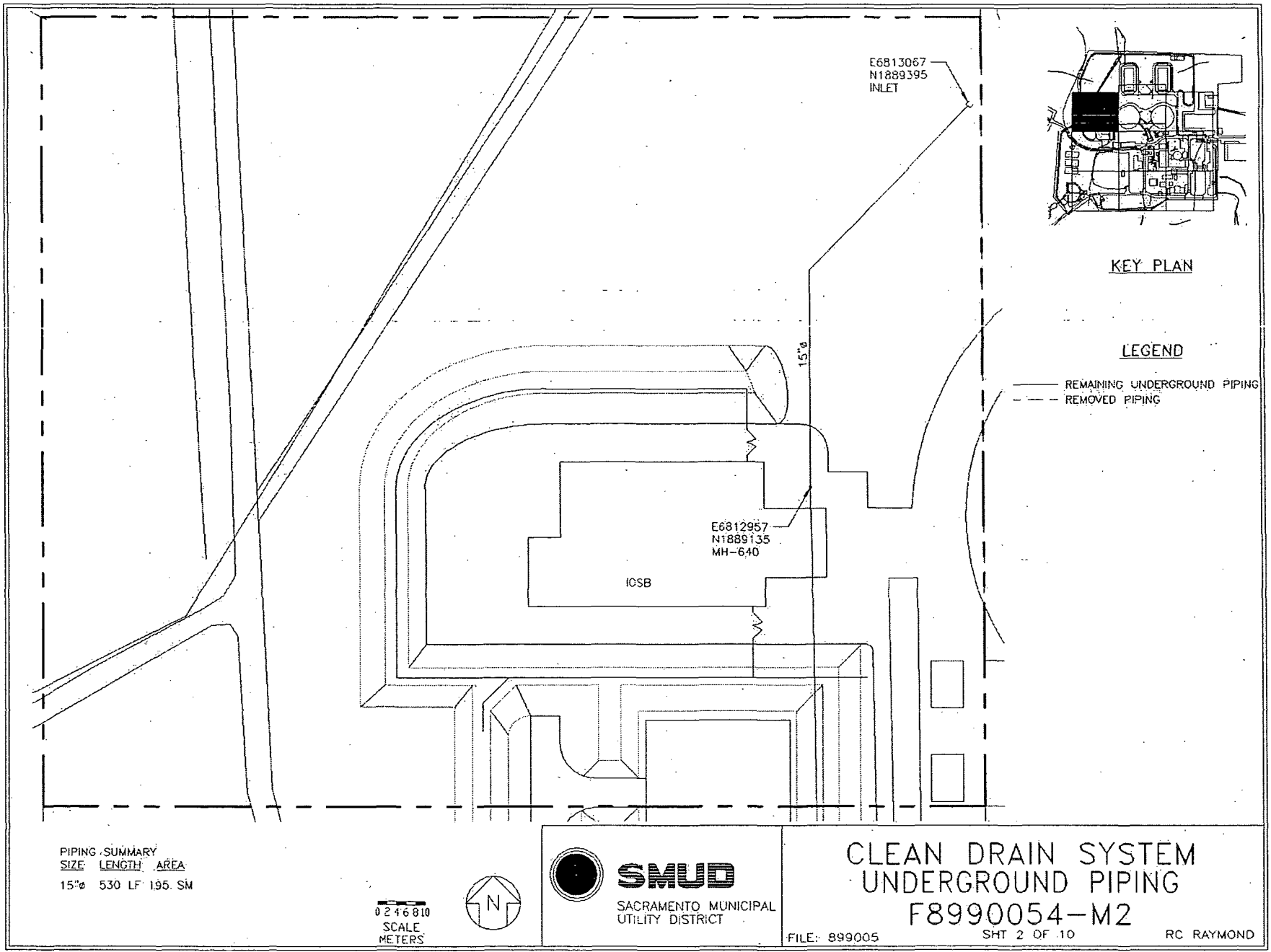
SACRAMENTO MUNICIPAL
UTILITY DISTRICT

CLEAN DRAIN SYSTEM
UNDERGROUND PIPING
KEY PLAN
F8990054-M1

FILE: 899005

SHT 1 OF 10

RC RAYMOND



KEY PLAN

LEGEND

- REMAINING UNDERGROUND PIPING
- - - REMOVED PIPING

PIPING SUMMARY

SIZE	LENGTH	AREA
15"	530 LF	195. SM

0 2 4 6 8 10
SCALE
METERS



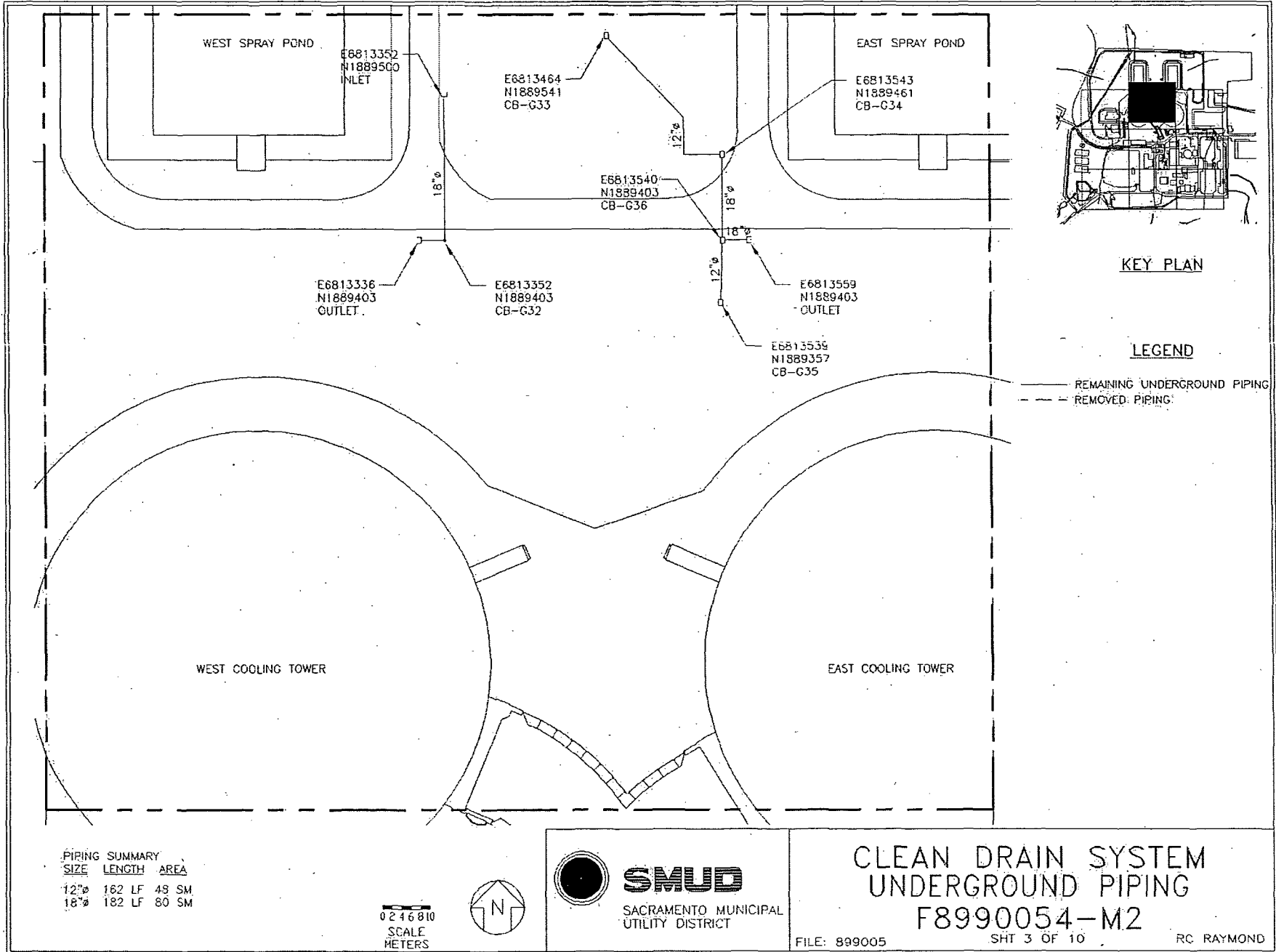
SMUD
SACRAMENTO MUNICIPAL
UTILITY DISTRICT

CLEAN DRAIN SYSTEM
UNDERGROUND PIPING
F8990054-M2

FILE: 899005

SHT 2 OF 10

RC RAYMOND



PIPING SUMMARY

SIZE	LENGTH	AREA
12"	162 LF	49 SM
18"	182 LF	80 SM

0 2 4 6 8 10
SCALE
METERS



SMUD

SACRAMENTO MUNICIPAL
UTILITY DISTRICT

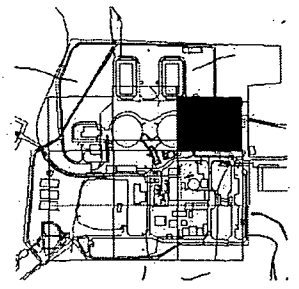
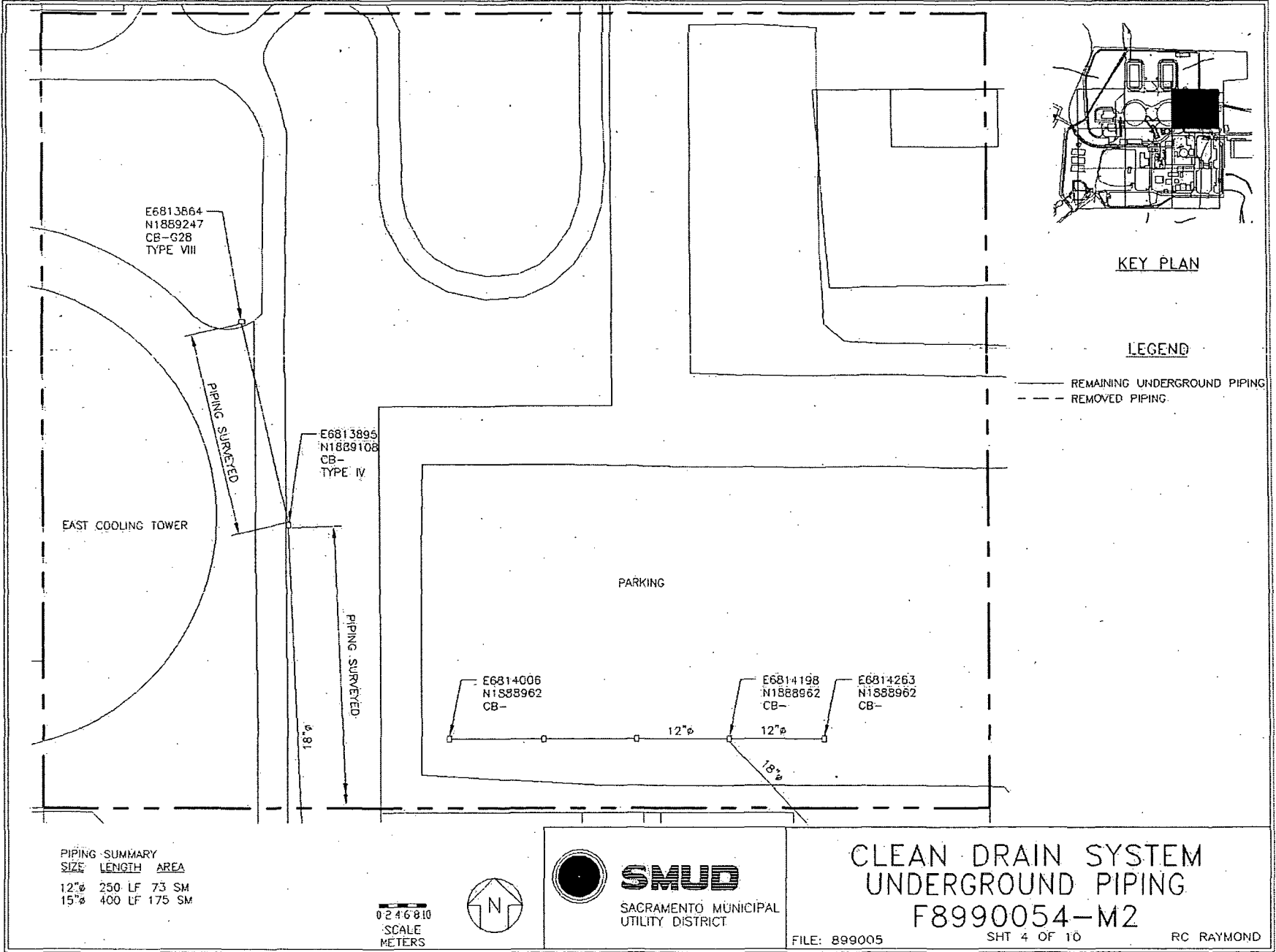
CLEAN DRAIN SYSTEM
UNDERGROUND PIPING

F8990054-M2

FILE: 899005

SHT 3 OF 10

RC RAYMOND



KEY PLAN

LEGEND

- REMAINING UNDERGROUND PIPING
- - - REMOVED PIPING

PIPING SUMMARY

SIZE	LENGTH	AREA
12"φ	250 LF	73 SM
15"φ	400 LF	175 SM

0 2 4 6 8 10
SCALE
METERS



SMUD

SACRAMENTO MUNICIPAL
UTILITY DISTRICT

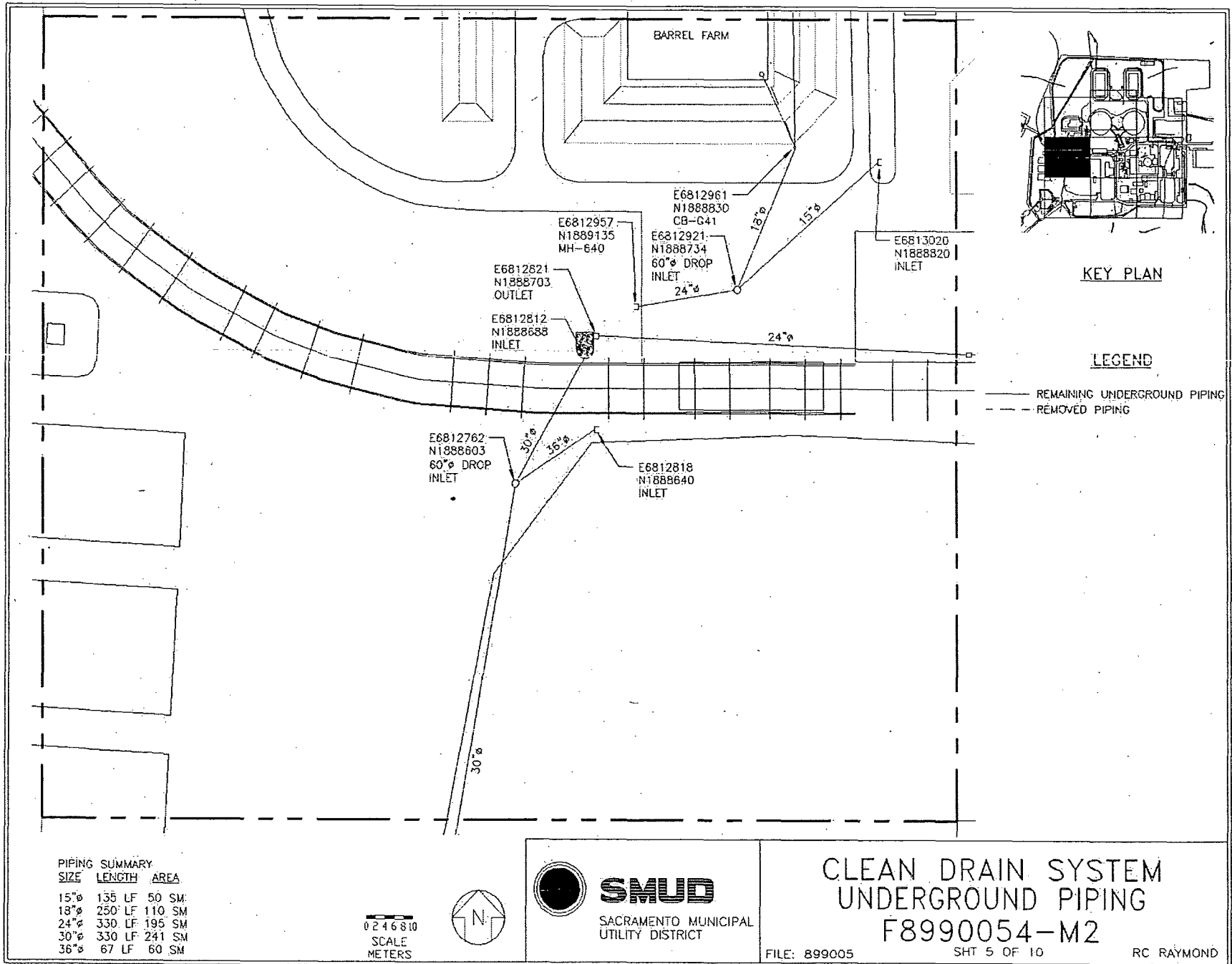
CLEAN DRAIN SYSTEM
UNDERGROUND PIPING

F8990054-M2

FILE: 899005

SHT 4 OF 10

RC RAYMOND



PIPING SUMMARY

SIZE	LENGTH	AREA
15"ø	135 LF	50 SM
18"ø	250 LF	110 SM
24"ø	330 LF	195 SM
30"ø	330 LF	241 SM
36"ø	67 LF	60 SM

0 2 4 6 8 10
SCALE
METERS



SMUD

SACRAMENTO MUNICIPAL
UTILITY DISTRICT

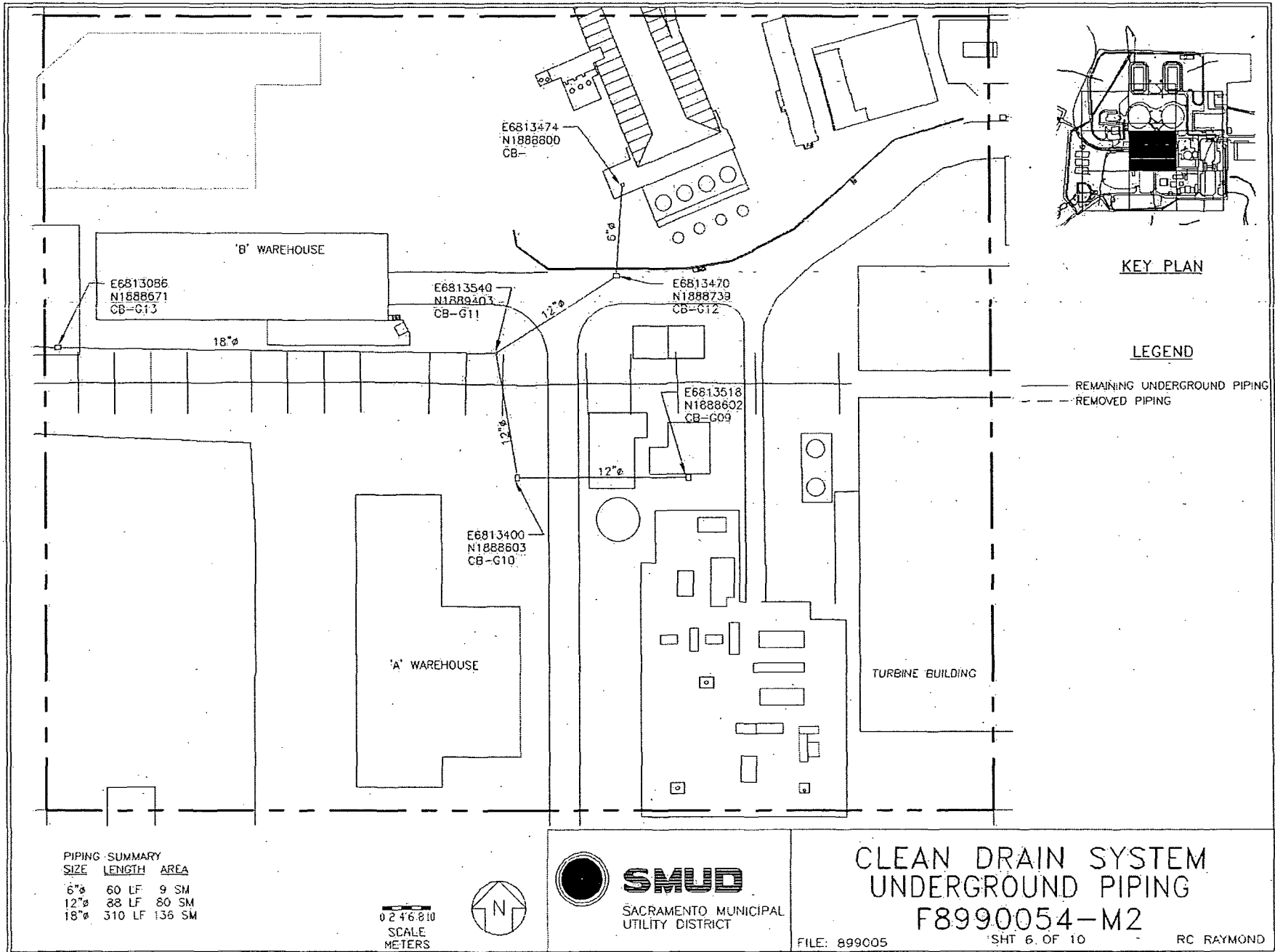
**CLEAN DRAIN SYSTEM
UNDERGROUND PIPING**

F8990054-M2

FILE: 899005

SHT 5 OF 10

RC RAYMOND



PIPING SUMMARY

SIZE	LENGTH	AREA
6"	60 LF	9 SM
12"	88 LF	80 SM
18"	310 LF	136 SM

0 2 4 6 8 10
SCALE
METERS



SMUD

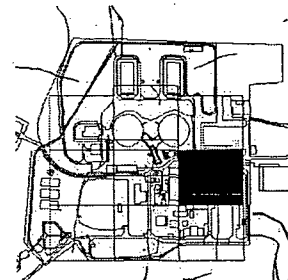
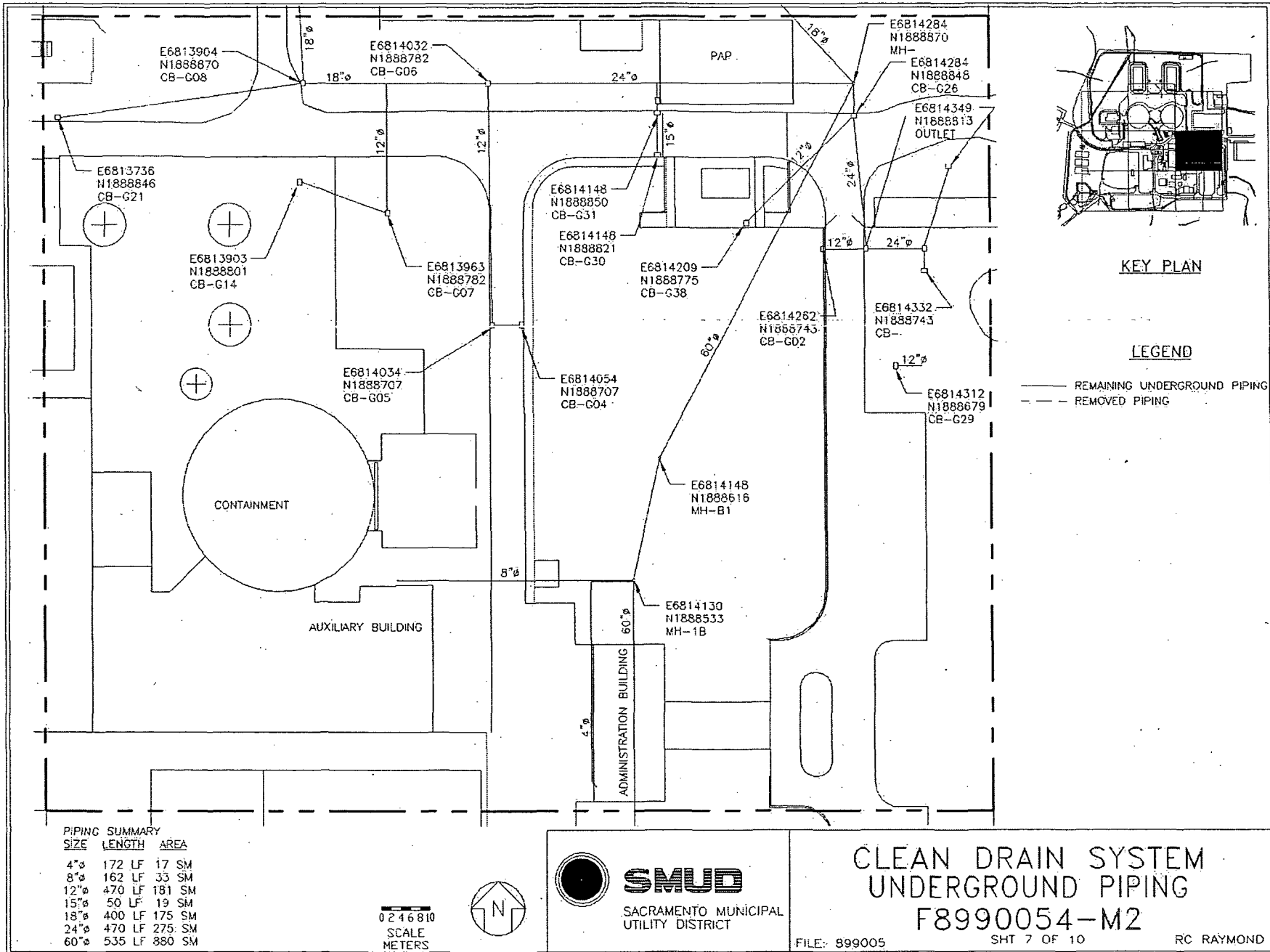
SACRAMENTO MUNICIPAL
UTILITY DISTRICT

CLEAN DRAIN SYSTEM
UNDERGROUND PIPING
F8990054-M2

FILE: 899005

SHT 6. OF 10

RC RAYMOND



KEY PLAN

LEGEND

- REMAINING UNDERGROUND PIPING
- - - REMOVED PIPING

PIPING SUMMARY

SIZE	LENGTH	AREA
4"φ	172 LF	17 SM
8"φ	162 LF	33 SM
12"φ	470 LF	181 SM
15"φ	50 LF	19 SM
18"φ	400 LF	175 SM
24"φ	470 LF	275 SM
60"φ	535 LF	880 SM

0 2 4 6 8 10
SCALE
METERS



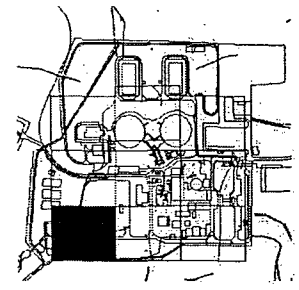
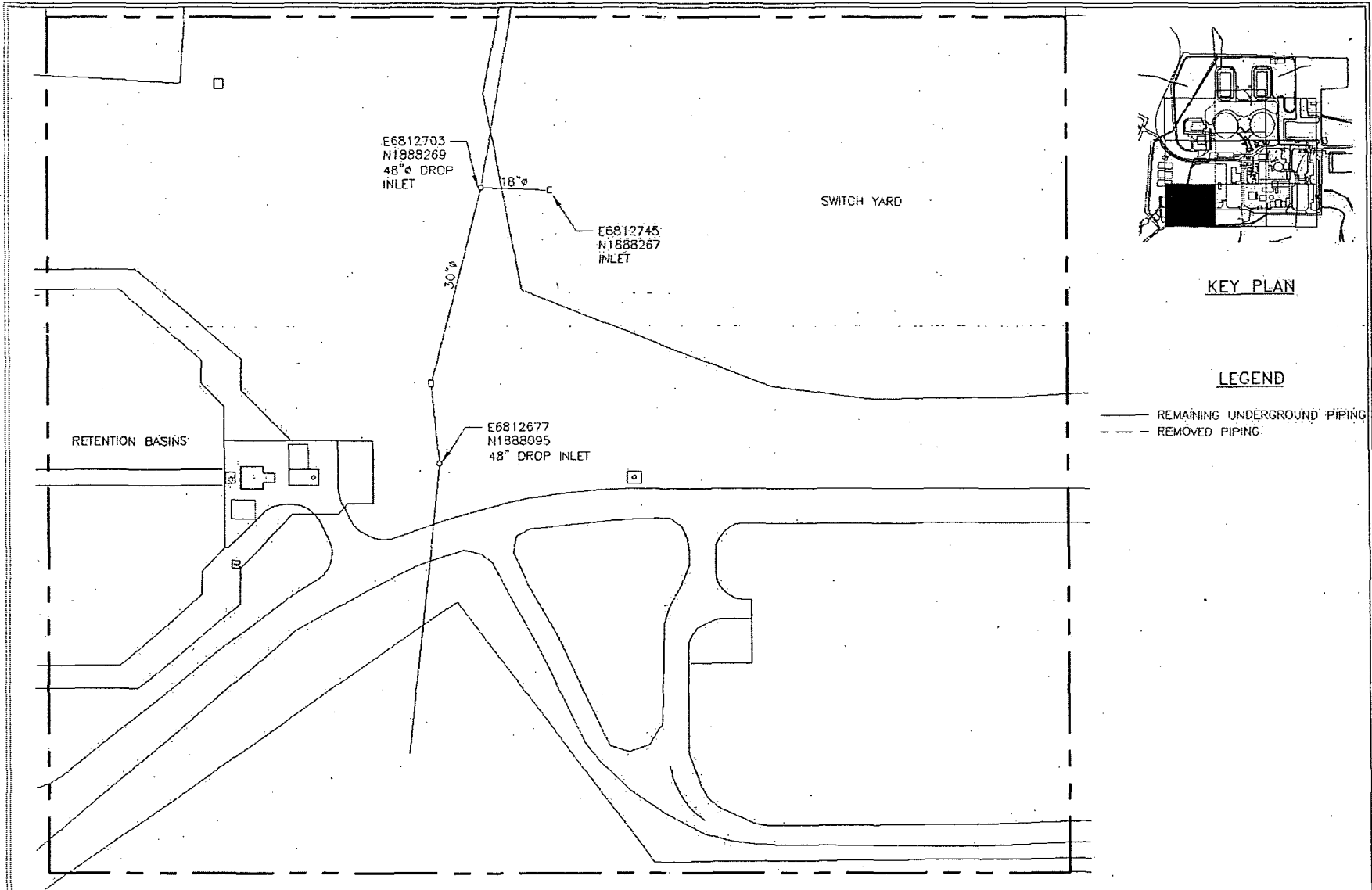
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SACRAMENTO MUNICIPAL
UTILITY DISTRICT

CLEAN DRAIN SYSTEM
UNDERGROUND PIPING
F8990054-M2

FILE: 899005

SHT 7 OF 10

RC RAYMOND



KEY PLAN

LEGEND

- REMAINING UNDERGROUND PIPING
- - - REMOVED PIPING

PIPING SUMMARY

SIZE	LENGTH	AREA
18"φ	45 LF	20 SM
30"φ	470 LF	343 SM

0 2 4 6 8 10
SCALE
METERS



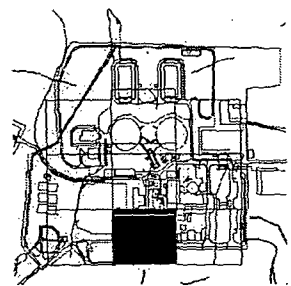
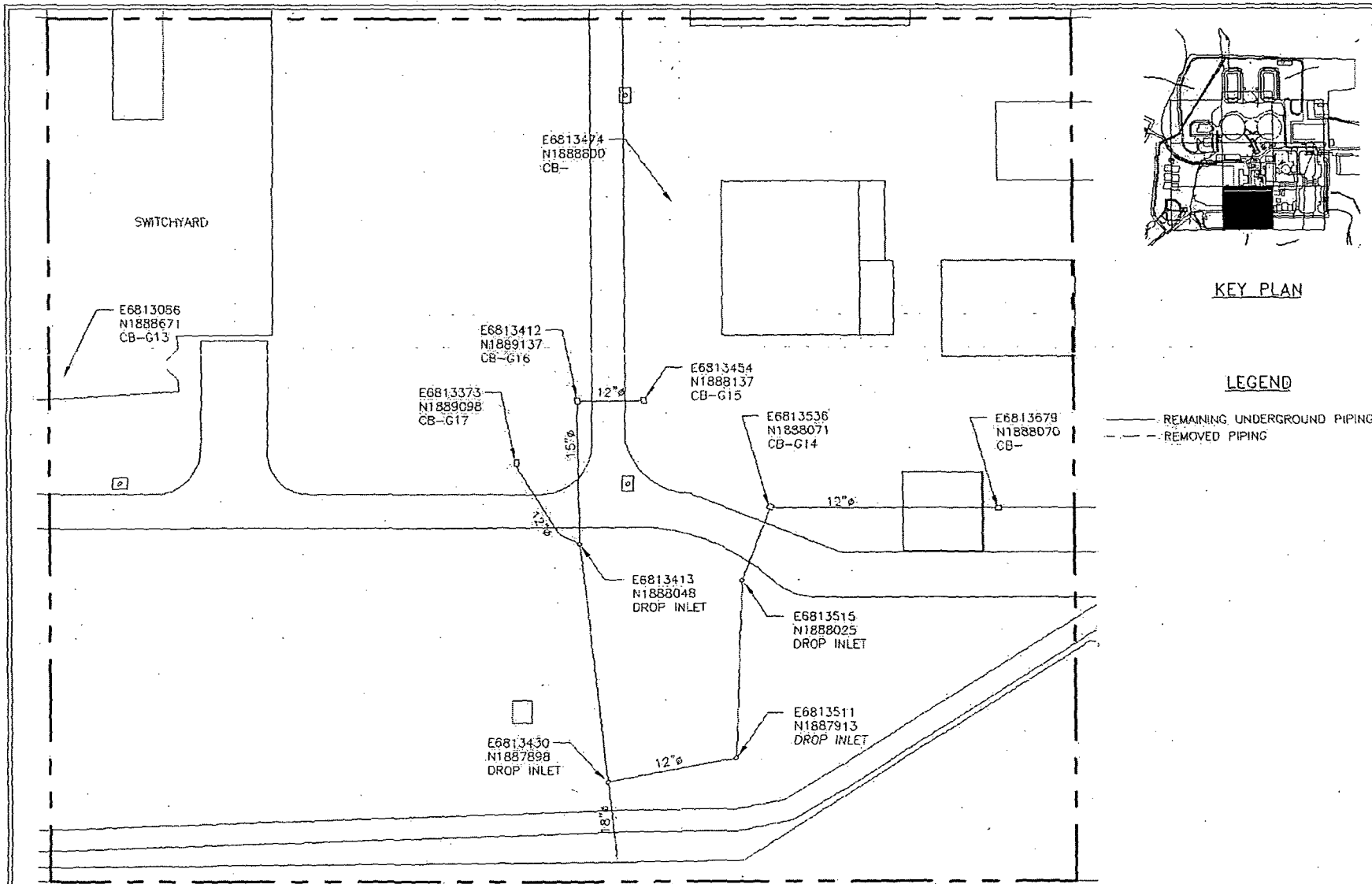
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UTILITY DISTRICT

CLEAN DRAIN SYSTEM
UNDERGROUND PIPING
F8990054-M2

FILE: 899005

SHT 8 OF 10

RC RAYMOND



KEY PLAN

LEGEND

- REMAINING UNDERGROUND PIPING
- - - REMOVED PIPING

PIPING SUMMARY

SIZE	LENGTH	AREA
12"	540 LF	158 SM
15"	240 LF	88 SM
18"	50 LF	22 SM

0 2 4 6 8 10
SCALE
METERS



SMUD

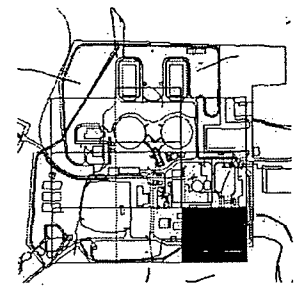
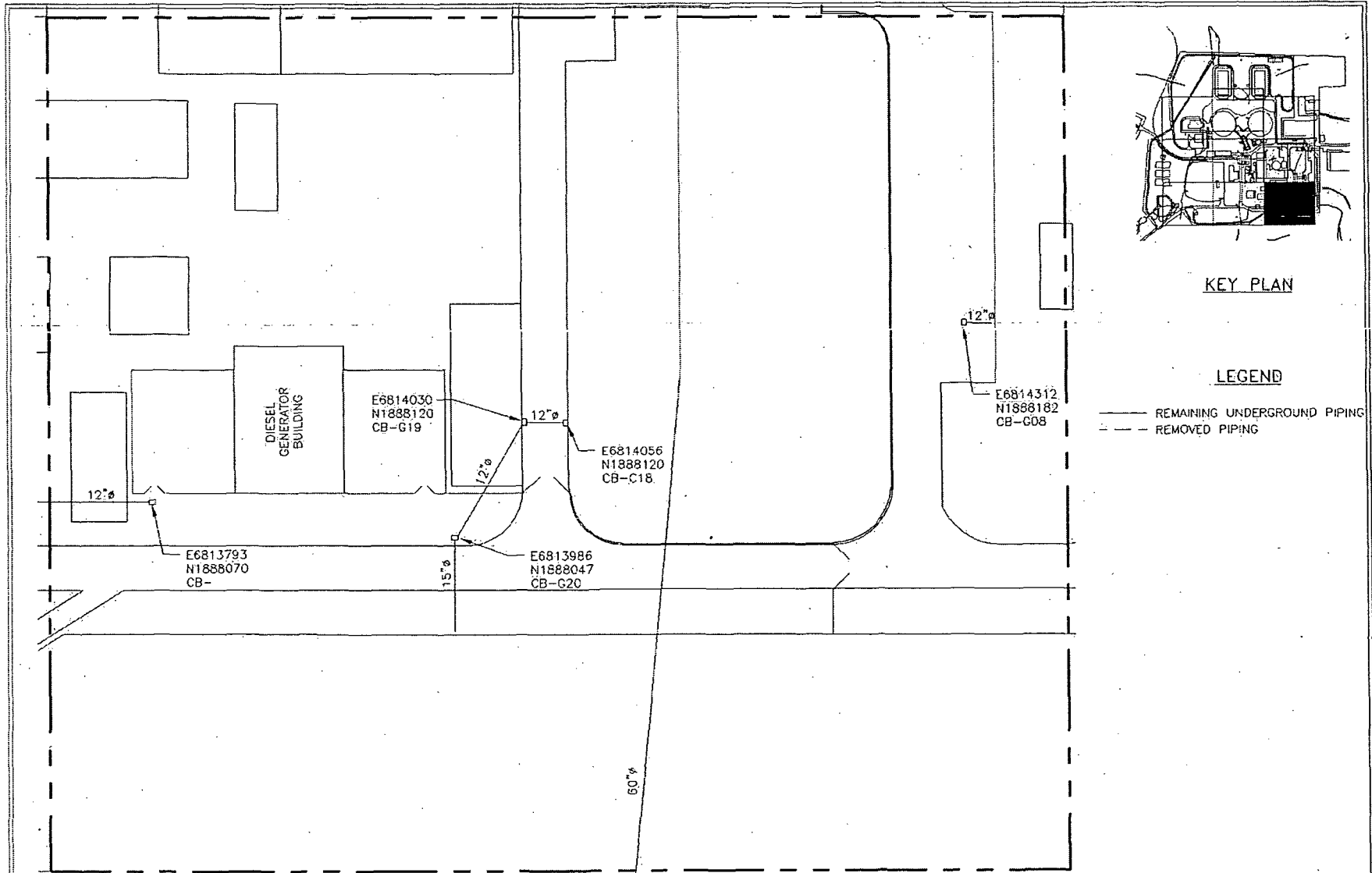
SACRAMENTO MUNICIPAL
UTILITY DISTRICT

CLEAN DRAIN SYSTEM
UNDERGROUND PIPING
F8990054-M2

FILE: 899005

SHT 9 OF 10

RC RAYMOND



KEY PLAN

LEGEND

- REMAINING UNDERGROUND PIPING
- - - REMOVED PIPING

PIPING SUMMARY

SIZE	LENGTH	AREA
12"	185 LF	54 SM
15"	60 LF	22 SM
60"	550 LF	905 SM

0 2 4 6 8 10
SCALE
METERS



SMUD

SACRAMENTO MUNICIPAL
UTILITY DISTRICT

CLEAN DRAIN SYSTEM
UNDERGROUND PIPING

F8990054-M2

FILE: 899005

SHT 10 OF 10

RC: RAYMOND

Attachment 2

Instrumentation

March 7, 2008

Survey Unit F8990054

Table 2-1. Survey Unit Instrumentation

Instrument Model; Serial No.	Detector Model; Serial No.	MDC Static (dpm/100 cm²)	MDC Scan (dpm/100 cm²)
M2350; 142512	44-162; L206935	2590	N/A

Table 2-2. Investigation Criteria and DCGL

Parameter	Value (dpm/100 cm²)
Investigation Criteria - Direct	50000
Investigation Criteria – Scan	N/A
DCGL _w	100000
DCGL _{EMC}	N/A

Attachment 3

Investigation

March 7, 2008

Survey Unit F8990054

(none required)

Attachment 4

Data Assessment

March 7, 2008

Survey Unit F8990054

