

Go East Landfill Closure  
Construction Quality Assurance Report

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Appendix O  
As-Built/Record Drawings  
PACE Engineers, Inc., Rev. June 8, 2022

# GO EAST LANDFILL CLOSURE - AS-BUILT LAND DISTURBANCE ACTIVITY - LDA #1 JUNE 1, 2022

**DEVELOPMENT DATA:**

**OWNER/APPLICANT:**

P&GE LLC  
11255 KIRKLAND WAY, SUITE 300  
KIRKLAND, WA 98033  
425.827.2014  
GARY@GARYEASTLAW.COM  
MARTYP@PACEENGRS.COM

**ENGINEER/CONTACT:**

PACE ENGINEERS, INC  
MARTY PENHALLEGON, P.E.  
11255 KIRKLAND WAY, SUITE 300  
KIRKLAND, WA 98033  
425.827.2014  
MARTYP@PACEENGRS.COM

**LANDSCAPE ARCHITECT:**

PACE ENGINEERS, INC  
V. BRIAN WAY, PLA  
11255 KIRKLAND WAY, SUITE 300  
KIRKLAND, WA 98033  
425.827.2014  
BRIANW@PACEENGRS.COM

**SENSITIVE AREAS CONSULTANT:**

WETLAND RESOURCES, INC  
SCOTT BRAINARD  
9505 19TH AVE SE  
EVERETT, WA 98208  
425.337.3174

**SURVEYOR:**

PACE ENGINEERS, INC  
AARON BLAISDELL, PLS  
11255 KIRKLAND WAY, SUITE 300  
KIRKLAND, WA 98033  
425.827.2014  
DAVIDF@PACEENGRS.COM

**GEOTECHNICAL:**

GEOENGINEERS  
BOB METCALFE, P.E., LEG  
17425 NE UNION HILL ROAD  
REDMOND, WA 98052  
425.861.6000

**TRAFFIC:**

GIBSON TRAFFIC CONSULTANTS, INC.  
MATT PALMER, P.E.  
2813 ROCKEFELLER AVE., SUITE B  
EVERETT, WA 98201  
425.339.8266  
MATTP@GIBSONTRAFFIC.COM

**CERTIFIED EROSION AND SEDIMENT CONTROL LEAD:**

PACE ENGINEERS, INC  
JAY PULLEN, ECO-3-4241709  
11255 KIRKLAND WAY, SUITE 300  
KIRKLAND, WA 98033  
425.827.2014  
MICHAELM@PACEENGRS.COM

**SITE INFORMATION:**

**ADDRESS:**

4330 108TH STREET SE  
EVERETT, WA 98208

**DATUM:**

HORIZONTAL DATUM: NAD83/91 PER W.S.D.O.T. CONTROL POINTS NO. GP31009-98, GP31005-88 AND GP31005-87 AND SNOHOMISH COUNTY CONTROL POINTS NO. 2805P09 AND 2805R11.

VERTICAL DATUM: NAVD 88 PER SNOHOMISH COUNTY AND W.S.D.O.T. CONTROL POINTS LISTED ABOVE.

**TAX PARCEL NUMBERS:**

2805210040-0200 ±1,781,717 SQUARE FEET (±40.9026 ACRES)

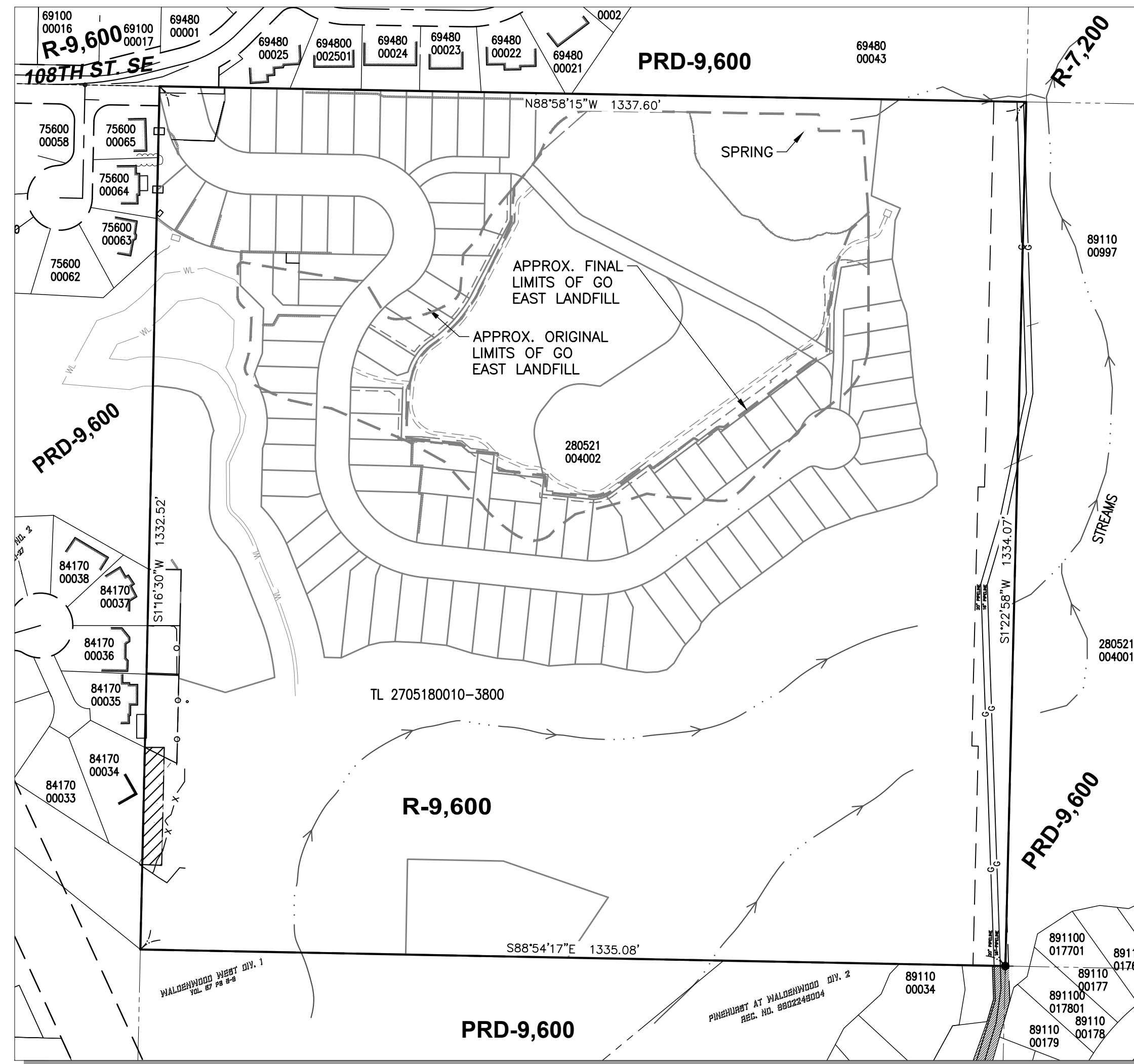
**ZONING:**

R-9,600

**RECORD LEGAL DESCRIPTION**

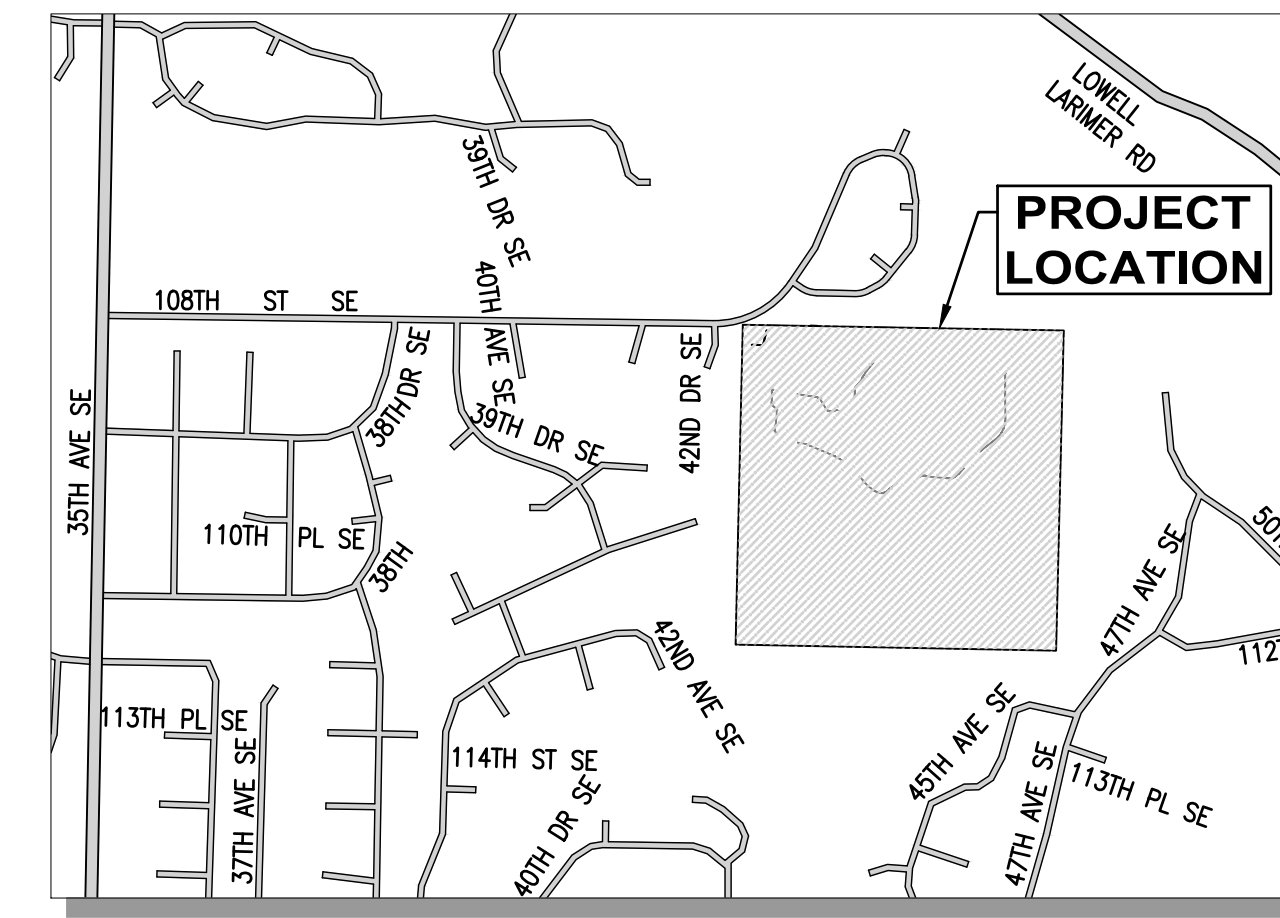
NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 28 NORTH, RANGE 5 EAST, W.M., RECORDS OF SNOHOMISH COUNTY, WASHINGTON.

SITUATE IN THE COUNTY OF SNOHOMISH, STATE OF WASHINGTON.



**SITE MAP**  
1"=150'

**NOTE:**  
PROPERTY OUTSIDE FEMA FLOOD PLAIN



**VICINITY MAP**  
1"=800'

**Sheet List Table - LFC AS-BUILTS \***

Sheet Number	Sheet Title
<b>Closure Plans</b>	
1	COVER SHEET
2	EXISTING CONDITIONS - DELETED
3	EXISTING CONDITIONS - DELETED
4	GRADING & DRAINAGE PLAN
5	GRADING MATRIX PLAN & QUANTITIES - DELETED
6	CROSS SECTIONS
7	DETAILS
7A	DETAILS
8	DETAILS
8A	DETAILS
9	NOTES
10	GENERAL NOTES
11	COMPOSITE UTILITY PLAN
12	STORM DRAIN PROFILES - DELETED
12A	STORM DRAIN PROFILES - DELETED
13	POND DETAIL SHEET - LDA #1 DETAILS - DELETED
14	STORM DETAILS AND SPECIFICATIONS
15	TEMPORARY EROSION & SEDIMENT CONTROL PLAN - DELETED
16	TEMPORARY EROSION & SEDIMENT CONTROL DETAILS - DELETED
17	TEMPORARY EROSION & SEDIMENT CONTROL DETAILS - DELETED
18	STREAM PLAN & PROFILE - DELETED
19	WALL GRADING PLAN - DELETED
20	WALL GRADING PLAN - DELETED
21	LANDSCAPE PLAN - DELETED
22	LANDSCAPE DETAILS - DELETED
23	MITIGATION PLAN (WRI, SHEET 1 OF 2) - DELETED
24	MITIGATION PLAN (WRI, SHEET 2 OF 2) - DELETED
25	WALL DETAILS (TERRA ASSOCIATES, INC.) - DELETED

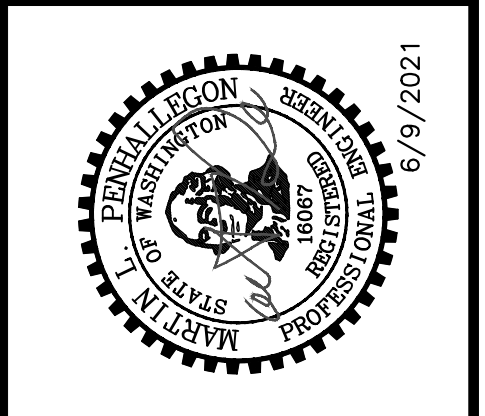
**CALL BEFORE YOU DIG 811**  
UNDERGROUND SERVICE (USA)

**VERIFY SCALE**  
BAR IS ONE INCH ON ORIGINAL DRAWING.  
0 1"  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

\* NOTE: CERTAIN SHEETS NOT PART OF THE LANDFILL CLOSURE HAVE BEEN DELETED FROM THIS SET.

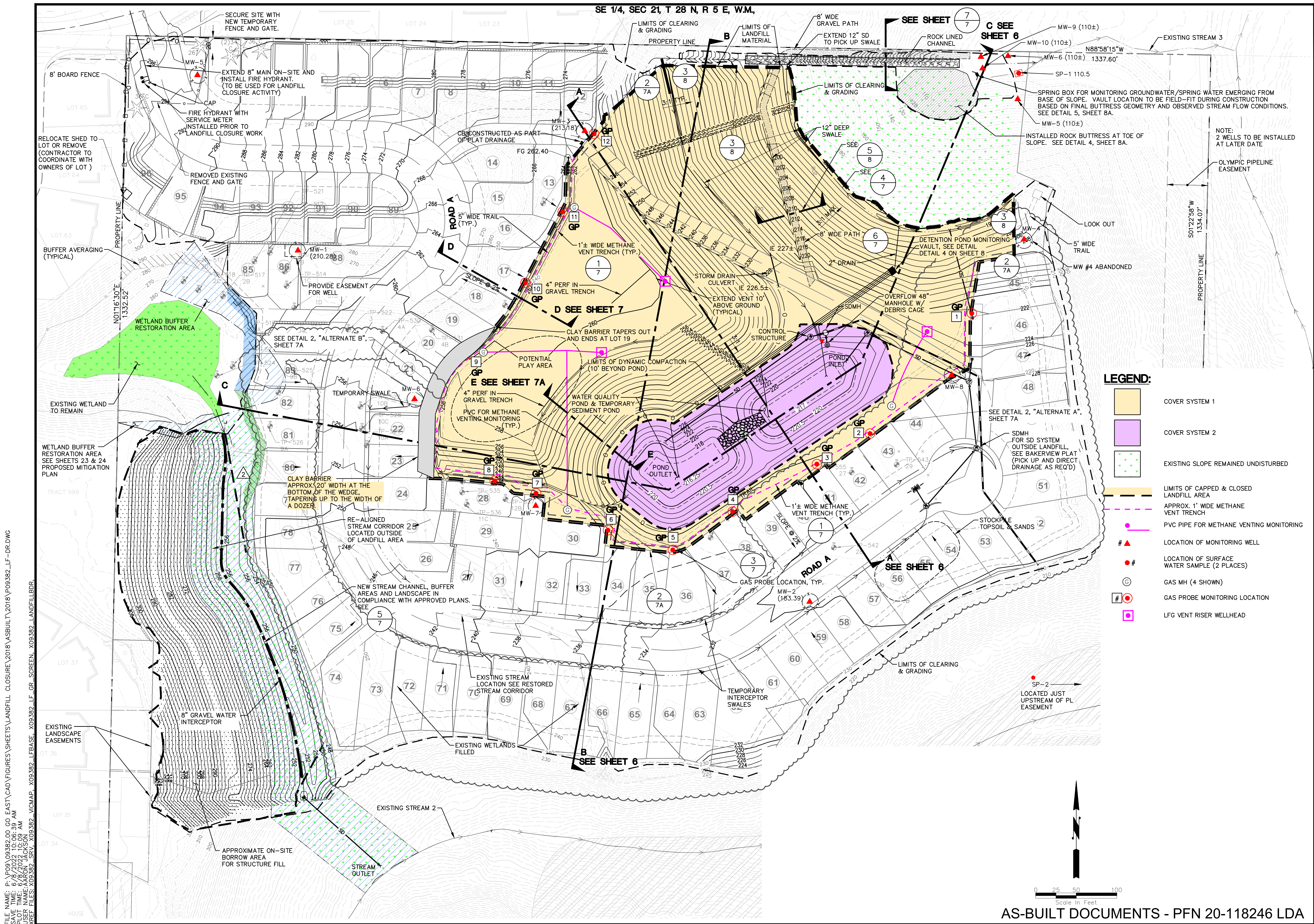
NO.	DATE	REVISION

**PACE**  
An Engineering Services Company  
11255 Kirkland Way, Suite 300  
Kirkland, WA 98033  
p. 425.827.2014 f. 425.827.9043  
Civil | Structural | Planning | Survey  
paceengrs.com



<b>GO EAST LANDFILL CLOSURE</b>	
COVER SHEET - AS BUILTS	
SCALE: AS NOTED	DATE: 6/9/2021
DESIGNED BY: MP	CHECKED BY: MP
JOB NUMBER P09382.00	
DWG NAME: P09382_CVR	
SHEET <b>1</b> OF <b>25</b>	

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XREF FILES: PACEENGRS

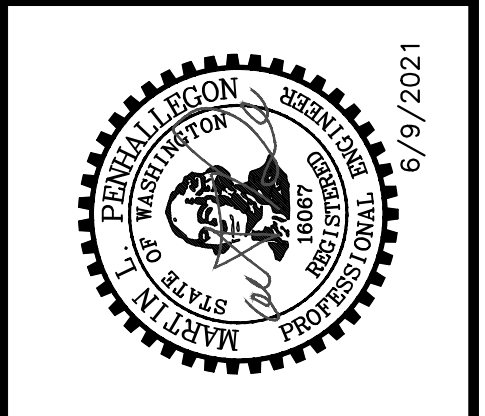


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SE 1/4, SEC 21, T 28 N, R 5 E, W.M.

DATE	REVISION	SYM

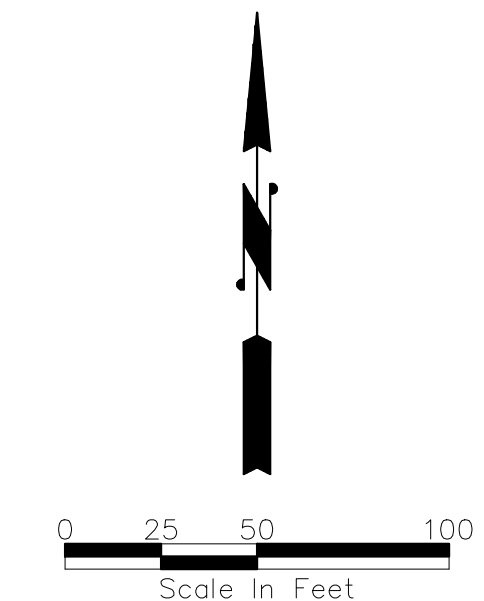
**PACE**  
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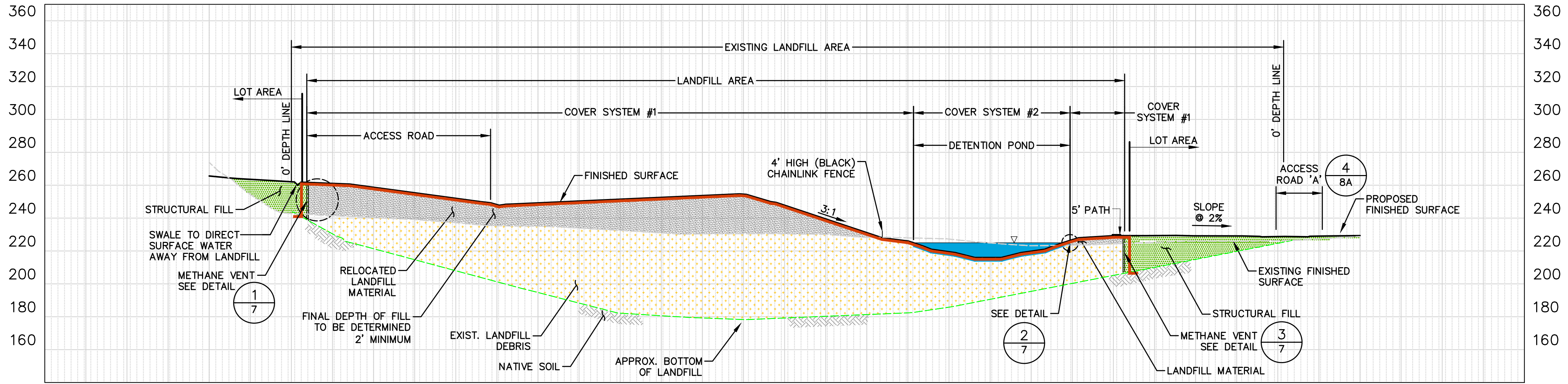
**GO EAST**  
**LANDFILL CLOSURE**  
**GRADING & DRAINAGE PLAN**

SCALE: 1"=50'	DATE: 6/9/2021
DESIGNED BY: SC	CHECKED BY: MP
JOB NUMBER P09382.00	
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SHEET <b>4</b> OF <b>25</b>	

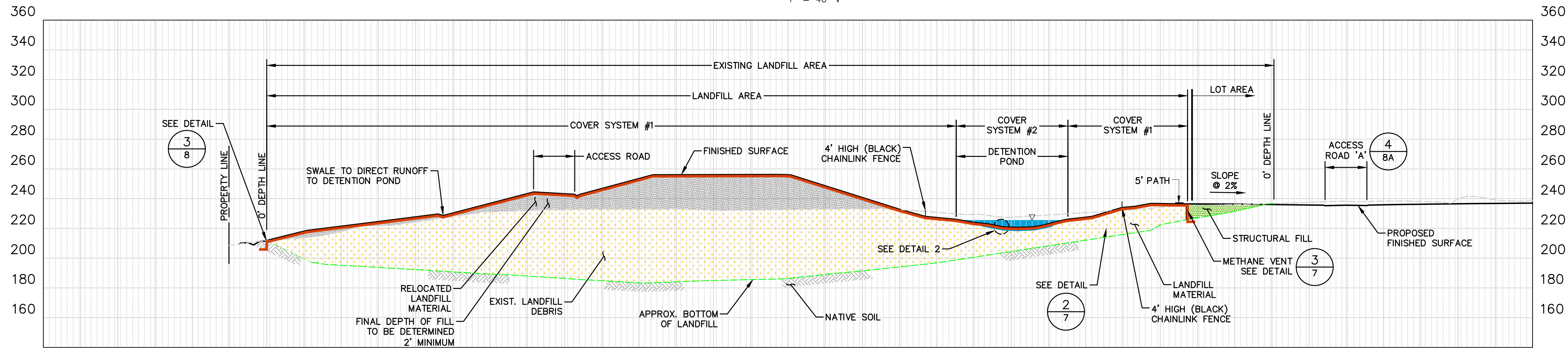
- LEGEND:**
- COVER SYSTEM 1
  - COVER SYSTEM 2
  - EXISTING SLOPE REMAINED UNDISTURBED
  - LIMITS OF CAPPED & CLOSED LANDFILL AREA
  - APPROX. 1' WIDE METHANE VENT TRENCH
  - PVC PIPE FOR METHANE VENTING MONITORING
  - #  # LOCATION OF MONITORING WELL
  - # LOCATION OF SURFACE WATER SAMPLE (2 PLACES)
  - G GAS MH (4 SHOWN)
  - #  # GAS PROBE MONITORING LOCATION
  - # LFG VENT RISER WELLHEAD



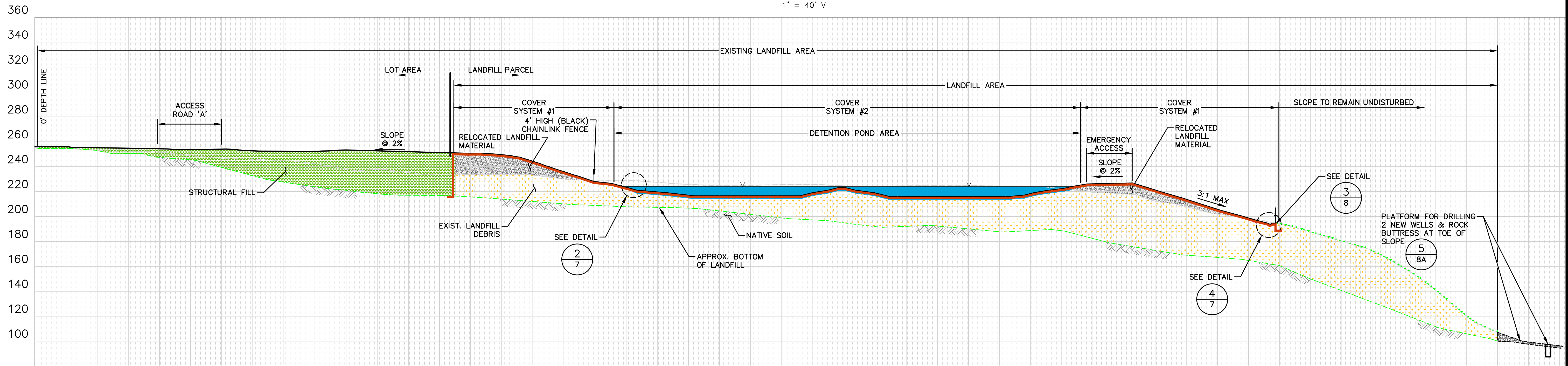
AS-BUILT DOCUMENTS - PFN 20-118246 LDA



SECTION A-A (SHEET 4 OF 25)  
SCALE: 1" = 40' H  
1" = 40' V



SECTION B-B (SHEET 4 OF 25)  
SCALE: 1" = 40' H  
1" = 40' V



SECTION C-C (SHEET 4 OF 25)  
SCALE: 1" = 40' H  
1" = 40' V

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NO.	DESCRIPTION	DATE

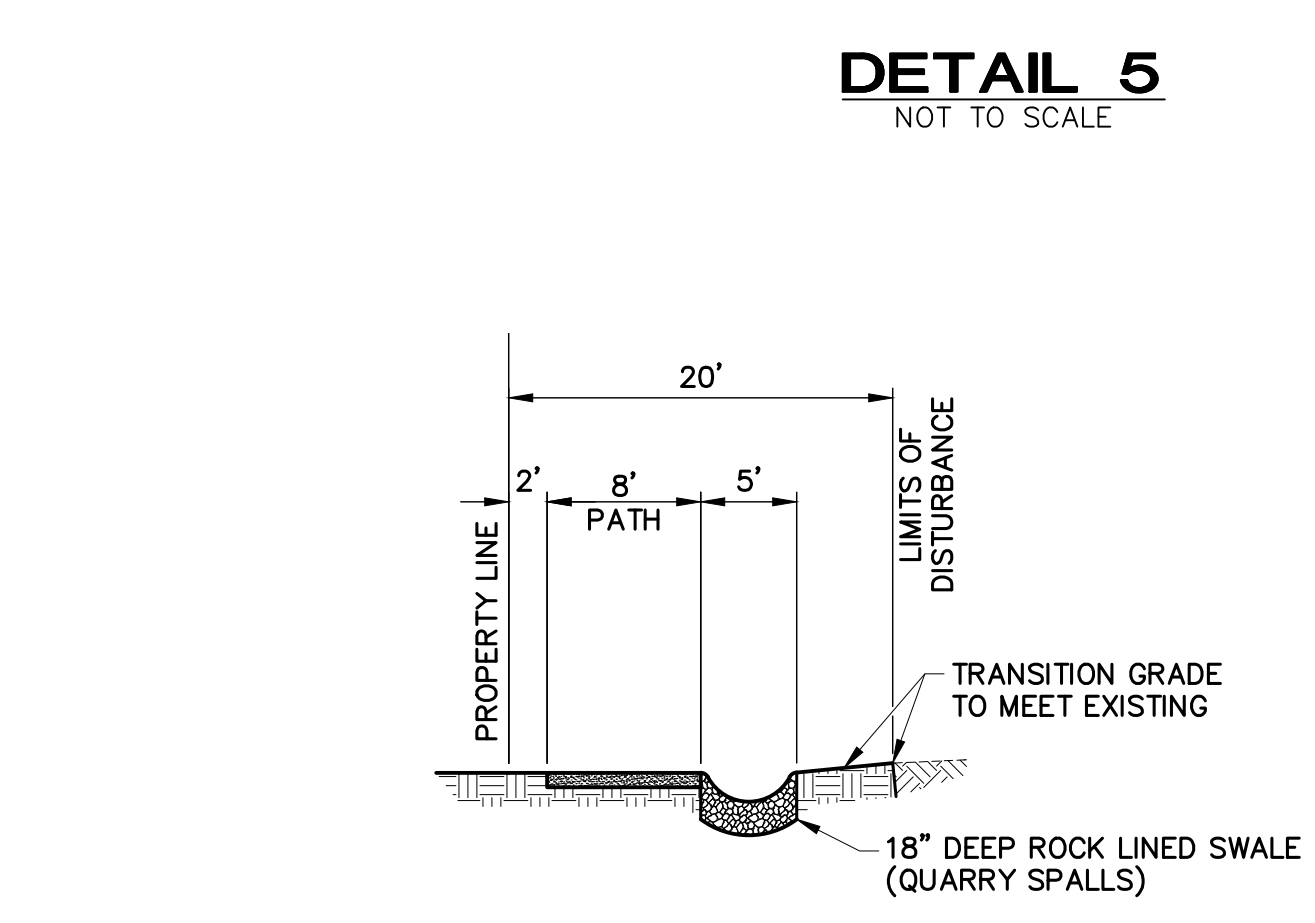
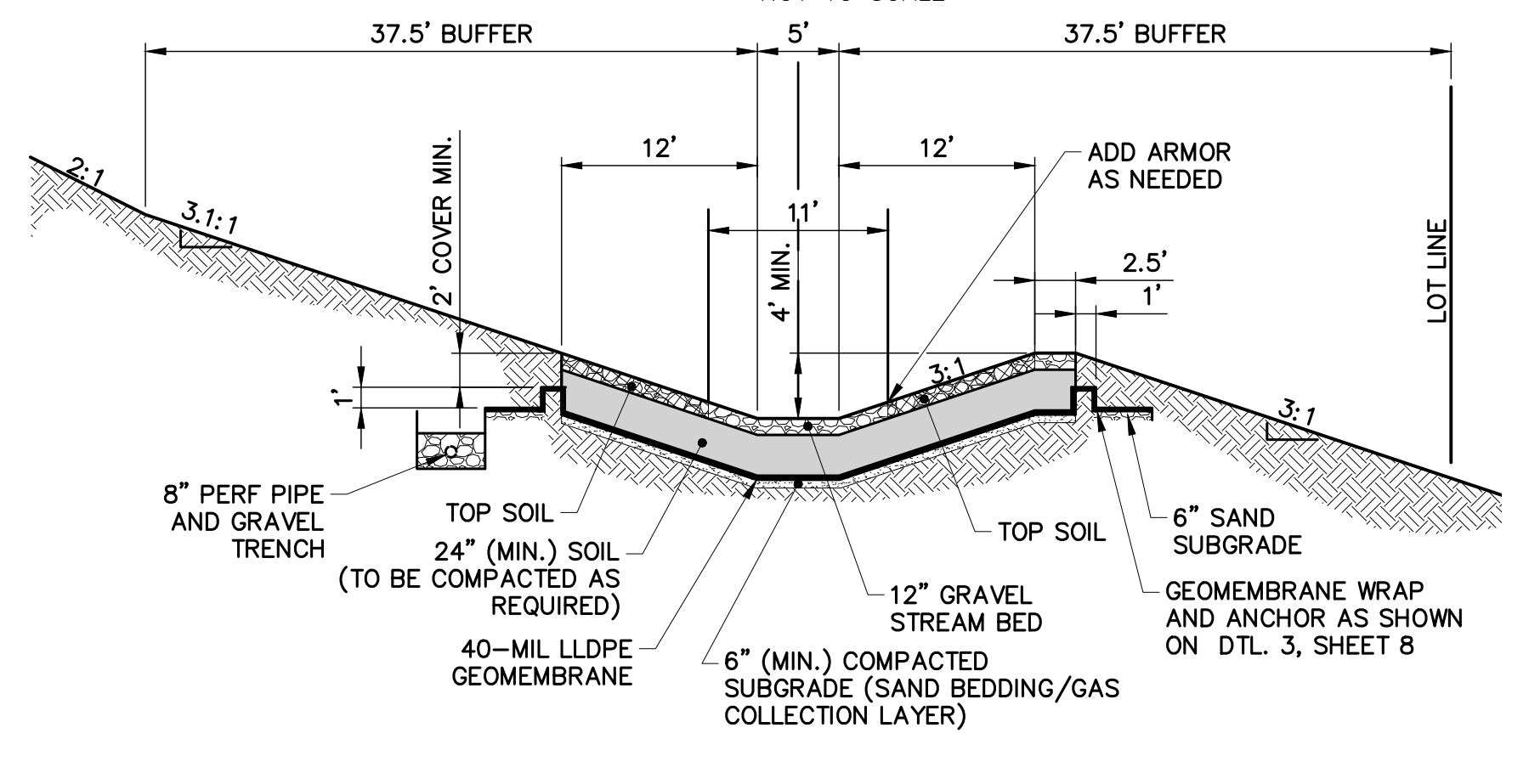
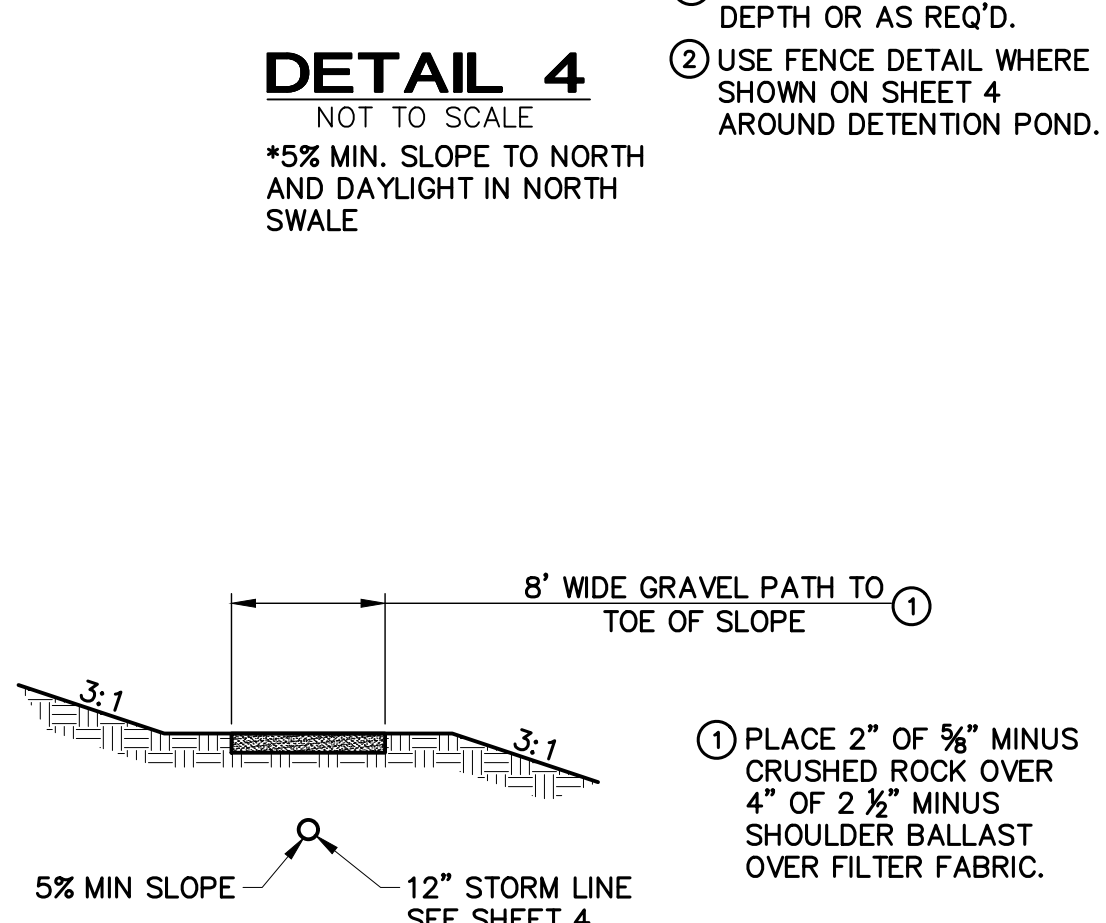
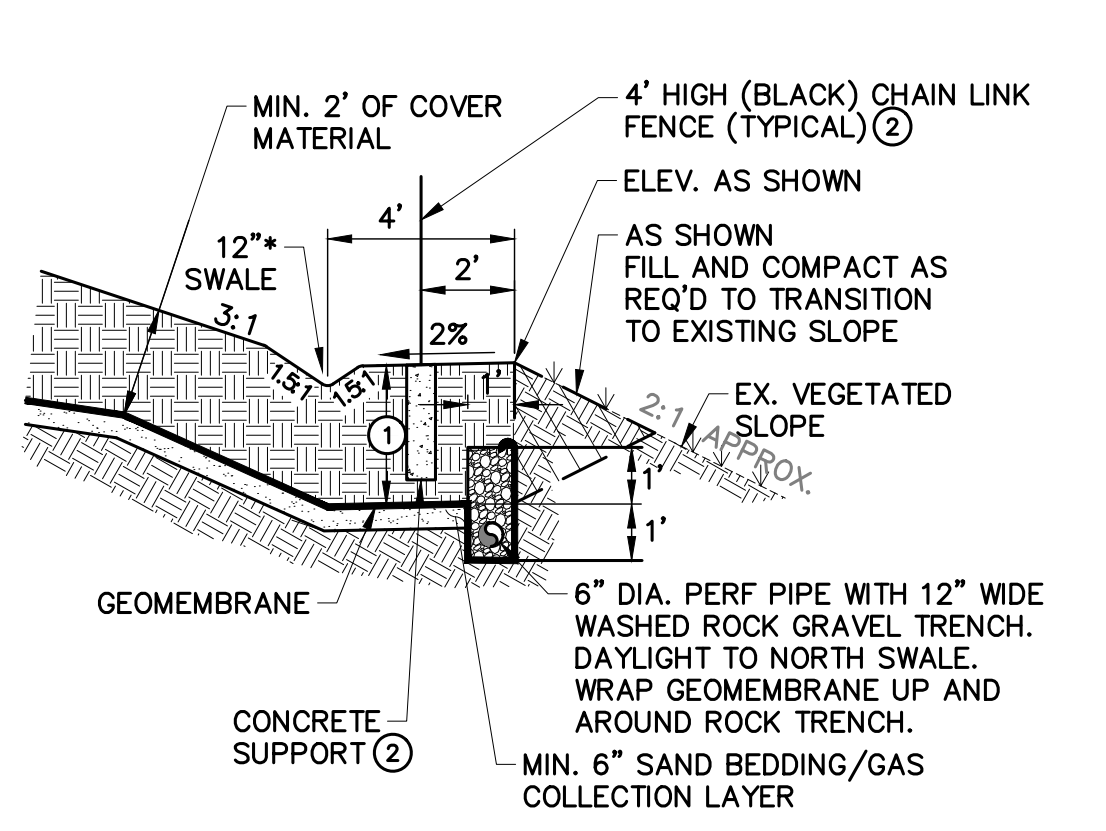
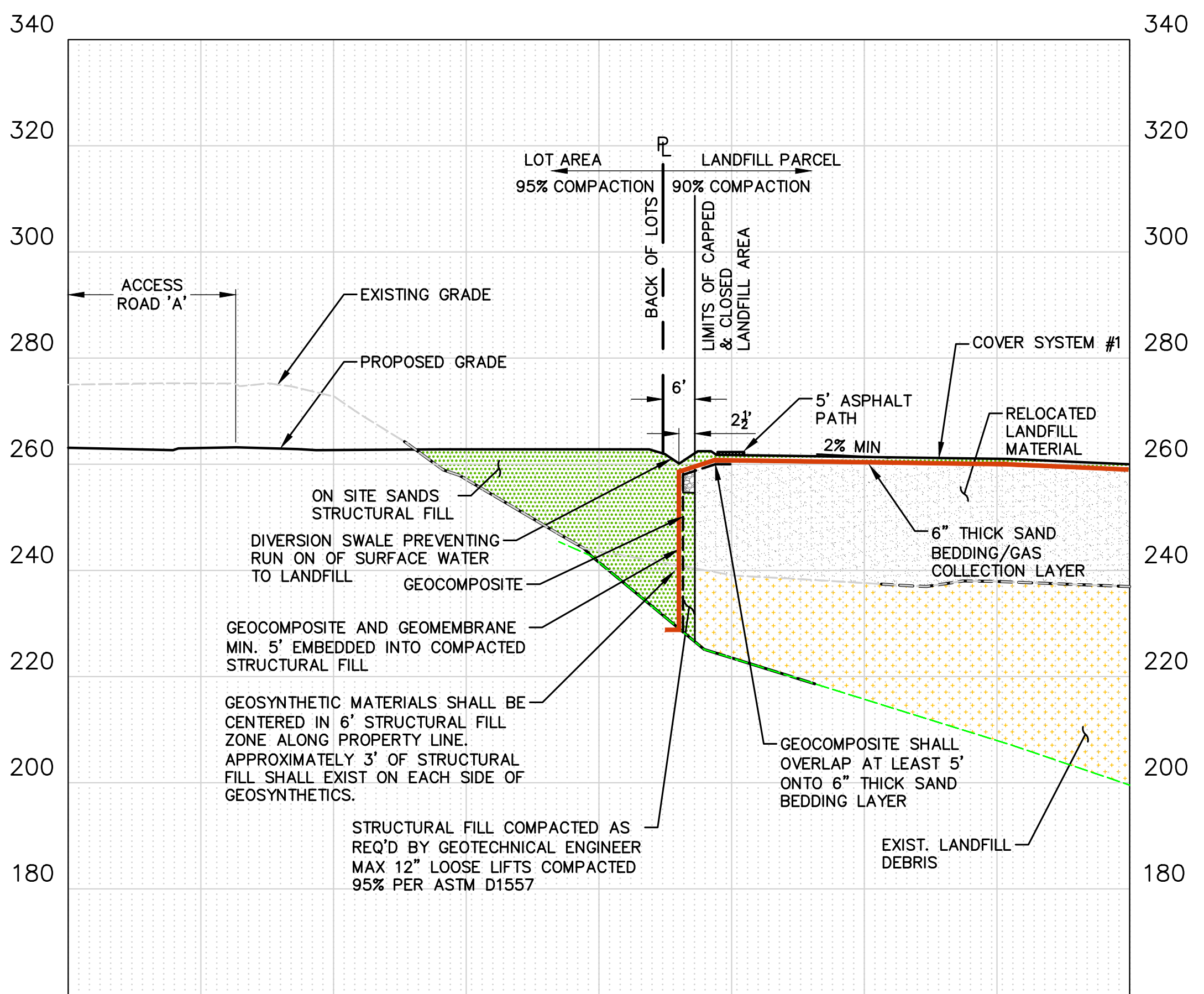
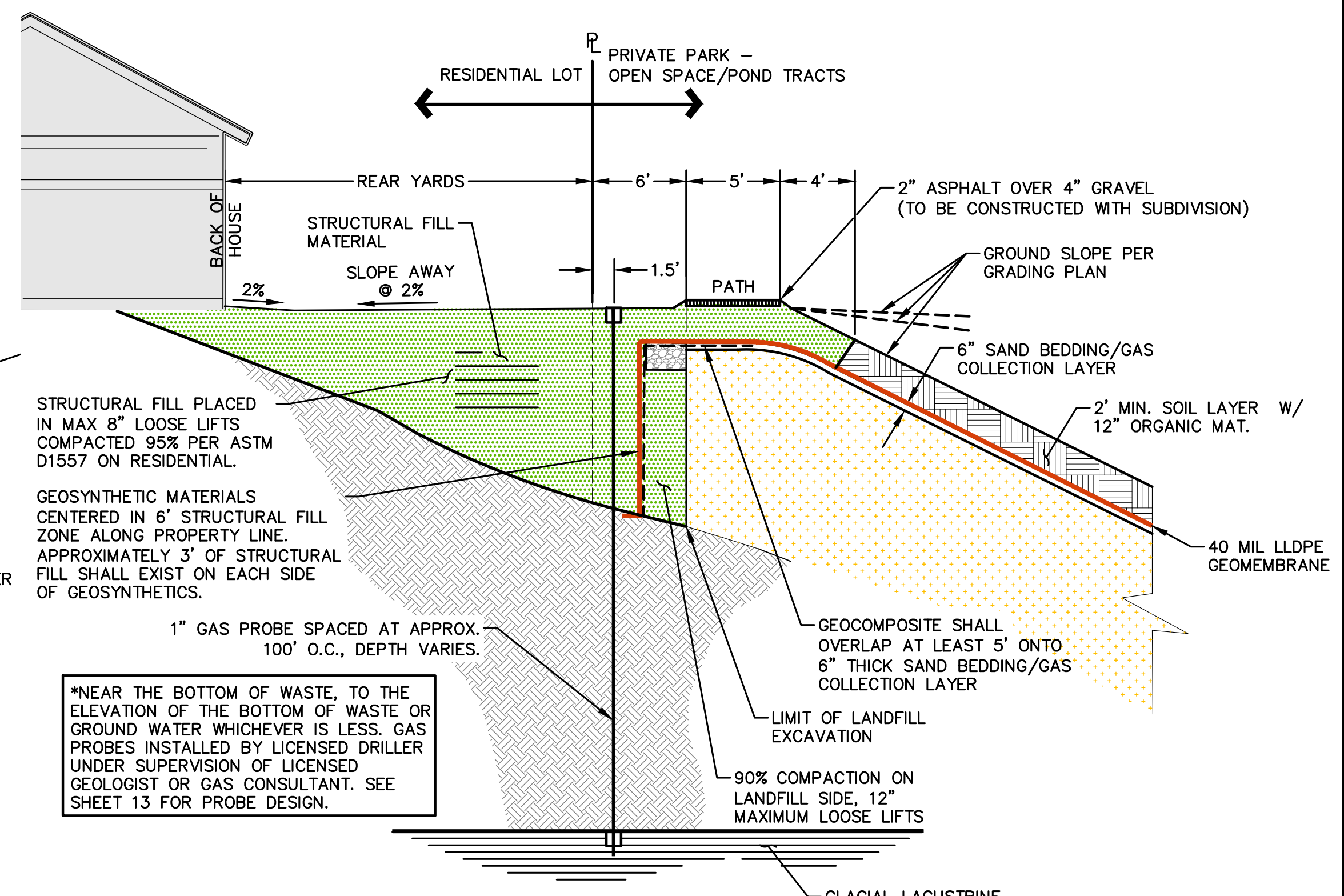
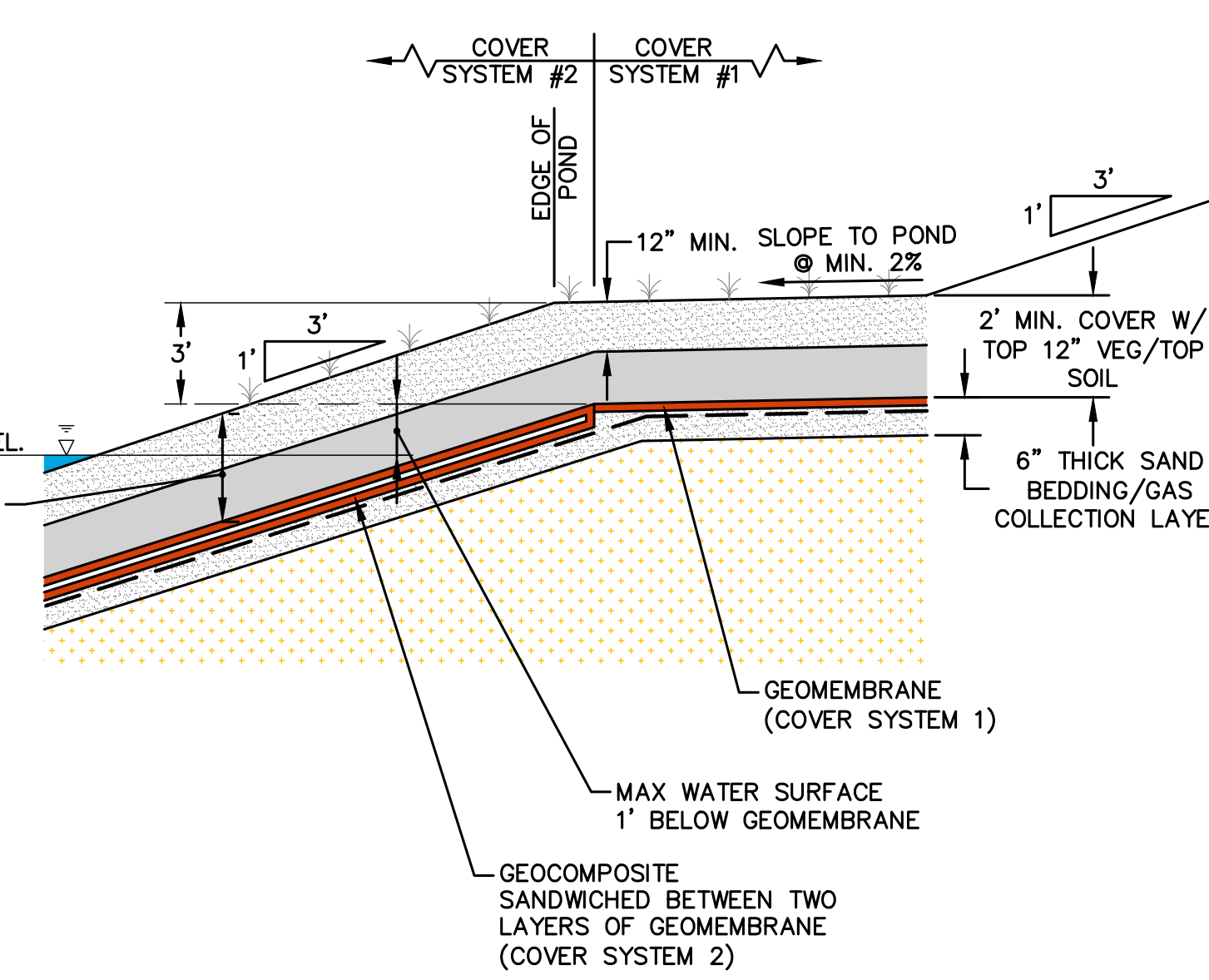
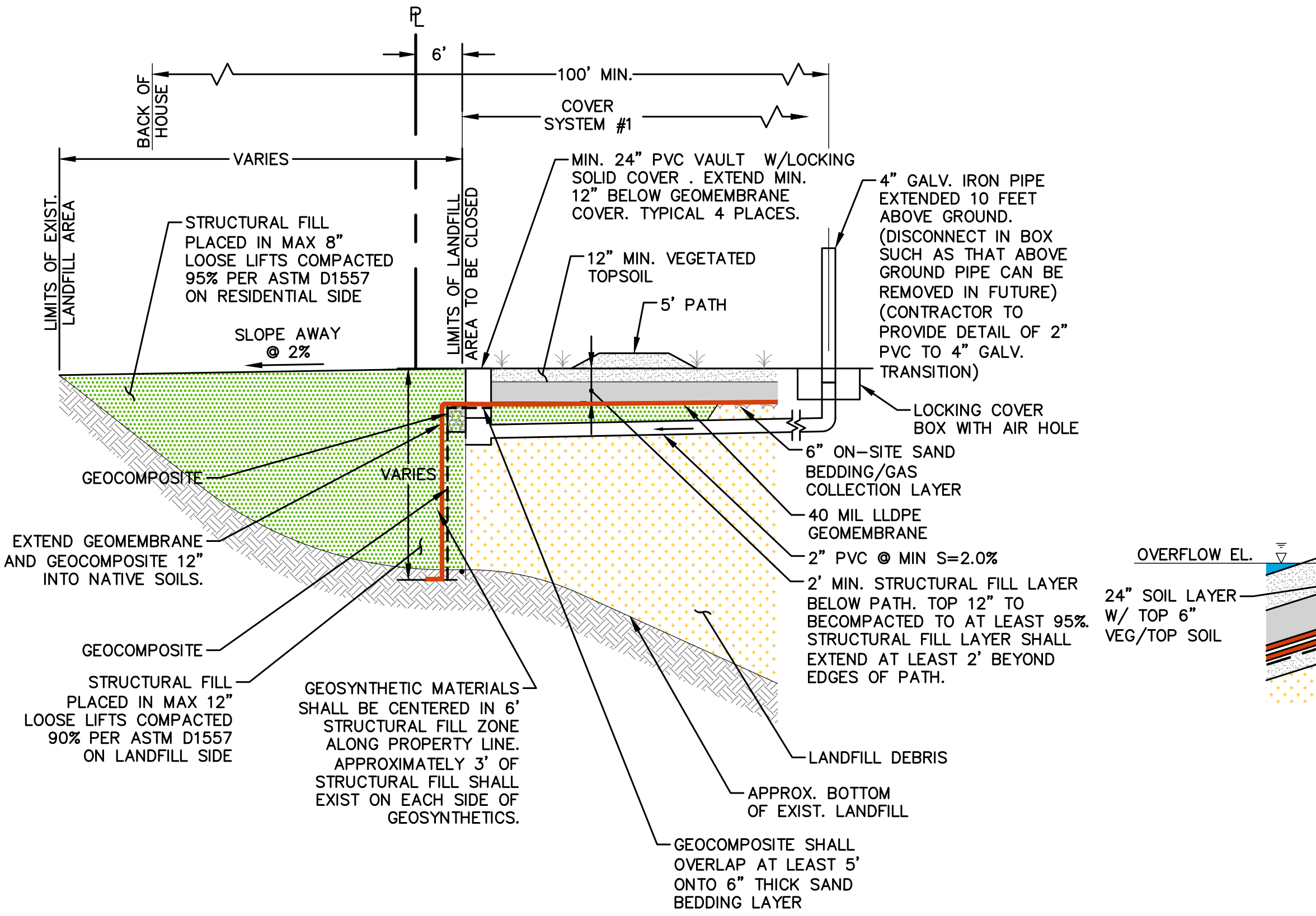
<p>11255 Kirkland Way, Suite 300 Kirkland, WA 98033 p. 425.827.2014 / f. 425.827.9043 Civil   Structural   Planning   Survey pacengrs.com</p>	
6/9/2021	

<b>GO EAST LANDFILL CLOSURE</b>	
CROSS SECTIONS	

SCALE: AS SHOWN	DATE: 6/9/2021
DESIGNED BY: MP	CHECKED BY: MP
JOB NUMBER P09382.00	
DWG NAME: P09382_LF-XS	
SHEET <b>6</b> OF <b>25</b>	



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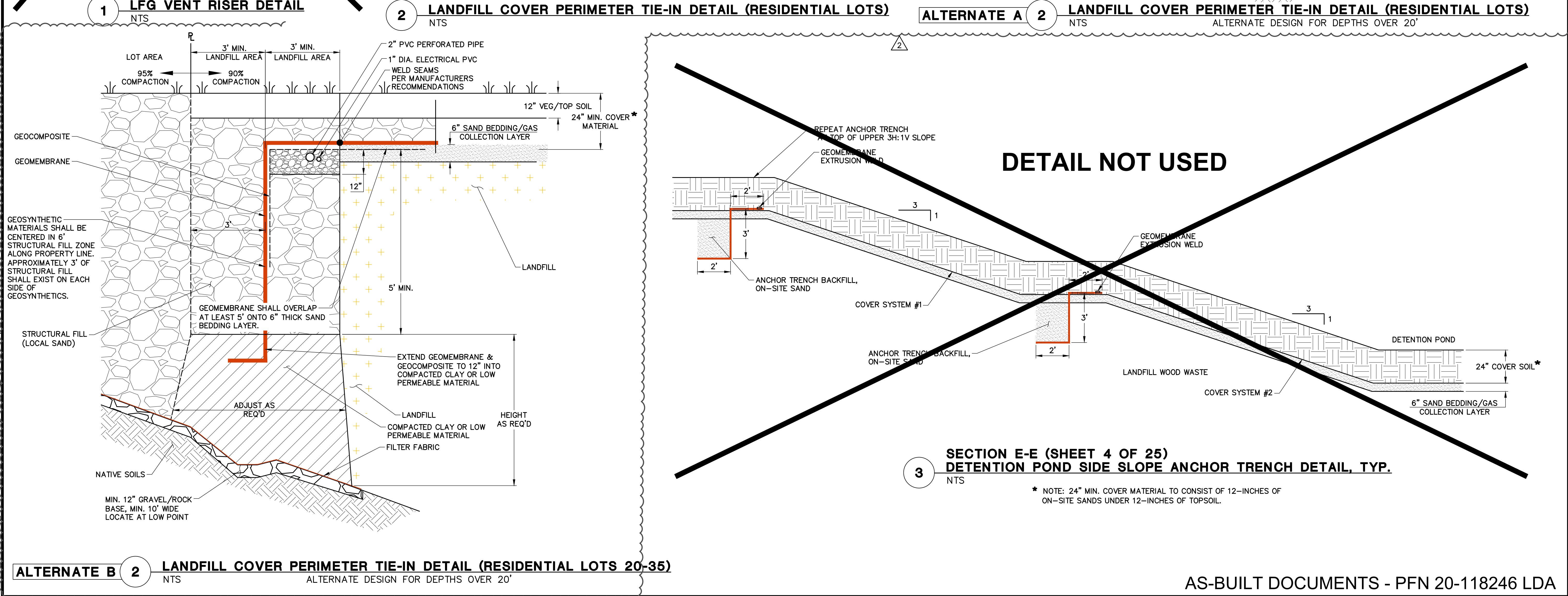
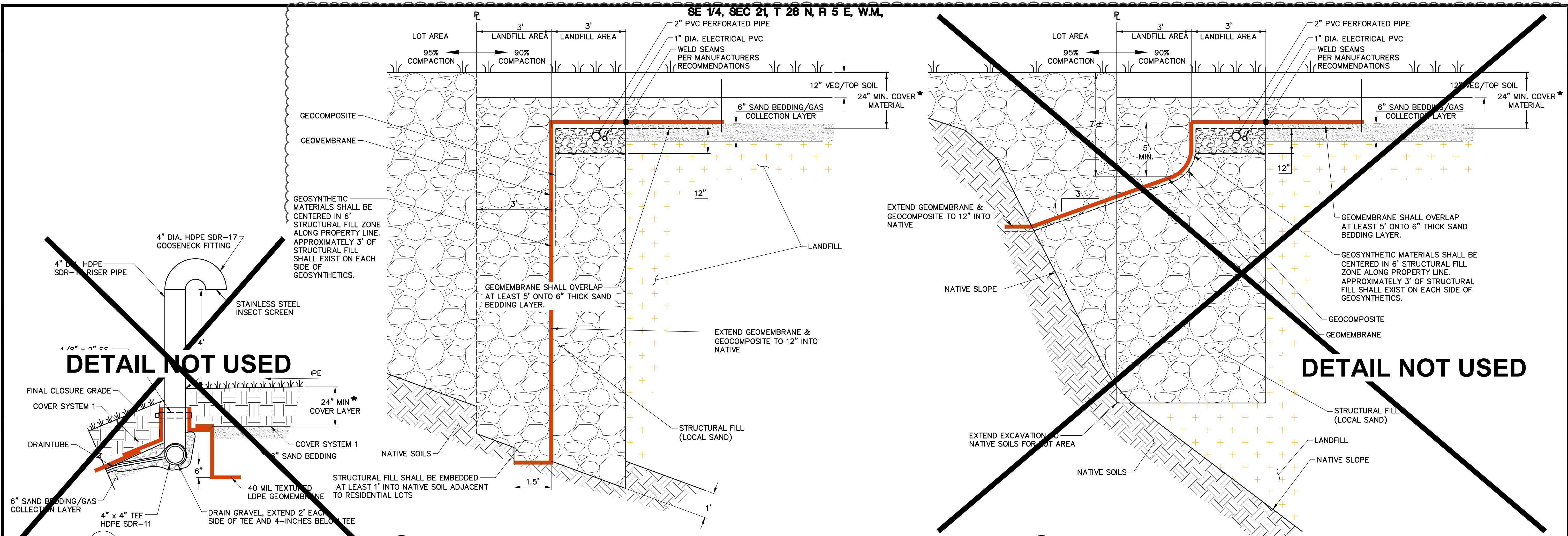
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Kirkland, WA 98033  
p. 425.827.2014 | f. 425.827.9043  
Civil | Structural | Planning | Survey  
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**WA STATE ENGINEERING BOARD**  
Registration No. 39097  
6/9/2021

**GO EAST  
LANDFILL CLOSURE  
DETAILS**

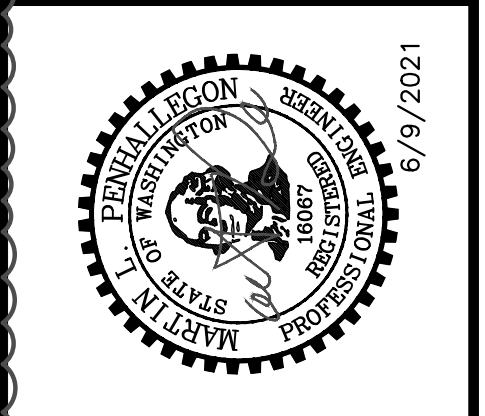
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 PLOT TIME: 6/8/2022 10:14 AM  
 XREF: FILE: XREF: P08\09382\_LF-DR\_X09382\_PRELATBDR



NO.	REVISION	DATE
1	ROAD A ALIGNMENT & LOT GRADING	6/9/2021
2	Civil Structural Planning Survey	6/9/2021

**PACE**  
 An Engineering Services Company  
 11255 Kirkland Way, Suite 300  
 Kirkland, WA 98033  
 p. 425.827.2014 | f. 425.827.9043  
 Civil Structural Planning Survey  
 paceengr.com



**GO EAST**

**LANDFILL CLOSURE**

DETAILS

SCALE: AS SHOWN  
 DATE: 6/9/2021

DESIGNED BY: MP  
 CHECKED BY: MP

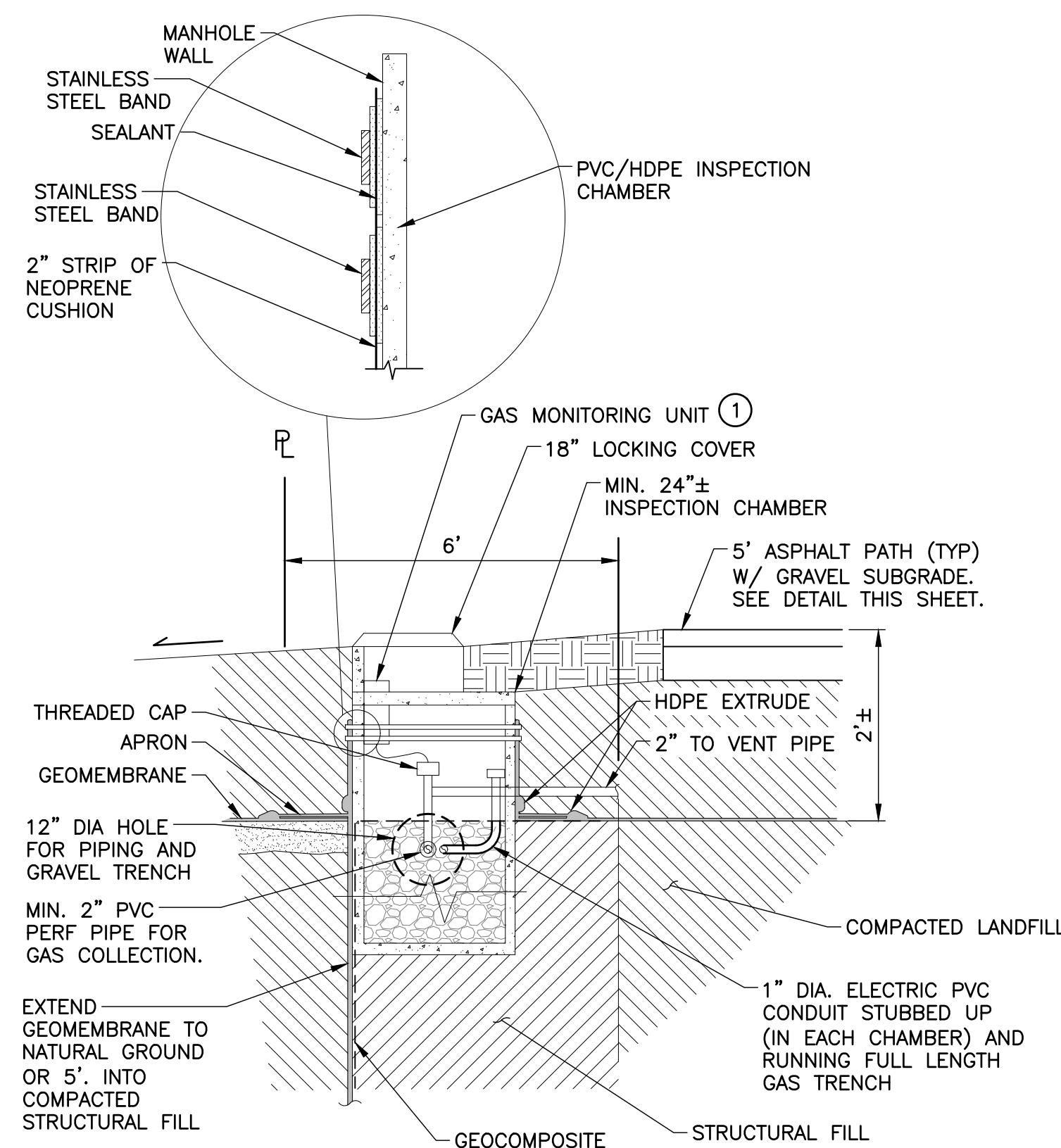
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DWG NAME: P09382\_LF-XS

SHEET **7A** OF **25**

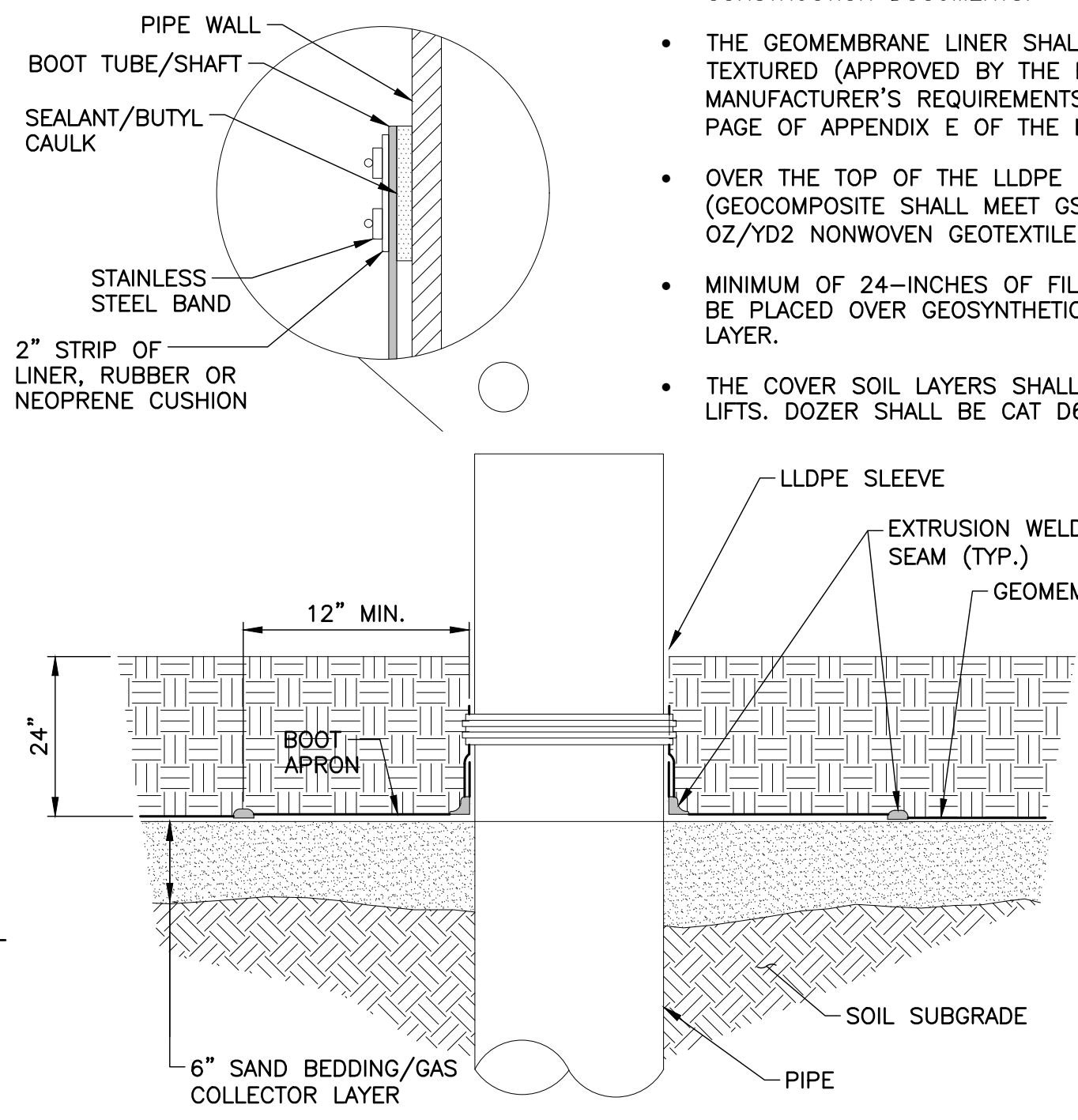
GENERAL NOTES:

- ALL SITE AND LAND FILL EXCAVATION, AND FILL BEING PLACED, SHALL BE ACCOMPLISHED IN COMPLIANCE WITH THE GEOTECH REPORT INCLUDED IN APPENDIX "A" OF THE LFCA AND AS SPECIFIED ON SHEET 9 AND 14.
- PROJECT GEOTECHNICAL ENGINEER SHALL VERIFY ALL LANDFILL MATERIAL HAS BEEN REMOVED IN THE "WEDGE" EXCAVATION AND AT LEAST 6 FEET PAST PROPERTY LINE ONTO LANDFILL SIDE, PRIOR TO PLACING ANY STRUCTURAL FILL BACK INTO THE EXCAVATED AREA.
- ALL FILLS PLACED BOTH INSIDE AND OUTSIDE OF THE REDUCED LANDFILL LIMITS SHALL BE PLACED AND COMPACTED IN LIFTS AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND IN COMPLIANCE WITH THE GEOTECHNICAL ENGINEER'S REQUIREMENTS AND THE CONSTRUCTION DOCUMENTS.
- THE GEOMEMBRANE LINER SHALL BE LLDPE 40 MILS THICKNESS DOUBLE-SIDED TEXTURED (APPROVED BY THE ENGINEER) AND INSTALLED IN COMPLIANCE WITH MANUFACTURER'S REQUIREMENTS AND MEET THE SPECIFICATIONS SHOWN ON THE FIRST PAGE OF APPENDIX E OF THE LFCA, TITLED "LLDPE TEXTURED SPECIFICATIONS."
- OVER THE TOP OF THE LLDPE GEOMEMBRANE, PLACE A GEOCOMPOSITE DRAINAGE LAYER (GEOCOMPOSITE SHALL MEET GSE FABRINET 200 MIL, DOUBLE-SIDED COMPOSITE WITH 6 OZ/YD2 NONWOVEN GEOTEXTILE AND AS SPECIFIED ON SHEET 14).
- MINIMUM OF 24-INCHES OF FILL WITH UPPER 12-INCH BEING VEGETATIVE SOILS SHALL BE PLACED OVER GEOSYNTHETIC LANDFILL COVER LAYERS. COMPOSITE GEONET DRAINAGE LAYER.
- THE COVER SOIL LAYERS SHALL BE TRACK-WALKED WITH DOZER IN 12-INCH LOOSE LIFTS. DOZER SHALL BE CAT D6 LOW GROUND PRESSURE EQUIPMENT OR SMALLER.

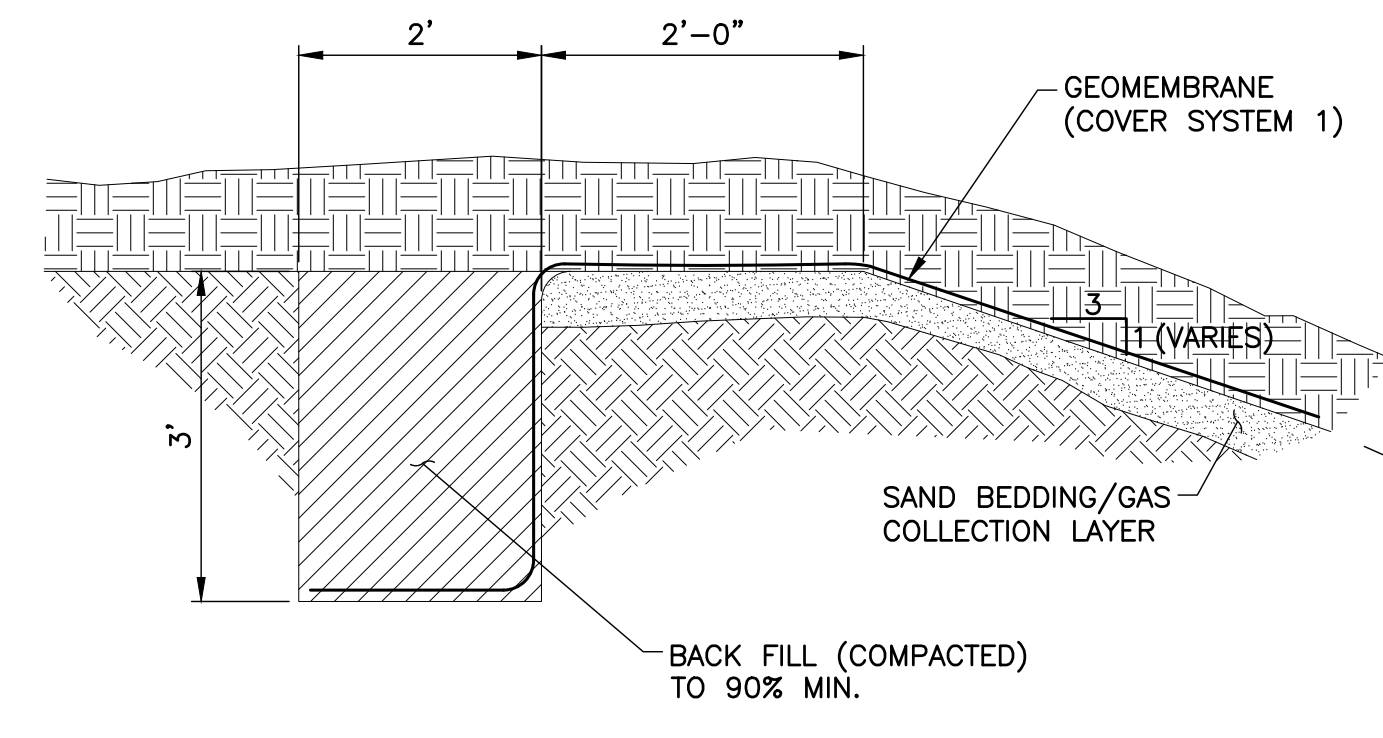


**1 MANHOLE BOOT DETAIL**  
NTS

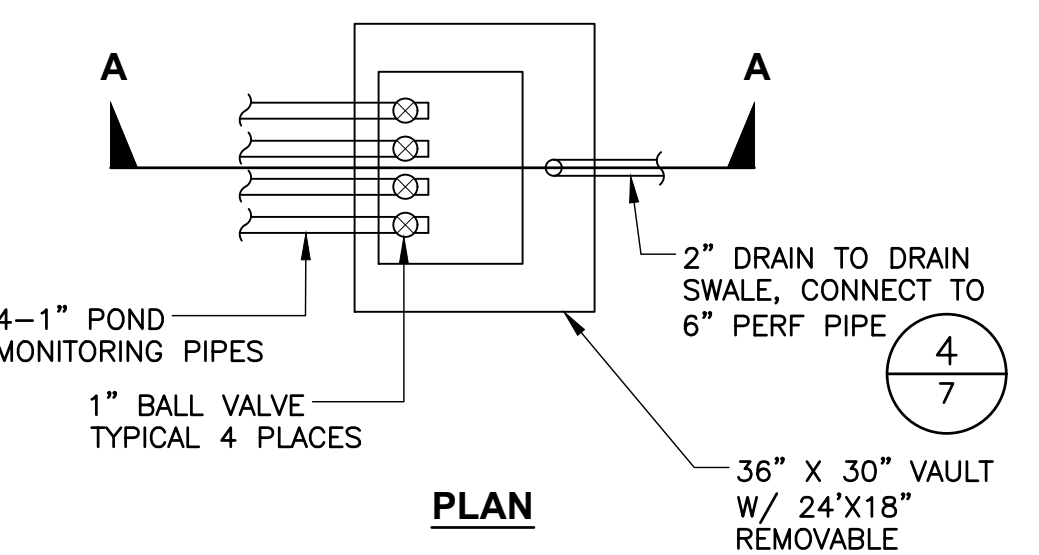
- 1 METHANE GAS MONITOR CAPABLE OF RECORDING GAS LEVELS 24/7. M2A METHANE TRANSMITTER W/GEOTECH SITE PRO TELEMETRY SYSTEM.



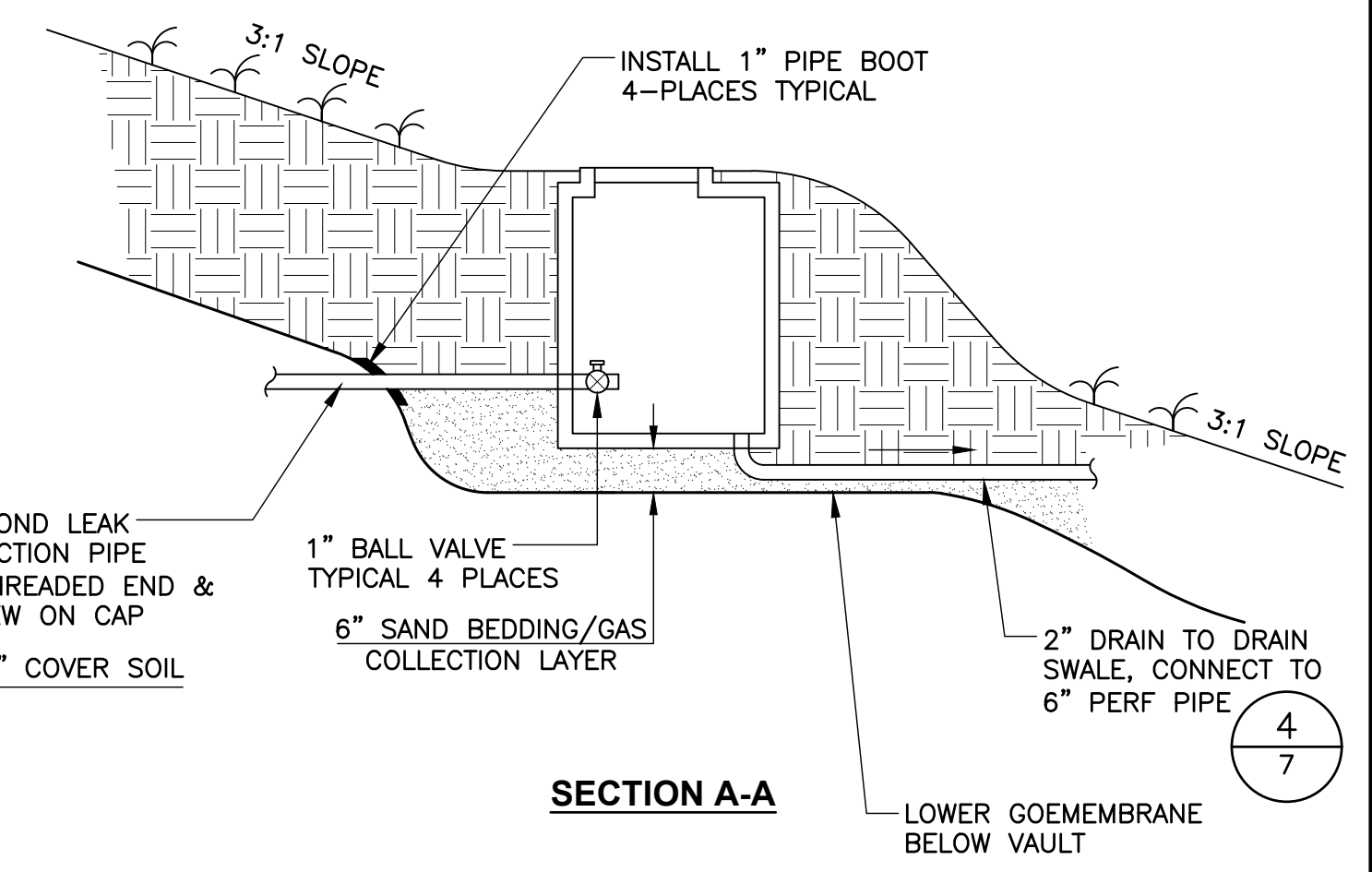
**2 LLDPE 90° PIPE BOOT DETAIL**  
NTS



**3 TYPICAL ANCHOR TRENCH**  
NTS LANDFILL COVER SYSTEM (NE AREA)

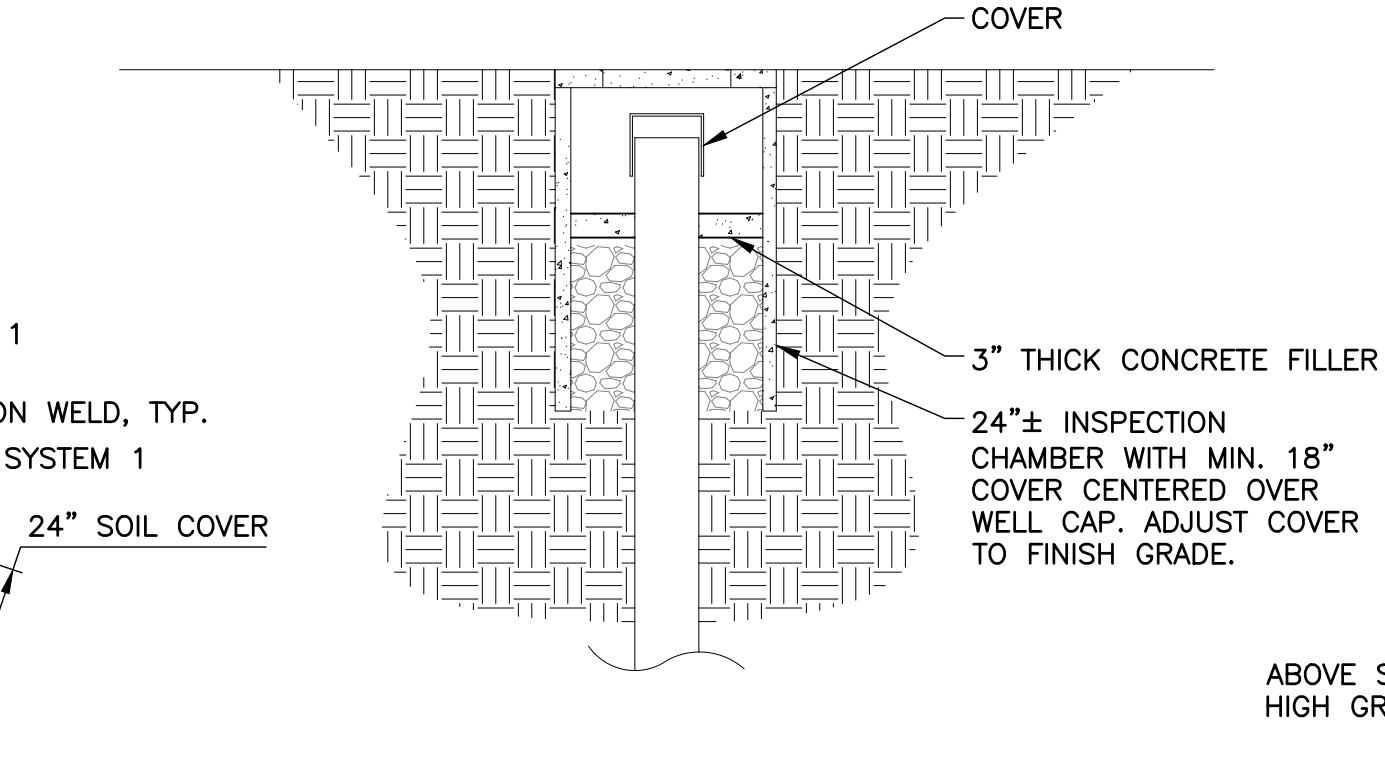


PLAN

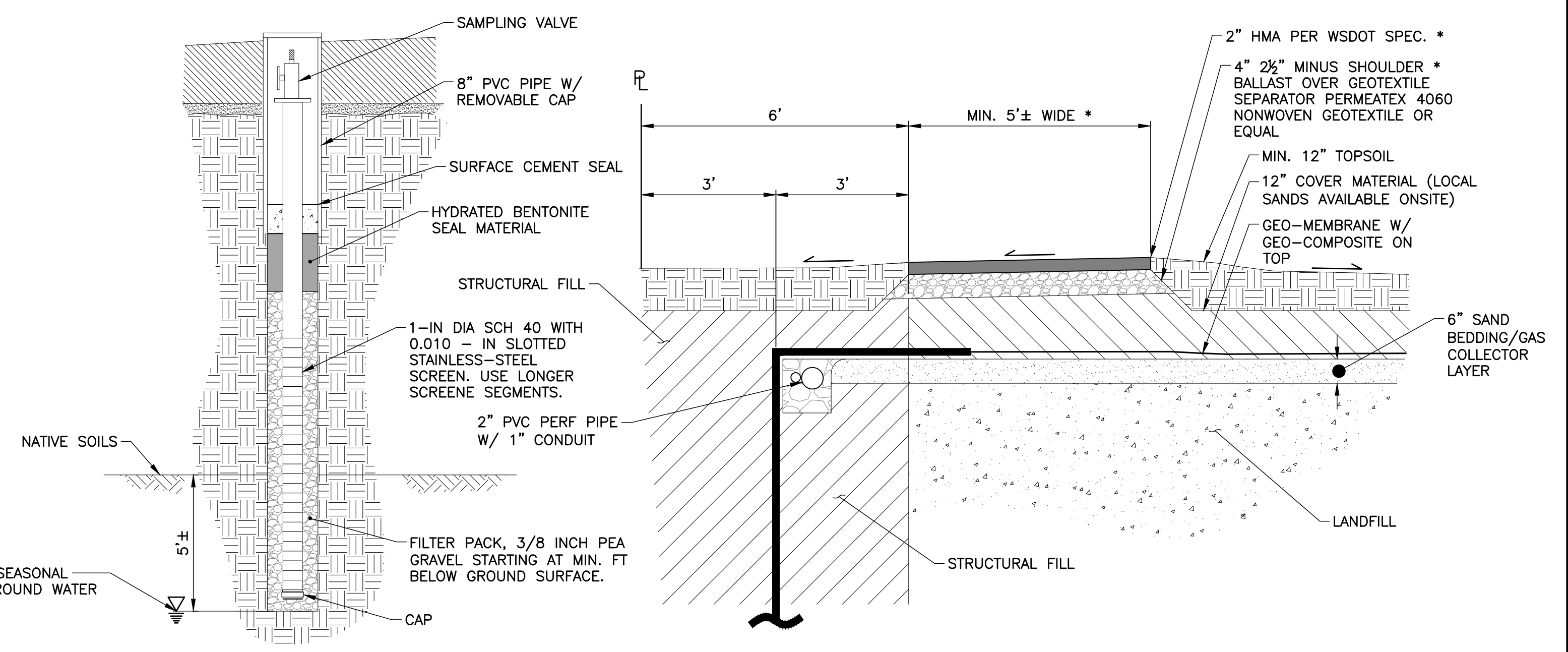


SECTION A-A

**4 DETENTION POND LEAK DETECTION MONITORING VAULT DETAIL**  
1"=2"



**6 MONITORING WELL PROTECTION ENCLOSURE**  
NTS

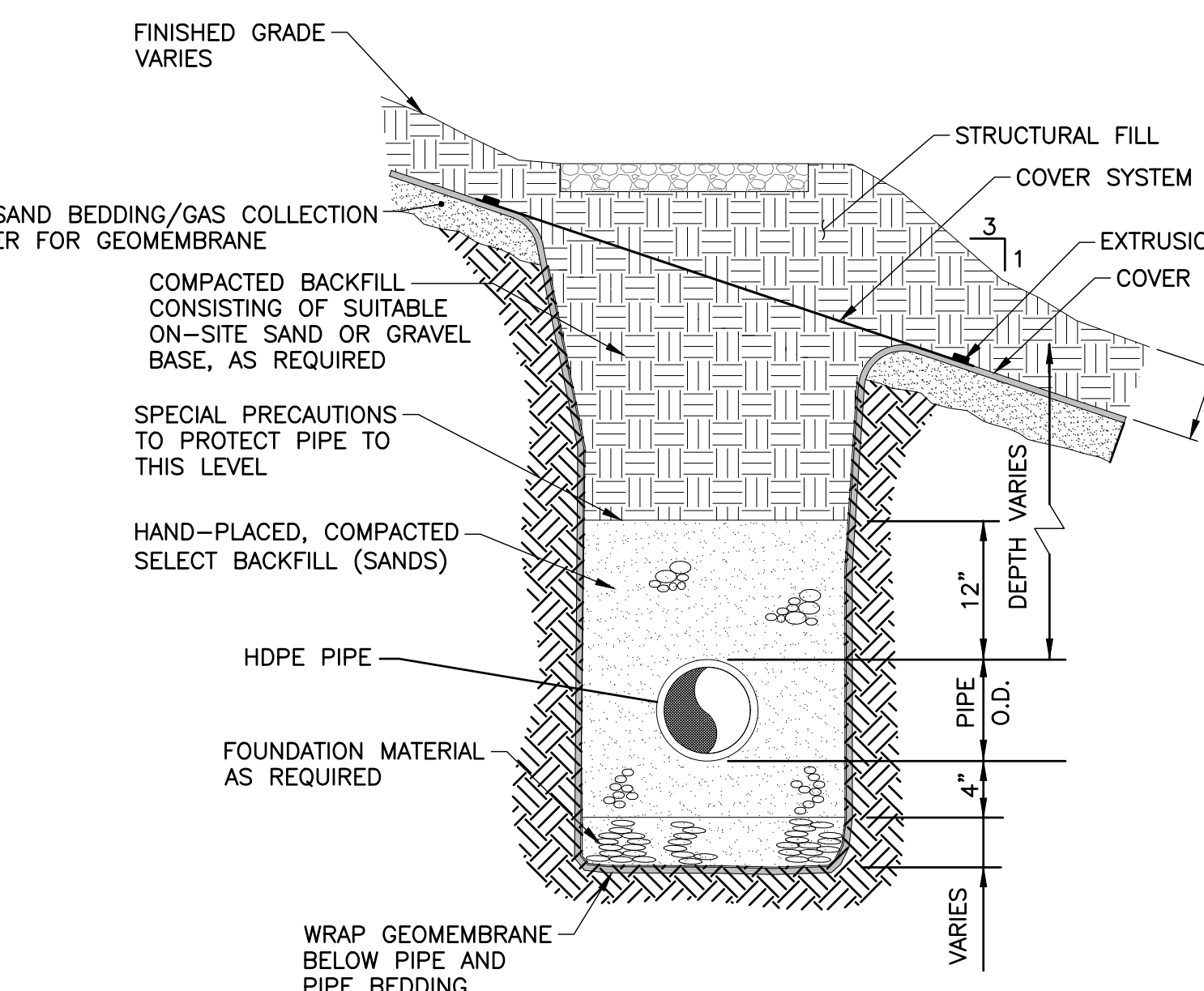


**7 LANDFILL GAS MONITORING PROBE**  
NTS

TO BE INSTALLED UNDER DIRECTION AND SUPERVISION OF A LICENSED GEOLOGIST OR GAS CONSULTANT.

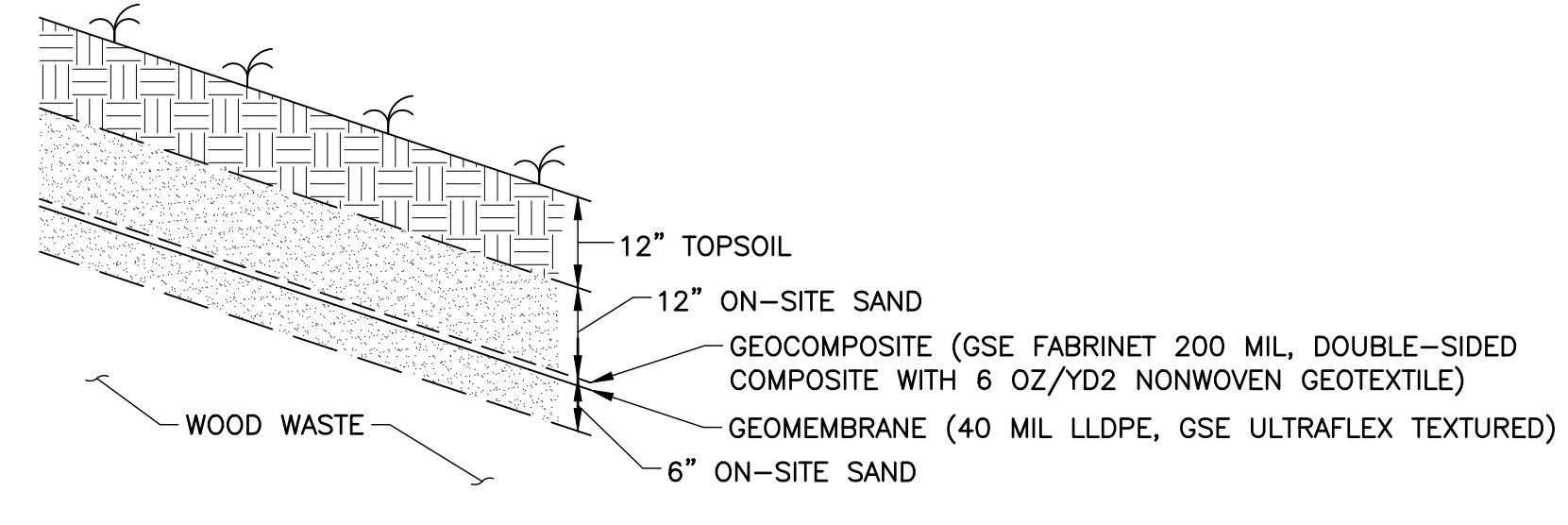
**8 ASPHALT PATH DETAIL**  
NTS

\* TO BE INSTALLED PER SUBDIVISION AND MAINTAINED BY HOA.

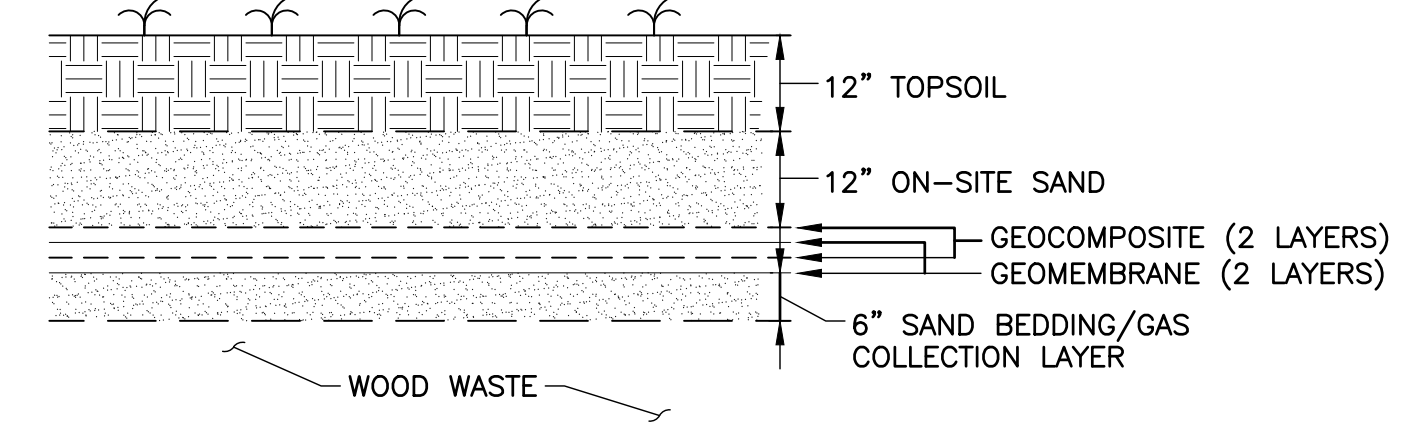


**5 STORM SEWER MAIN TRENCH SECTION**  
NTS

- NOTES:
- BACKFILL MATERIAL AND COMPACTION SHALL BE IN CONFORMANCE WITH GEOTECH REQUIREMENTS AND THE SNOHOMISH COUNTY PERMIT REQUIREMENTS, AS MAY BE APPLICABLE.
  - OVER 4' DEPTH, SLOPE TRENCH SIDE WALLS PER OSHA REQUIREMENTS.



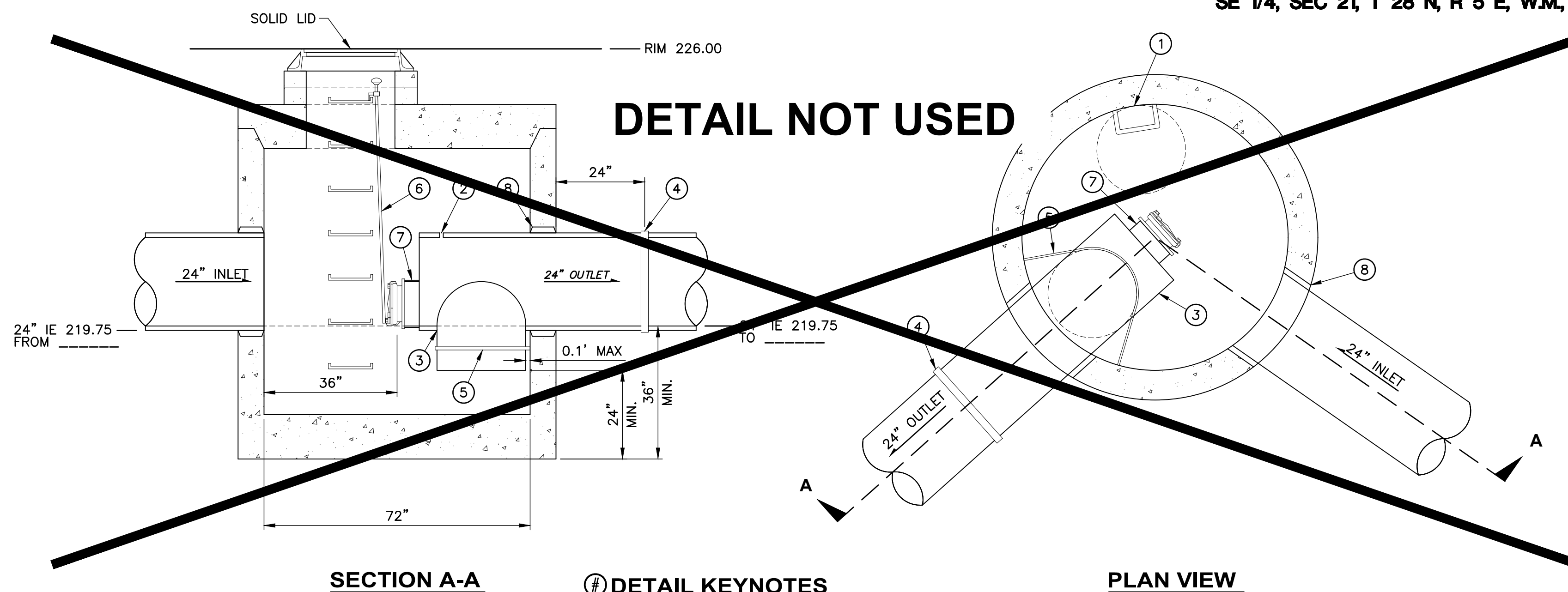
**9 COVER SYSTEM #1**  
NTS



**10 COVER SYSTEM #2**  
NTS

FILE NAME: P:\P09382\00 GO EAST\CAD\FIGURES\SHEETS\LANDFILL\_CLOSURE\2018\ASBUILT\2018\P09382\_CN-DET.DWG  
SAVE TIME: 6/8/2022 9:20:46 AM  
PLOT TIME: 6/8/2022 10:14 AM  
XREF FILES: PACS.AXD

DATE	
REVISION	
SYM	
 11255 Kirkland Way, Suite 300 Kirkland, WA 98033 p. 425.827.2014 f. 425.827.9043 Civil   Structural   Planning   Survey paceengr.com	
 MATT LARSON PROFESSIONAL ENGINEER STATE OF WASHINGTON LICENSE NO. 19603 6/9/2021	
GO EAST LANDFILL CLOSURE DETAILS	
SCALE:	DATE:
AS NOTED	6/9/2021
DESIGNED BY:	CHECKED BY:
SC	MP
JOB NUMBER	
P09382.00	
DWG NAME:	
P09382_CN-DET	
SHEET 8	OF 25



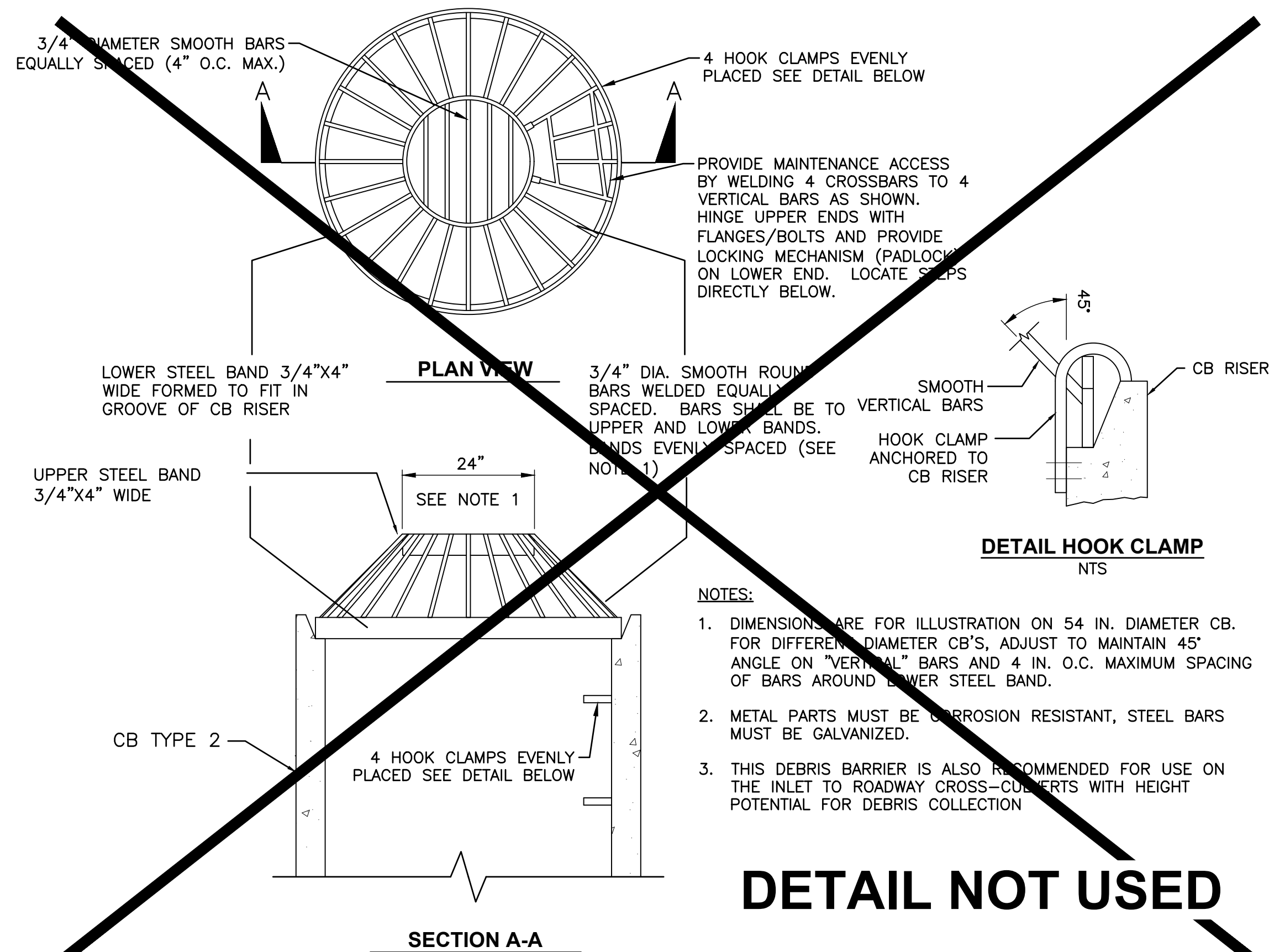
SECTION A-A

**DETAIL KEYNOTES**

1. INSTALL MANHOLE ACCESS SO THAT LIFT GATE IS VISIBLE THROUGH OPENING AND STEPS CLEAR INLET AND RESTRICTOR UNIT.
2. 1" VENT HOLE
3. SEPARATOR ASSEMBLY
4. BAND STRAP WITH GASKET
5. SECURE SEPARATOR TO MANHOLE WITH 8 GA ALUMINUM STRAP. BOLT TO MANHOLE WALL WITH STAINLESS STEEL ANCHOR BOLTS AND TACK WELD TO SEPARATOR UNIT.
6. LIFT HANDLE
7. 12" DIA. CLEANOUT
8. GROUT ALL JOINTS INSIDE AND OUTSIDE

PLAN VIEW

**1 SDMH 18, 72" W/MATERIALS SEPARATOR**  
1"=2"



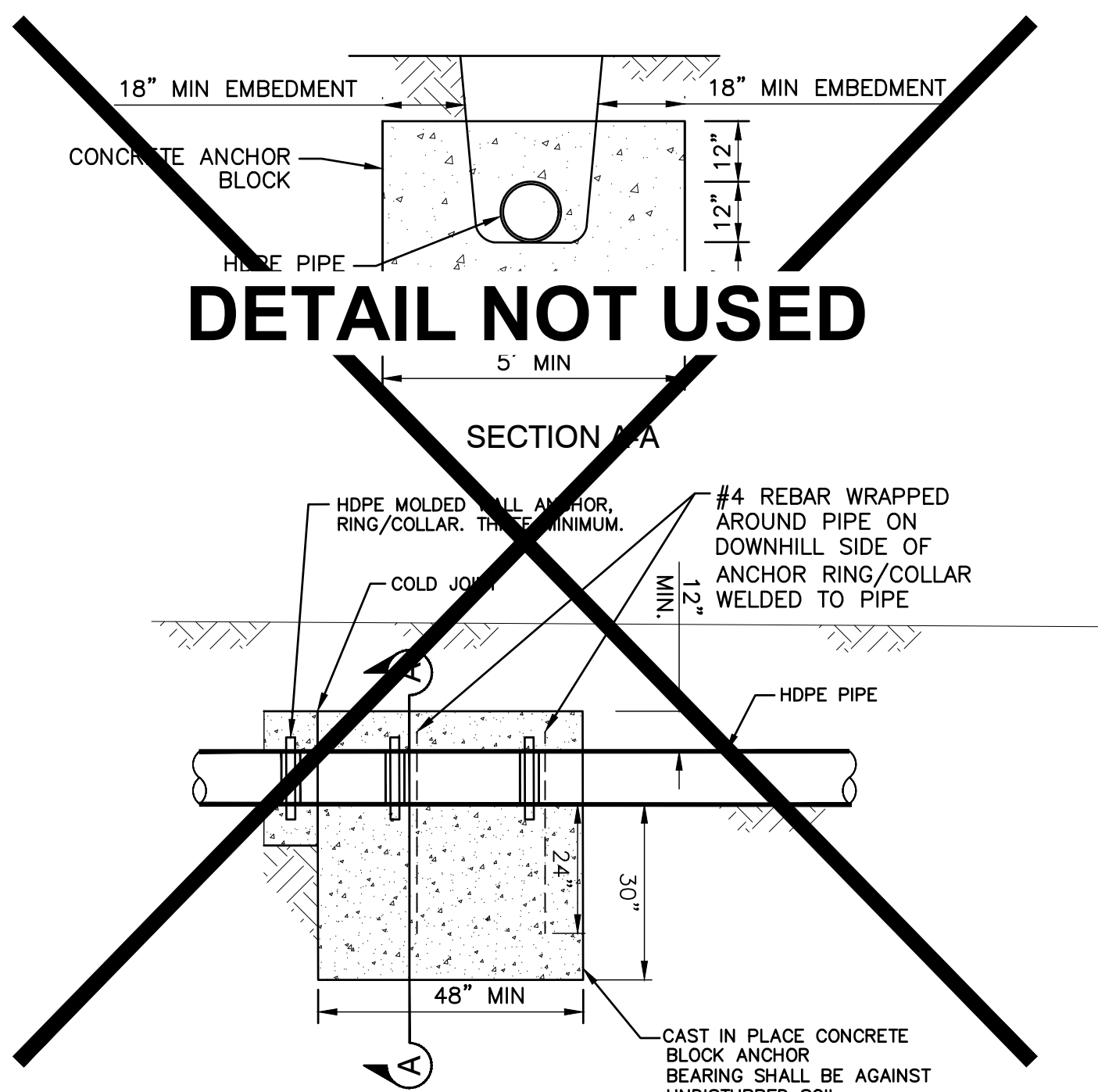
PLAN VIEW

SECTION A-A

**2 DEBRIS CAGE DETAIL**  
NTS

- NOTES:
1. DIMENSIONS ARE FOR ILLUSTRATION ON 54 IN. DIAMETER CB. FOR DIFFERENT DIAMETER CB'S, ADJUST TO MAINTAIN 45° ANGLE ON "VERTICAL" BARS AND 4 IN. O.C. MAXIMUM SPACING OF BARS AROUND LOWER STEEL BAND.
  2. METAL PARTS MUST BE CORROSION RESISTANT, STEEL BARS MUST BE GALVANIZED.
  3. THIS DEBRIS BARRIER IS ALSO RECOMMENDED FOR USE ON THE INLET TO ROADWAY CROSS-CURBS WITH HEIGHT POTENTIAL FOR DEBRIS COLLECTION

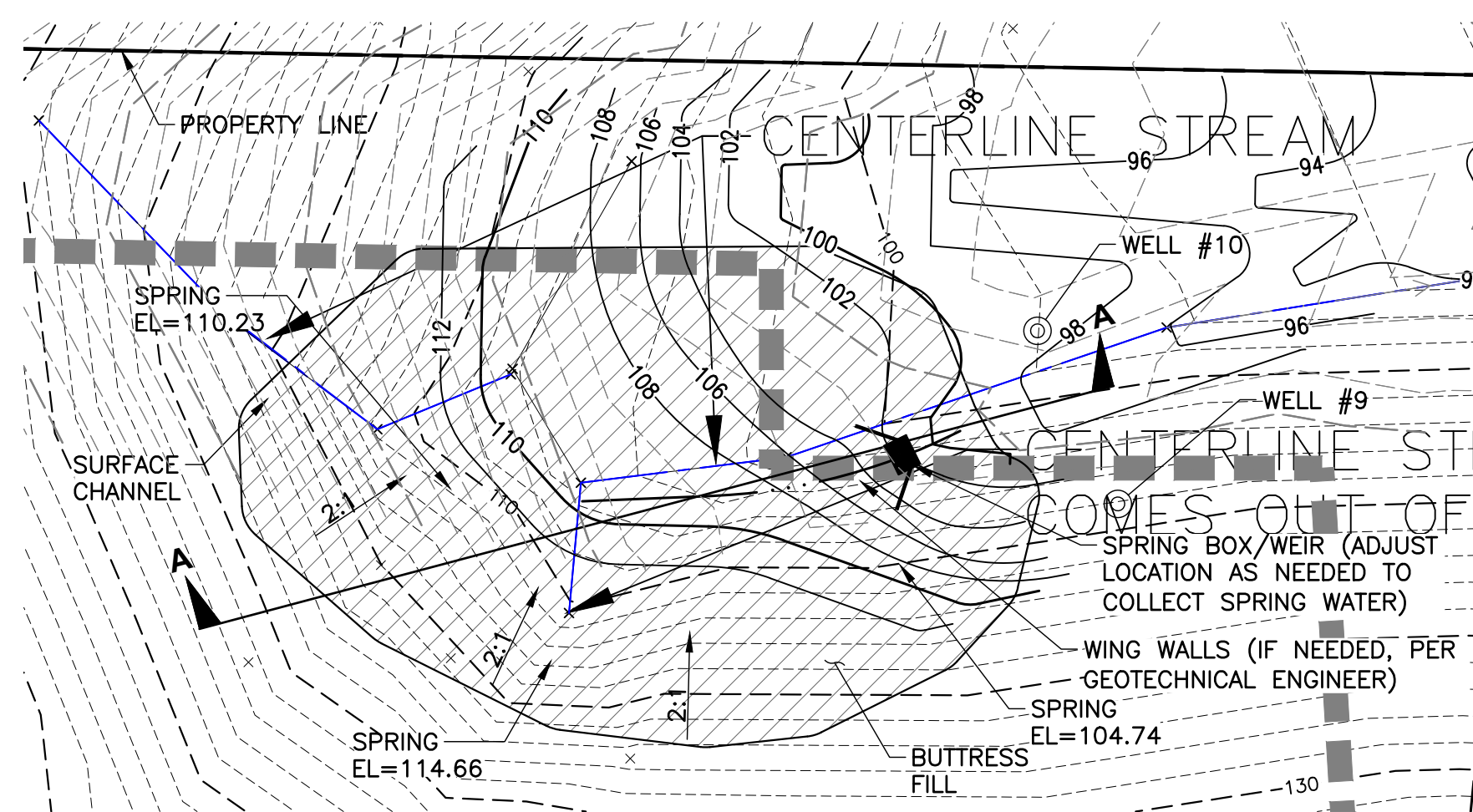
**DETAIL NOT USED**



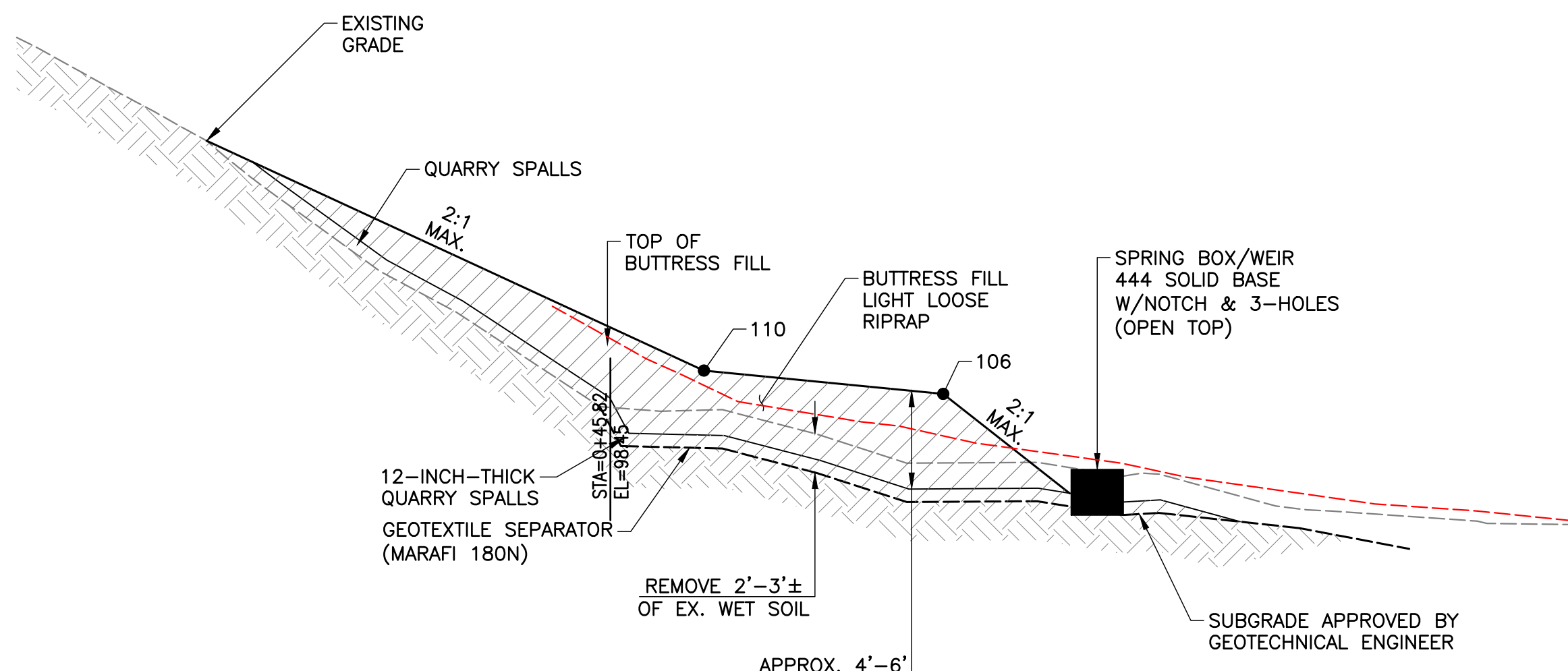
SECTION A-A

NTS

**3 CONCRETE BLOCK ANCHOR DETAIL**



**4 NE SLOPE DRAINAGE**  
NTS



**5 EMERGENCY ACCESS ROAD**  
NTS

- NOTE: PLACEMENT OF CSBC AND HMA TO BE ACCOMPLISHED IN LDA #2 WORK. FINAL SUBGRADING TO BE COMPLETED IN LDA #1 WORK

**NOTES:**

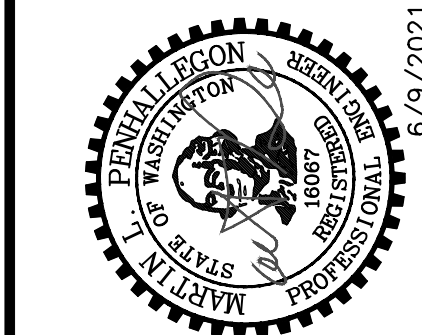
1. FIELD FIT TO EXISTING CONDITIONS.
2. SUBGRADE SHALL CONSIST OF SUITABLE NATIVE SOILS. SOFT AND LOOSE SOILS SHALL BE REMOVED AS REQUIRED BY GEOTECHNICAL ENGINEER TO EXPOSE SUITABLE SOILS.
3. ONCE SUBGRADE IS APPROVED BY GEOTECHNICAL ENGINEER, GRADE SUBGRADE SUCH THAT SPRING IS DIRECTED TO WEIR. MAJORITY OF SEEPAGE AND SPRING SHALL FLOW THROUGH THE WEIR FOR FUTURE MONITORING PURPOSES. ADJUST WEIR AS NEEDED BASED ON FINAL GRADES.
4. TOE BUTTRESS SHALL BE CONSTRUCTED TO 2H:1V MAXIMUM STEEPNESS WHERE BUTTRESS BLENDS INTO EXISTING SLOPES.
5. SPRING BOX SHALL BE UTILITY VAULT 444 SOLID BASE W/NOTCH & 3 HOLES PER OLDCASTLE PRECAST SUBMITTED, AND AS APPROVED BY GEOTECHNICAL ENGINEER.

SECTION A-A

SCALE= H= 1"=20'  
V= 1"=20'

FILE NAME: P:\P09\09382\_00 GO EAST\CAD\FIGURES\SHEETS\LANDFILL CLOSURE\2018\ASBUILT\2018\F09382\_GN-DET.DWG  
SAVE TIME: 6/8/2022 9:20:46 AM  
PLOT TIME: 6/8/2022 10:15 AM  
XREF FILES: PAGES: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

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GO EAST  
LANDFILL CLOSURE

DETAILS

SCALE: AS NOTED	DATE: 6/9/2021
DESIGNED BY: SC	CHECKED BY: MP
JOB NUMBER P09382.00	
DWG NAME: P09382_GN-DET	
SHEET <b>8A</b> OF <b>25</b>	



**GO-EAST LANDFILL WASTE SCREENING PROGRAM\***

THE FOLLOWING TABLE SHOWS HOW TO HANDLE DIFFERENT TYPES OF WASTE MATERIALS THAT MAY BE FOUND IN EXCAVATED LANDFILL MATERIAL.

ITEM	OFFSITE HAZARDOUS WASTE DISPOSAL	OFFSITE NON-HAZARDOUS WASTE DISPOSAL	ONSITE LANDFILL	ONSITE FILL OUTSIDE OF LANDFILL
CARPET, FOAM, INSULATION		X		
TIRES		X		
CONFIRMED FRIABLE ASBESTOS-CONTAINING MATERIAL		X (AUTHORIZED ASBESTOS FACILITY)		
CONFIRMED NONFRIABLE ASBESTOS-CONTAINING MATERIAL			X	
CONFIRMED LEAD-BASED PAINT THAT FAILS TCLP	X			
CONFIRMED LEAD-BASED PAINT THAT PASSES TCLP		X		
LOGGED TREES AND BRANCHES (NON-CHIPPED)		X		
CHIPPED TREE BRANCHES, LIMBS				X
CONFIRMED OTHER HAZARDOUS WASTE	X			
SEPARATED/TESTED SAND OR SOIL THAT PASSES TCLP/MTCA			X	
SEPARATED/TESTED SAND OR SOIL THAT FAILS MTCA BUT PASSES TCLP			X	
SEPARATED/TESTED SAND OR SOIL THAT FAILS TCLP	X			
EXCAVATED LANDFILL MATERIAL THAT FAILS MTCA BUT PASSES TCLP			X	
INORGANICS SUCH AS CONCRETE, BRICKS, GRAVEL, ROCKS, GLASS, ASPHALT, CINDER BLOCKS			X	
EXCAVATED WOOD, RR TIES, BURNED WOOD, LUMBER WITH NO PRESERVATIVES, CARDBOARD			X	
PLASTICS, WIRE, PVC PIPE, METAL, DEMOLITION WASTE, LINOLEUM			X	
ORGANICS, GENERAL REFUSE, FABRIC		X		

NOTES: MTCA (MODEL TOXICS CONTROL ACT) VALUES AND TCLP (TOXICITY CHARACTERISTIC LEACHING PROCEDURE) VALUES ARE SET FORTH IN TABLE 6.4 - RECOMMENDED PARAMETERS AND SUGGESTED VALUES FOR DETERMINING REUSE AND DISPOSAL OPTIONS FOR LANDFILL MATERIAL. THESE CAN BE FOUND ON PAGE 29 OF 60 OF THE "GO EAST LANDFILL CLOSURE PLAN".

THE PUGEST SOUND CLEAN AIR AGENCY DEFINES "ASBESTOS-CONTAINING MATERIAL" AS ANY MATERIAL CONTAINING MORE THAN 1 PERCENT ASBESTOS, AND "FRIABLE ASBESTOS-CONTAINING MATERIAL" AS ASBESTOS-CONTAINING MATERIAL THAT, WHEN DRY, CAN BE CRUMBLED, PULVERIZED, OR REDUCED TO POWDER BY HAND PRESSURE OR BY THE FORCES EXPECTED TO ACT UPON THE MATERIAL IN THE COURSE OF DEMOLITION, RENOVATION, OR DISPOSAL.

THE U.S. ENVIRONMENTAL PROTECTION AGENCY DEFINES "LEAD-BASED PAINT" AS PAINT THAT CONTAINS AT LEAST 1 MILLIGRAM OF LEAD PER SQUARE CENTIMETER OR THAT HAS A LEAD CONCENTRATION OF AT LEAST 0.5 PERCENT.

\* OVERSIGHT CONDUCTED BY PAC RIM ENVIRONMENTAL, AS DESCRIBED IN THE COA REPORT.

**LOT EXPLORATION PLAN (OUTSIDE LANDFILL AREA)\*\***

- THE FOLLOWING REPRESENTS A TEST PIT SAMPLING AND OBSERVATION PLAN INTENDED TO COMPLY WITH THE SNOHOMISH COUNTY HEARING EXAMINER'S REQUIREMENTS FOR RESIDENTIAL LOT AREAS OF THE BAKERVIEW PLAT.
- THIS PLAN AND ITS EXECUTION SHALL BE OVERSEEN AND VERIFIED BY THE FOLLOWING: PROPERTY OWNER, SNOHOMISH COUNTY HEALTH DISTRICT REPRESENTATIVE, PDS REPRESENTATIVE, AND PROJECT COA ENGINEER/PROFESSIONAL (WHO SHALL BE RESPONSIBLE TO COMPILER AND DOCUMENT EXECUTION OF THE PLAN).
- ALL LANDFILL MATERIAL LYING OUTSIDE THE RECONFIGURED LANDFILL LIMITS AND INCLUDING ANY LOT AREAS, STREET RIGHT-OF-WAYS, AND OTHER USE AREAS LIKE SEWER PUMP STATION SITE, ACCESS TO LANDFILL AREA, IS TO BE COMPLETELY REMOVED AND RELOCATED TO THE RECONFIGURED AND REDUCED LANDFILL LIMITS.
- EXCAVATED AREAS LYING OUTSIDE EXISTING LANDFILL LIMITS, SHALL HAVE ALL EXCAVATION OBSERVED BY GEOTECHNICAL ENGINEER AND IF ANY LANDFILL MATERIALS ARE FOUND (EXCAVATED), IT SHALL BE RELOCATED AS APPROPRIATE EITHER TO THE RECONFIGURED LANDFILL PROPER OR OFFSITE AS DETERMINED APPROPRIATE. THE FINISH GRADE OF ALL EXCAVATED AREAS SHALL BE WALKED AND VERIFIED THAT NO LANDFILL MATERIAL REMAINS.
- "WEDGE AREA" SHALL BE FILLED TO AT LEAST 6 FEET INSIDE OF LANDFILL BOUNDARY WITH EXCAVATED ON-SITE MATERIAL FROM OUTSIDE THE LANDFILL (MATERIAL FROM ITEM 4 ABOVE) AND COMPACTED IN CONFORMANCE TO STRUCTURAL FILL SPECIFICATIONS.
- THE REMAINING AREAS OUTSIDE THE LANDFILL AREA THAT ARE TO BE LEFT UNGRADED OR FILLED, SHALL BE SCARIFIED TO A DEPTH OF 12-INCHES TO VERIFY NO HIDDEN OR BURIED LANDFILL MATERIAL REMAIN PRIOR TO FILLING OR RECOMPACTING THE TOP 12-INCHES. ADDITIONAL POT HOLDING SHALL BE ACCOMPLISHED AS DETERMINED NECESSARY TO VERIFY NO LANDFILL MATERIAL REMAINS.
- ALL OF THE ABOVE SEQUENCE SHALL BE OBSERVED BY PARTIES DESCRIBED IN NOTE 2 ABOVE. A FORMAL REPORT SHALL BE COMPILED AND PREPARED BY THE COA ENGINEER/PROFESSIONAL AND SUBMITTED TO SHD AND PDS FOR REVIEW AND CONCURRENCE.

\*\* THIS WORK WAS COMPLETED WITH MEMO PREPARED DOCUMENTING OVERSIGHT BY GEOENGINEERS AS CONTAINED IN THE COA REPORT.

**LANDFILL CLOSURE PLAN (LFCP) REQUIREMENTS AND RECOMMENDATIONS**

**NOTES FOR LAND DISTURBING ACTIVITY (LDA) PERMIT\*\*\***

NOTE: THESE REQUIREMENTS PERTAIN ONLY TO THE CLOSURE ACTIVITY RELATED TO THE GO-EAST LANDFILL CLOSURE AND NOT BAKERVIEW PLAT WORK.

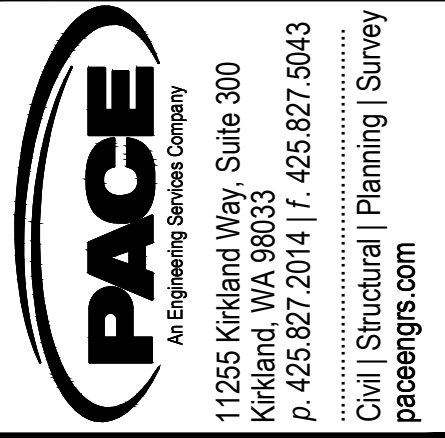

- PRIOR TO LANDFILL CLOSURE ACTIVITY, CONDUCT NECESSARY TESTING PER SECTION 3.6.2 OF THE LFCP. IT INCLUDES SAMPLES TAKEN FOR EVERY 500 CUBIC YARDS FOR FIRST 2500 CUBIC YARDS AND EVERY 2500 CUBIC YARDS THEREAFTER. FOR AN ESTIMATED 50,000 CUBIC YARDS OF LANDFILL MATERIAL BEING RELOCATED THIS RESULTS IN ABOUT 25 TEST SAMPLES. REFER TO TABLE 6.4 OF THE LFCP FOR TESTING REQUIREMENTS. NO LANDFILL EXCAVATED MATERIAL IS TO BE PERMANENTLY LOCATED OR PLACED OUTSIDE THE CLOSED LANDFILL LIMIT.
  - MEASURING NOISE LEVELS AT THE PROPERTY BOUNDARY TO DETERMINE THE ACTUAL EFFECTS OF THE CONSTRUCTION EQUIPMENT AND OPERATING SCHEDULE IF COMPLAINTS ARE RECEIVED.
  - USING EQUIPMENT SUITABLE FOR THE JOB THAT ISNT OVER OR UNDER POWERED.
  - WHENEVER POSSIBLE, USING THE QUIETEST EQUIPMENT ALTERNATIVE.
  - SCHEDULING LOUDER OR IMPULSIVE NOISE SOURCES DURING MID-DAY HOURS ONLY.
  - LOCATING EQUIPMENT TO POSITION PROMINENT NOISE SOURCES AWAY FROM THE PROPERTY BOUNDARY TO THE EXTENT PRACTICAL.
  - LIMITING THE USE OF BACK UP BEEPERS THROUGH TRUCK/EQUIPMENT ROUTING OR THE USE OF FLAGMEN.
  - USING A SOUND LEVEL METER TO DETERMINE IF THE PROJECT NOISE LEVELS (FOR THE LANDFILL CLOSURE ACTIVITIES) ARE APPROACHING LIMITS, IF CONSTRUCTION ACTIVITIES NEED TO BE PERFORMED IN CLOSE PROXIMITY TO RESIDENCES.
  - USING BEST MANAGEMENT PRACTICES SUCH AS ENHANCED MUFFLER SYSTEMS AND SOUND BARRIERS TO PREVENT EXCEEDANCES IF CONSTRUCTION NOISE IS APPROACHING UNACCEPTABLE LEVELS.
- IN CONCERT WITH ITEM 1 ABOVE CONDUCT ADDITIONAL EXPLORATIONS ALONG THE EXPECTED "CATCH POINT" (EXTENT OF EXCAVATION) FOR LANDFILL EXCAVATION TO CONFIRM DEPTH AND EXTENT OF LANDFILL RELOCATION AS DETERMINED NECESSARY. (IF SIGNIFICANTLY DIFFERENT THAN SHOWN, CONTACT ENGINEER.)
- ARRANGE TO CONSTRUCT ONE FIRE HYDRANT AND A METERED HOSE BIB WITH REQUIRED BACKFLOW PREVENTION ON SITE TO BE USED FOR LANDFILL CLOSURE ACTIVITY. ARRANGE AS REQUIRED WITH SILVER LAKE WATER DISTRICT. NOTE: THIS SERVICE IS TO BE USED FOR FILLING WATER TRUCKS, DUST CONTROL AND OTHER LANDFILL CLOSURE NEEDS.
- MOVE IN AND ESTABLISH ON-SITE JOB TRAILER TO HOUSE WEEKLY COORDINATION MEETINGS WITH OWNER, CONTRACTOR, COUNTY AND SNOHOMISH HEALTH DISTRICT. MAINTAIN PERMIT DOCUMENTS, LFCP, AND MEETING MINUTES ON SITE IN JOB TRAILER.
  - AS ADDITIONAL MITIGATION ENFORCE REDUCED VEHICLE SPEED REQUIREMENTS OF 15 MPH, AND HIGH WIND SPEED CLOSURES, REQUIREMENTS DURING HANDING AND RELOCATING THE LANDFILL MATERIALS. THE CONSTRUCTION MANAGER SHALL PROVIDE TRAINING AND REGULAR DEBRIEFINGS FROM CREWS ON THE IMPORTANCE OF IMPLEMENTING AND MAINTAINING FUGITIVE DUST CONTROL MEASURES. THIS INCLUDES THE IMPORTANCE OF ONGOING OBSERVATIONS TO DETERMINE IF CONDITIONS HAVE DETERIORATED OR A MITIGATION MEASURES IS INEFFECTIVE OR NOT BEING USED PROPERLY. ONSITE WORKERS SHOULD CONDUCT A DAILY INSPECTION TO ENSURE THAT MITIGATION MEASURES ARE REMAINING EFFECTIVE AND THAT THERE ARE NO AREAS OF INADEQUATE DUST CONTROL. MAINTAIN BEST MANAGEMENT PRACTICES RELATED DUST CONTROL. DUST CONTROL DURING THE LANDFILL CLOSURE PLAN ACTIVITY SHALL COMPLY WITH BMP'S AS CONTAINED IN 2019 STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON AND BMP S407 DUST CONTROL AT DISTURBED LAND AREAS AND UNPAVED ROADWAYS AND PARKING LOTS.
- IMPLEMENT A NOISE CONTROL PLAN (NCP) AS DESCRIBED BELOW:
  - NOTE: A FULL TIME CERTIFIED PROFESSIONAL HIRED BY OWNER AND UNDER THE DIRECTION OF THE OWNER'S REPRESENTATIVE IS REQUIRED ON SITE WHEN LANDFILL MATERIAL IS BEING REGRADED OR MOVED. SEE SECTION 3.6 OF THE LFCP. THE INDIVIDUAL SHALL BE A CERTIFIED ASBESTOS PROFESSIONAL AND QUALIFIED TO DETERMINE IF ANY HAZARDOUS MATERIALS ARE ENCOUNTERED. THE INDIVIDUAL WILL ALSO BE RESPONSIBLE TO INSURE ALL LANDFILL MATERIAL IS REMOVED FROM AREAS WHERE LANDFILL IS BEING RELOCATED. THIS PERSON WILL OVERSEE AND PROVIDE DAILY REPORTS AND DOCUMENTS AS REQUIRED IN APPENDIX K OF THE PLAN AS REQUIRED FOR THE CONSTRUCTION QUALITY ASSURANCE PLAN.
  - ANY HAZARDOUS MATERIALS, IF ENCOUNTERED, WILL BE SEPARATED AND PLACED IN CONFINED CONTAINERS ONSITE AND TRANSPORTED TO A PREAPPROVED FACILITY LICENSED TO HANDLE THE PARTICULAR MATERIAL. ALL REGULATIONS PROTECTING WORKER SAFETY WILL BE FOLLOWED IF SUCH HAZARDOUS MATERIALS ARE ENCOUNTERED.
  - TO SECURE THE SITE FROM THE COMMUNITY DURING THE CONSTRUCTION ACTIVITIES THE ENTRY AND SECURITY FENCING WILL BE REINFORCED AND REPAIRED. THE GOAL WILL BE TO ELIMINATE TRESPASSING ONTO THE SITE DURING THESE ACTIVITIES.
  - OBTAIN STREET USE AND HAUL PERMITS FROM SNOHOMISH COUNTY.
  - MITIGATION RELATED TO THE IMPORT/EXPORT OF MATERIALS SHALL COMPLY WITH BEST MANAGEMENT PRACTICES INCLUDING THE FOLLOWING:
    - INSTALL WHEEL WASH FACILITY AS REQUIRED BY PERMIT.
    - COMPLIANCE WITH WORK HOURS FOR USING THE STREETS FOR HAULING AND RELATED TO THE PROJECT.

**SUGGESTED CONSTRUCTION SEQUENCE**

- CONDUCT TREE REMOVAL AND CLEARING OF THE AREAS OF THE SITE BEING GRADED.
- CONSTRUCT TESCP FACILITIES INCLUDING DITCHES AND CHECK DAMS, SILT FENCING ETC. AS NEEDED.
- INSTALL STREAM DIVERSION PIPE AT DEPTH AND LOCATION TO PREVENT CONFLICT OR CONTAMINATION TO THE STREAM WATERS.
- GRADE AND STOCKPILE ANY USABLE TOP SOIL AND PROTECT WITH COVERING WITH R/F PLASTIC SHEETING ANCHORED DOWN. STOCK PILE IN AREA TO NOT BE DISTURBED BY LANDFILL CLOSURE ACTIVITY.
- REMOVE ANY LANDFILL COVER MATERIAL THAT MAY EXIST LYING BELOW THE TOP SOIL AND ABOVE THE LANDFILL MATERIAL AND STOCKPILE AND PROTECT BY COVERING. THIS MATERIAL WILL BE REUSED FOR BEDDING UNDER THE GEOMEMBRANE OR OVER THE TOP OF THE GEOMEMBRANE.
- NOT USED.
- CONDUCT THE REQUIRED DYNAMIC COMPACTION FOR THE AREA OF THE DETENTION POND.
- PROOF ROLL AND CONDUCT FINAL COMPACTION OF THE DETENTION POND AND STORM LINE AND GRADE THE DETENTION POND AREA TO FINAL SUBGRADE ELEVATION.
- PLACE 6-INCH SAND BEDDING LAYER AND COMPACT UNDER THE POND AREA AND MAKE READY FOR THE INITIAL GEOMEMBRANE FOR THE POND. PLACE THE GEOMEMBRANE AS RECOMMENDED BY GEOTECHNICAL ENGINEER AND MANUFACTURERS REQUIREMENTS.
- PLACE/INSTALL A TEMPORARY OUTLET PIPE FROM THE POND DOWN THE NORTHEAST SLOPE TO THE TOE AND ANCHOR AS REQUIRED. PLACE OUTLET TO PREVENT EROSION AT THE TOE OF THE SLOPE.
- PROCEED WITH RELOCATING THE LANDFILL MATERIAL IN THE "WEDGE" AREA AN NO CLOSER THAN 6 FEET TO RESIDENTIAL LOT LINE PLACING REGRADED LANDFILL MATERIAL IN COMPACTED LIFTS AS REQUIRED. PROOF ROLL ANY AREAS TO ACCEPT LANDFILL MATERIALS PRIOR TO PLACING MATERIAL OVER THEM. COMPLY WITH THE PROJECT GEOTECHNICAL ENGINEER'S DIRECTION AND PROJECT REPORT DIRECTING THIS WORK.
- GRADE THE SITE WITH CUT/FILLS FOR THE ENTIRE AREA AS REQUIRED AND SHOWN ON THE PLANS TO ACHIEVE FINAL GRADES, COVER MATERIAL, FILL WEDGE AREA, ETC. AS REQUIRED.
- GRADE AND ESTABLISH NEW STREAM CORRIDOR AS SHOWN ON WETLAND RESOURCES DRAWINGS AND REQUIRED BY PROJECT HPA. ONCE NEW STREAM CHANNEL IS STABILIZED, DIRECT STREAM WATER INTO NEW CHANNEL AND MAINTAIN UNTIL STABLE.
- COMPLY WITH THE LANDFILL CLOSURE PLAN AND APPROVED PROJECT PLANS AND SPECIFICATIONS. A LIST OF APPLICABLE SPECIFICATIONS IS PROVIDED ON SHEET 14.
- PROVIDE FINAL LANDSCAPING TO COVER ALL DISTURBED AREAS AND MAINTAIN TEMPORARY EROSION CONTROL UNTIL SUITABLE RE-VEGETATION HAS OCCURRED.
- PREPARE FINAL GEOTECHNICAL REPORT DEMONSTRATING COMPLIANCE WITH GEOTECHNICAL ASPECTS OF THE LANDFILL CLOSURE PLAN, AND GEO-ENGINEERS' PLAN REVIEW RECOMMENDATIONS INCLUDED IN THEIR APRIL 17, 2019 LETTER.

\*\*\* ALL LFC WORK OBSERVED BY GEOENGINEERS AND PAC RIM ENVIRONMENTAL AS DESCRIBED IN THE COA REPORT.

FILE NAME: P:\P09382\_00 GO EAST\CAD\FIGURES\SHEETS\LANDFILL\_CLOSURE\2018\ASBUILT\2018\_P09382\_GN-DET.DWG  
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 XREF FILES: PACEN.dwg

DATE	
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 <p>11255 Kirkland Way, Suite 300                  Kirkland, WA 98033                  p. 425.827.2014 f. 425.827.9043                  Civil   Structural   Planning   Survey                  paceengrs.com</p>	
 <p>6/9/2021</p>	
<p><b>GO EAST                  LANDFILL CLOSURE</b></p>	<p><b>NOTES</b></p>
SCALE: AS NOTED	DATE: 6/9/2021
DESIGNED BY: SC	CHECKED BY: MP
JOB NUMBER P09382.00	
DWG NAME: P09382_GN-DET	
SHEET <b>9</b>	OF <b>25</b>

GENERAL NOTES - AS RELATED TO GRADING, DRAINAGE AND ALL AREAS OUTSIDE THE RECONFIGURED LANDFILL AREA

- 1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE APPLICABLE EDITIONS OF THE SNOHOMISH COUNTY ENGINEERING DESIGN AND DEVELOPMENT STANDARDS (EDDS), SNOHOMISH COUNTY CODE, WASHINGTON STATE DEPARTMENT OF TRANSPORTATION/AMERICAN PUBLIC WORKS ASSOCIATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, AND THE SNOHOMISH COUNTY DRAINAGE MANUAL.
2. THE PROJECT IS VESTED TO THE 2009 EDITION OF THE SNOHOMISH COUNTY ENGINEERING DESIGN AND DEVELOPMENT STANDARDS. THE CONTRACTOR SHALL KEEP A SET OF THE EDDS ON SITE AT ALL TIMES.
3. ALL WORK PERTAINING TO THIS PROJECT SHALL BE SUBJECT TO INSPECTION BY THE COUNTY INSPECTOR OR HIS DESIGNATED REPRESENTATIVE. PRIOR TO BEGINNING ANY SITE WORK, THE CONTRACTOR SHALL CONTACT THE COUNTY INSPECTOR AT (425) 388-3338 AND SCHEDULE A PRE-CONSTRUCTION CONFERENCE.
4. IF THE PROJECT SITE AS DEFINED IN SCC 30.63A.915.351 IS MORE THAN ONE ACRE, THE CESCL IDENTIFIED IN THE SWPPP NARRATIVE SHALL BE ON SITE OR ON CALL AT ALL TIMES (SCC30.63A.510).
5. THE CESCL SHALL NOTIFY THE COUNTY INSPECTOR IN WRITING ANY TIME A BMP PROVES TO BE INADEQUATE RESULTING IN AN ACTUAL DISCHARGE OF OR POSES A POTENTIAL TO DISCHARGE A SIGNIFICANT AMOUNT OF ANY POLLUTANT PURSUANT TO SCC 7.53 TO WATERS OF THE STATE OR THE COUNTY'S MS-4 DRAINAGE SYSTEM (SCC30.63A.510). SAID NOTIFICATION SHALL BE MADE WITHIN 24 HOURS OF THE DISCHARGE EVENT OR PROBLEM IDENTIFICATION.
6. IF INDIVIDUALS REVIEWING OR INSPECTING WORK ARE REPLACED DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO THE CIVIL ENGINEER, SOILS ENGINEER, CESCL OR THE ENGINEERING GEOLOGIST, WORK REQUIRING THEIR REVIEW SHALL BE STOPPED UNTIL ANOTHER QUALIFIED PERSON AGREES TO ACCEPT RESPONSIBILITY AND NOTIFIES PLANNING & DEVELOPMENT SERVICES IN WRITING (SCC 30.63A.855 AND SCC 30.63B.340(4)).
7. A ROW USE PERMIT IS REQUIRED FROM THE DPW FOR ANY LANE/ROAD CLOSURES WITHIN THE SNOHOMISH COUNTY ROW. CONTACT DPW AT LEAST 15 DAYS PRIOR TO CONSTRUCTION ACTIVITY WITHIN THE PUBLIC ROW. SNOHOMISH COUNTY DOES NOT HAVE JURISDICTION ON STATE ROUTES OR ROADWAYS WITHIN INCORPORATED CITIES, PRIVATE ROADS OR PRIVATE PROPERTY. FOR ANY ACTIVITY ENCRORCHING ON SUCH PROPERTY THE APPLICANT SHALL OBTAIN PERMISSION FROM THE APPROPRIATE AUTHORITY.
8. FIELD CHANGES REQUIRING REDESIGN SHALL BE SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION.
9. ENGINEERED RECORD DRAWINGS SHALL BE REQUIRED PRIOR TO SITE APPROVAL (EDDS SECTION 10-05).
10. SURVEY MONUMENTS SHALL BE FOUND AND SET IN ACCORDANCE WITH SNOHOMISH COUNTY ENGINEERING DESIGN AND DEVELOPMENT STANDARDS (EDDS), CHAPTER 4-03, DETAIL 4-130. MONUMENTS AND PROPERTY CORNERS SHALL BE PROTECTED FROM DISTURBANCE DURING CONSTRUCTION. A LICENSED SURVEYOR SHALL OBTAIN A PERMIT FOR REMOVAL OR REPLACEMENT OF ANY ROW MONUMENTS, SURVEY MONUMENTS, OR PROPERTY CORNERS IN ACCORDANCE WITH STATE LAW AND WAC 332-120 PRIOR TO ANY DISTURBANCE TO THE CORNER. THE POINTS TO BE PROTECTED OR REPLACED SHALL BE RELOCATED BY A PROFESSIONAL LAND SURVEYOR AND SHOWN ON THE CONSTRUCTION PLANS.
11. REMOVE ABANDONED PIPES WITHIN THE RIGHT-OF-WAY.
12. ALL PIPES SHALL HAVE A MINIMUM OF 12" COVER AT THE TOP OF THE BELL, OR SHALL HAVE MINIMUM COVER PER THE MANUFACTURER'S SPECIFICATIONS, WHICHEVER IS GREATER. [EDDS 5-04.1.9.]
13. PRIOR TO PLACING ANY SURFACE MATERIALS ON THE ROADWAY, IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER OR UTILITY TO PROVIDE DENSITY TEST REPORTS (AS SPECIFIED IN EDDS) CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF WASHINGTON. [EDDS 8-05.]
14. APPROVED PERMANENT TRAFFIC CONTROL SIGNS AND MARKINGS WITHIN THE PUBLIC RIGHT-OF-WAY (ROW) SHALL BE INSTALLED BY COUNTY FORCES. THE DEVELOPER SHALL PAY FOR INSTALLATION OF ALL DEVICES. THE INSPECTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS (DPW) TRAFFIC OPERATIONS WHEN THE PROJECT IS READY FOR CHANNELIZATION AND SIGNING. IF COUNTY FORCES ARE UNAVAILABLE TO PERFORM THE STRIPING INSTALLATION WITHIN AN APPROPRIATE TIME FRAME, THE PERMIT HOLDER SHALL CONTRACT FOR THE STRIPING INSTALLATION. DPW TRAFFIC OPERATIONS SHALL BE CONTACTED AT LEAST 2 DAYS IN ADVANCE OF INSTALLATION TO VERIFY CHANNELIZATION LAYOUT.
15. DURING PROJECT CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TEMPORARY CONSTRUCTION SIGNS, TRAFFIC CONTROL SIGNS, DELINEATORS AND TEMPORARY MARKINGS AS REQUIRED. ALL SIGNS, TRAFFIC CONTROL SIGNS, DELINEATORS AND TEMPORARY MARKINGS SHALL BE ACCORDING TO THE CURRENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
16. ACCESS BY EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
17. AFTER WORK WITHIN THE TRAVELED ROADWAY IS COMPLETED AT THE END OF EACH DAY, THE ROAD SHALL BE CLEARED OF DEBRIS AND EQUIPMENT, AND COMPLETELY OPEN TO TRAFFIC (UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS OF THE COUNTY). LIGHTED BARRICADES OR BARRELS SHALL DELINEATE ALL AREAS WITHIN THE ROADWAY AFFECTED BY CONSTRUCTION (I.E. EDGE OF PAVEMENT, NEW CURB EDGES NOT ILLUMINATED BY STREET LIGHTS).
18. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR INTERIM TRAFFIC CONTROL DURING CONSTRUCTION ON OR ALONG TRAVELED COUNTY ROADWAYS. THE DEVELOPER/CONTRACTOR MUST SUBMIT A TRAFFIC CONTROL PLAN TO PUBLIC WORKS (PERMIT COUNTER) AND RECEIVE APPROVAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.
19. THE WORKMANSHIP AND MATERIALS FOR ALL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE COUNTY R/W SHALL BE IN ACCORDANCE WITH EDDS SECTIONS 8-02, 8-04, 8-05, 8-09 AND THE MOST RECENT COPY OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION (WSDOT/APWA).
20. ALL WORK WITHIN THE SITE AND COUNTY RIGHT-OF-WAY SHALL BE SUBJECT TO THE INSPECTION OF THE COUNTY ENGINEER OR HIS DESIGNATED REPRESENTATIVE.
21. THE TEMPORARY EROSION/SEDIMENTATION CONTROL FACILITY SHALL BE CONSTRUCTED PRIOR TO ANY GRADING OR EXTENSIVE LAND CLEARING IN ACCORDANCE WITH THE APPROVED TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN. THESE FACILITIES MUST BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION AND LANDSCAPING IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED.
22. ALL STORM SEWER PIPE MATERIALS SHALL CONFORM TO WSDOT STANDARD SPECIFICATIONS CHAPTER 9-05.
23. DOUBLE WALL, SMOOTH INTERIOR (ADS, N-12 T.M.) LINED CORRUGATED POLYETHYLENE (LCPE) PIPE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 294S FOR SIZES 12 TO 36 INCH DIAMETER. (PVC) POLYVINYL CHLORIDE PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM D3034 SOR 35 FOR SIZES UP TO 15 INCH DIAMETER AND ASTM F679, TYPE 1 ONLY FOR SIZES 18 TO 27 INCH DIAMETER.
24. PIPE MATERIAL FOR HDPE BUTT-FUSED SHALL BE: HIGH DENSITY POLYETHYLENE (HDPE) SDR 11. THE PIPE MUST COMPLY WITH ASTM STANDARDS DEPENDING UPON THE PURPOSE OF THE MATERIAL. FOR THE PIPE MATERIAL, ASTM D 2447, D 3350, F 1962, AND F 714 SHALL APPLY. HDPE PIPE WILL BE BUTT-FUSED INTO THE MAXIMUM AVAILABLE LENGTHS. ALL HDPE BUTT-FUSED JOINTS SHALL BE COMPLETED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AS TO EQUIPMENT AND TECHNIQUE BY WORKERS WHO HAVE A DEMONSTRATED ABILITY AND EXPERIENCE IN THE FUSION PROCESS. ELECTRONIC DETECTION MATERIAL FOR NON-CONDUCTIVE PIPING PRODUCTS SHALL BE 12 GAUGE COPPER CLAD WHICH MUST BE ATTACHED TO THE PIPE SECURELY TO WITHSTAND THE HD.
25. LCPE DOUBLE WALL - SMOOTH I.D. PIPE, AASHTO M-294 TYPE S SHALL HAVE 1 FOOT MINIMUM COVER PER MANUFACTURER'S RECOMMENDATIONS TO OBTAIN H-20 LOADING.
26. ALL PIPE INLETS AND OUTFALLS TO HAVE BEVELED END SECTIONS PER EDDS STD. DET. 5-050. ALL CPP PIPE TO BE MITERED TO NEW SLOPE AFTER FINAL GRADING.
27. ALL TRENCH BEDDING AND BACKFILL SHALL BE PER WSDOT/APWA STD. PLAN B-55, 22-00.
28. ALL PIPE SHALL BE PLACED ON STABLE EARTH, OR IF IN THE OPINION OF THE COUNTY ENGINEER, THE EXISTING FOUNDATION IS UNSATISFACTORY, THEN IT SHALL BE EXCAVATED BELOW GRADE AND BACKFILLED WITH A GRAVEL MATERIAL TO SUPPORT THE PIPE.
29. THE BACKFILL SHALL BE PLACED EQUALLY ON BOTH SIDES OF THE PIPE OR PIPE-ARCH IN LAYERS WITH A LOOSE AVERAGE DEPTH OF 6", MAXIMUM DEPTH 8", THOROUGHLY TAMPING EACH LAYER. THESE COMPACTED LAYERS MUST EXTEND FOR ONE DIAMETER ON EACH SIDE OF THE PIPE OR TO THE SIDE OF THE TRENCH. MATERIALS TO COMPLETE THE FILL OVER PIPE SHALL BE THE SAME AS DESCRIBED.
30. ALL CATCH BASINS SHALL BE TYPE I, TYPE I-L OR TYPE II AS NOTES ON THE PLANS.

GENERAL NOTES - AS RELATED TO GRADING, DRAINAGE AND ALL AREAS OUTSIDE THE RECONFIGURED LANDFILL AREA (CONT.)

- 31. ALL CATCH BASIN GRATES ARE SHOWN AT FLOW LINE ELEVATIONS.
32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL MANHOLE, INLET, AND CATCH BASIN FRAMES AND GRATES JUST PRIOR TO POURING OF CURBS AND PAVING.
33. ALL CATCH BASINS WITH A DEPTH OVER 5.0 FEET TO THE FLOW LINE SHALL BE TYPE II CATCH BASINS.
34. ALL CATCH BASIN MANHOLES, INLETS AND CATCH BASINS SHALL HAVE LOCKING LIDS.
35. STANDARD LADDER STEPS SHALL BE PROVIDED IN ALL CATCH BASINS/MANHOLES EXCEEDING FOUR (4) FEET IN DEPTH.
36. THE CATCH BASIN FRAME AND GRATES SHALL BE PER SNOHOMISH COUNTY STD. DETAIL 5-180, OR AS SHOWN ON PLAN. USE VANED GRATE PER STD. DRAWING 5-200 ON CATCH BASINS WHERE STREET GRADE IS OVER 4%. ALL SOLID COVERS AND GRATES SHALL BE SECURED WITH 5/8" STAINLESS STEEL SOCKET HEAD CAP SCREWS. USE AN ANTI-SEIZE COMPOUND AT THE TIME SCREWS ARE INSTALLED.
37. BACKFILL TRENCH OF NEW UTILITIES SHALL BE COMPACTED TO 95% RELATIVE COMPACTION UNDER ROADWAYS AND 90% RELATIVE COMPACTION OFF ROADWAYS, AS SPECIFIED IN WSDOT STANDARD SPEC. SECTION 2.03.3(14)D AND SECTION 2-03.3(14)E.
38. STORM WATER CONVEYANCE FACILITIES MUST BE FLUSHED AND CLEANED PRIOR TO SNOHOMISH COUNTY ACCEPTANCE.
39. PROVIDE AND MAINTAIN THE TEMPORARY SEDIMENTATION COLLECTION FACILITIES TO INSURE SEDIMENT LADEN WATERS DO NOT ENTER THE NATURAL DRAINAGE SYSTEM.
40. ALL DISTURBED AREAS SUCH AS DETENTION FACILITIES, ROADWAY BACK-SLOPES, ETC., SHALL BE SEEDED WITH A PERENNIAL GROUND COVER GRASS TO MINIMIZE EROSION. GRASS SEEDING WILL BE DONE USING AN APPROVED HYDROSEEDER OR AS OTHERWISE APPROVED BY SNOHOMISH COUNTY.
41. ALL EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH COUNTY STANDARDS. PRE-CONSTRUCTION SOILS INVESTIGATION MAY BE REQUIRED TO EVALUATE SOILS STABILITY.
42. IF CUT AND FILL SLOPES EXCEED A MAXIMUM OF TWO FEET HORIZONTAL TO ONE FOOT VERTICAL, A ROCK, BLOCK OR CONCRETE RETAINING WALL MAY BE REQUIRED. ALL ROCK RETAINING WALLS GREATER THAN FOUR (4) FEET IN HEIGHT ARE TO FOLLOW COUNTY SPECIFICATIONS AND TO BE DESIGNED AND CERTIFIED BY A CIVIL ENGINEER EXPERIENCED IN SOILS MECHANICS.
43. STOCKPILES ARE TO BE LOCATED IN SAFE AREAS AND ADEQUATELY PROTECTED BY TEMPORARY SEEDING AND MULCHING. HYDRO-SEED PREFERRED.
44. COMPACTION: EARTH EMBANKMENTS TO BE COMPACTED PER THE GEOTECHNICAL REPORT.
45. RIP-RAP SHALL BE PLACED IN AREAS AS SHOWN ON PLANS PER SECTION 8-15.3(2). MATERIALS SHALL MEET MINIMUM REQUIREMENTS OF SECTION 9-13.1.(2).
46. N/A
47. N/A
48. ALL STEEL PIPES, CULVERTS, TANKS, AND OTHER STEEL PARTS OF ANY STORM DRAINAGE SYSTEM SHALL BE GALVANIZED AND HAVE A TREATMENT 1 ASPHALT COATING OR BETTER AS SPECIFIED IN THE WSDOT STD SPECIFICATION SECTION 9-05.4(3). NOTE: ALUMINUM AND CONCRETE PIPES AND STRUCTURES DO NOT REQUIRE A TREATMENT 1 COATING.
49. SURVEY MONUMENTS SHALL BE FOUND AND SET IN ACCORDANCE WITH SNOHOMISH COUNTY ENGINEERING DESIGN AND DEVELOPMENT STANDARDS (EDDS), CHAPTER 4-03, DETAIL 4-130.
MONUMENTS AND PROPERTY CORNERS SHALL BE PROTECTED FROM DISTURBANCE DURING CONSTRUCTION. A LICENSED SURVEYOR SHALL OBTAIN A PERMIT FOR REMOVAL OR REPLACEMENT OF ANY ROW MONUMENTS, SURVEY MONUMENTS, OR PROPERTY CORNERS IN ACCORDANCE WITH STATE LAW AND WAC 332-120 PRIOR TO ANY DISTURBANCE TO THE CORNER. THE POINTS TO BE PROTECTED OR REPLACED SHALL BE RELOCATED BY THE PROJECT SURVEYOR OR ENGINEER AND SHOWN ON THE CONSTRUCTION PLANS.
50. WHEN ABUTTING NEW PAVEMENT TO EXISTING PAVEMENT THE CONTRACTOR SHALL NEAT LINE SAWCUT, CLEAN, HEAT AND TACK EXISTING PAVEMENT WITH SEALER CSS-1 AND SEAL WITH AR4000 AND SAND. SAWCUT SHALL BE A MINIMUM OF 1 FOOT INSIDE THE EXISTING EDGE OF PAVEMENT. A FOUR FOOT WIDE SECTION OF NEW PAVEMENT IS THE MINIMUM WIDTH REQUIRED.
51. PRIOR TO PLACING ANY SURFACE MATERIALS ON THE ROADWAY, IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER OR UTILITY TO PROVIDE DENSITY TEST REPORTS (AS SPECIFIED IN EDDS) CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF WASHINGTON. TEST RESULTS TO BE SUBMITTED WITH AS-BUILT DRAWINGS.
52. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR INTERIM TRAFFIC CONTROL DURING CONSTRUCTION ON OR ALONG TRAVELED COUNTY ROADWAYS. THE DEVELOPER/CONTRACTOR MUST SUBMIT A TRAFFIC CONTROL PLAN TO PUBLIC WORKS (PERMIT COUNTER) AND RECEIVE APPROVAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.
53. CONSISTENT WITH EDDS CHAPTER 8-05, ANY DEVELOPERS, UTILITIES, OR OTHERS INTENDING TO TRENCH IN EXISTING OR PROPOSED COUNTY RIGHT-OF-WAY SHALL NOTIFY PLANNING AND DEVELOPMENT SERVICES INSPECTION SECTION NOT LESS THAN 3 WORKING DAYS PRIOR TO PERFORMING THE WORK, OR MUST APPLY FOR EDDS DEVIATION IF NOT CONSISTENT WITH EDDS CHAPTER 8. THIS NOTIFICATION SHALL INCLUDE:
A. LOCATION OF THE WORK (SITE LOCATION AND LOCATION OF THE TRENCH WORK RELATIVE TO EXISTING/PROPOSED ROADS)
B. PERMIT NUMBER
C. METHOD OF COMPACTION TO BE USED
D. DAY AND HOUR WHEN COMPACTION IS TO BE DONE
E. DAY AND HOUR WHEN TESTING IS TO BE DONE.
54. ALL FIRE HYDRANTS INSTALLATIONS SERVING THE DEVELOPMENT, EITHER PUBLIC OR PRIVATE, SHALL COLOR CODE THE TOPS OF THE HYDRANTS IN ACCORDANCE WITH SEC TABLE 30.53A.330(12)(d). IN ADDITION TO COLOR CODING HYDRANTS THE DEVELOPER SHALL ALSO INSTALL BLUE REFLECTORS TO INDICATE HYDRANT LOCATIONS. COLOR CODING OF THE FIRE HYDRANTS AND THE INSTALLATION OF BLUE STREET REFLECTORS SHALL BE COMPLETED PRIOR TO FINAL APPROVAL OF ANY DEVELOPMENT OR NEW CONSTRUCTION.

BMP T5.13 - DESIGN CRITERIA

- SOIL RETENTION. THE DUFF LAYER AND NATIVE TOPSOIL SHOULD BE RETAINED IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIRING GRADING REMOVE AND STOCKPILE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SITE WHERE FEASIBLE.
SOIL QUALITY. THE RESULTING SOIL SHOULD BE CONDUCIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED. ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING:
O A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF TEN PERCENT DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT (BASED ON A LOSS-ON-IGNITION TEST) IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE ORIGINAL UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE.
O PLANTING BEDS MUST BE MULCHED WITH 2 INCHES OF ORGANIC MATERIAL.
O QUALITY OF COMPOST AND OTHER MATERIALS USED TO MEET THE ORGANIC CONTENT REQUIREMENTS:
1. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION (BMP T7.30), WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE.
2. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 35% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1.
3. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
O CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING THE REQUIREMENTS ABOVE, OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220.
IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW.
O LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
O AMEND DISTURBED SOIL ACCORDING TO THE FOLLOWING PROCEDURES:
1. SCARIFY SUBSOIL TO A DEPTH OF ONE FOOT
2. IN PLANTING BEDS, PLACE THREE INCHES OF COMPOST AND TILL IN TO AN EIGHT-INCH DEPTH.
3. IN TURF AREAS, PLACE TWO INCHES OF COMPOST AND TILL IN TO AN EIGHT-INCH DEPTH.
4. APPLY TWO TO FOUR INCHES OF ARBORIST WOOD CHIP, COARSE BARK MULCH, OR COMPOST MULCH TO PLANTING BEDS AFTER FINAL PLANTING.
IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE ORGANIC MATTER AND DEPTH REQUIREMENTS.

MAINTENANCE

- SOIL QUALITY AND DEPTH SHOULD BE ESTABLISHED TOWARD THE END OF CONSTRUCTION AND, ONCE ESTABLISHED, SHOULD BE PROTECTED FROM COMPACTION, SUCH AS FROM LARGE MACHINERY USE, AND FROM EROSION.
SOIL SHOULD BE PLANTED AND MULCHED AFTER INSTALLATION.
PLANT DEBRIS OR ITS EQUIVALENT SHOULD BE LEFT ON THE SOIL SURFACE TO REPLENISH ORGANIC MATTER.

ESTIMATED COMPOST OR TOPSOIL QUANTITY BY AREA

Table with 6 columns: DESCRIPTION, APPLICATION, AREA (SQUARE FEET), DEPTH (INCHES), MATERIAL, QUANTITY (CUBIC YARDS). Rows include INFREQUENTLY MAINTAINED SEEDED AREAS, PLANTING AREAS, MAINTAINED TURF/LAWN AREAS.

TOTAL COMPOST (CY)\*: 4,918
TOTAL TOPSOIL (CY): 699

\*TILLING COMPOST INTO GRAVEL BORROW OR STRUCTURAL FILL WILL NOT MEET THE MINIMUM REQUIREMENTS FOR PREPARING THE PLANTING AREAS AND ESTABLISHING THE PROPOSED PLANTING. IF NATURAL SUBGRADE CANNOT BE USED, IMPORTED TOPSOIL IS RECOMMENDED.

DYNAMIC COMPACTION SPECIFICATIONS:

- DYNAMIC COMPACTION FOR THE COVER SYSTEM 2 WITHIN THE LANDFILL CLOSURE SHALL MEET THE FOLLOWING GENERAL REQUIREMENTS.
75 FOOT DROP HEIGHT.
12 TON WEIGHT.
12-FT CENTER TO CENTER SPACING WITH TRIANGULAR PATTERN.
4 DROPS PER POINT.
ONE PASS UNLESS DIRECTED BY GEOTECHNICAL ENGINEER ON ADDITIONAL PASS IS NEEDED.
VARIATIONS OF THESE REQUIREMENTS MUST BE APPROVED BY ENGINEER OBSERVING THIS OPERATION IN FIELD.
MONITOR VIBRATION AT PROPERTY BOUNDARY CLOSEST TO PROPERTY BOUNDARY.

FILE NAME: P:\P09\09382\_00\_GO\_EAST\CAD\FIGURES\LANDFILL\_CLOSURE\2018\ASBUILT\2018\_P09382\_GN-DET.DWG
SAVE TIME: 6/8/2022 9:20:46 AM
PLOT TIME: 6/8/2022 10:15 AM
XREF FILES: PACES.WX2

Vertical sidebar containing logos for PACE Engineering Services Company and the State of Washington Department of Ecology. Includes project title 'GO EAST LANDFILL CLOSURE', 'GENERAL NOTES', and a revision table at the bottom with columns for SCALE, DATE, DESIGNED BY, CHECKED BY, JOB NUMBER, DWG NAME, and SHEET/OF.

108TH ST SE  
EX FIRE HYDRANT

42ND DRIVE SE

11TH ST SE

SEE SHEET 4 FOR  
DESIGN OF WATER

FOR DETAILED WALL ELEVATIONS, SEE  
SHEETS 19 & 20. DESIGN OF WALLS OVER  
4' IN HEIGHT REQUIRED BY PROFESSIONAL  
ENGINEER UNDER SEPARATE PERMIT.

SPRING BOX

LIMITS OF  
LANDFILL  
MATERIAL

BUTTRESS FILL

APPROXIMATE EXISTING  
LANDFILL LIMITS

DETENTION POND  
MONITORING VAULT,  
SEE DETAIL  
4 ON SHEET 8

FINAL  
LANDFILL  
LIMITS

DETENTION POND

APPROXIMATE  
PROPOSED  
LANDFILL LIMITS

STREAM RELOCATION  
SEE SECTION DETAIL ON SHEET 7.  
SEE PLAN ON SHEET 18

SEE SHEET 18 FOR PLAN & PROFILE

25 TYPE 2-48"  
W/DEBRIS CAGE  
RIM 247.42

MW-9  
MW-6  
MW-10  
MW-5

19 CONTROL STRUCTURE  
RIM 226.31

MONITORING  
DRAINS

POND OUTLET  
IE 221.0

219LF 18" HDPE  
S=0.91%

15LF 18" HDPE  
S=0.00%

42LF 8" DI  
S=0.00%

19LF 18" HDPE  
S=1.03%

15LF 18" HDPE  
S=0.00%

47LF 24" LCPE  
S=1.58%

95LF 24" LCPE  
S=0.96%

139LF 24" LCPE  
S=0.63%

83LF 24" LCPE  
S=0.65%

25LF 12" LCPE  
S=11.84%

28LF 8" LCPE  
S=2.21%

22LF 8" LCPE  
S=20.02%

112LF 8" LCPE  
S=20.02%

CB 26, TYPE 1  
N= 330686.13  
E= 1312480.40  
RIM= 222.79  
IE OUT= 217.43 (8" N)

CB 16-1, TYPE 1  
N= 330635.55  
E= 1312479.84  
RIM= 226.41  
IE OUT= 222.56 (8" S)

CB 16, TYPE 2-48"  
N= 330608.21  
E= 1312475.97  
RIM= 228.15  
IE IN= 220.62 (24" S)  
IE IN= 221.95 (8" N)  
IE OUT= 220.62 (24" NW)

CB 15, TYPE 2-48"  
N= 330525.76  
E= 1312485.28  
RIM= 227.92  
IE IN= 221.14 (24" SW)  
IE OUT= 221.14 (24" N)

CB 14, TYPE 2-48"  
N= 330454.33  
E= 1312423.25  
RIM= 228.01  
IE IN= 222.05 (24" SW)  
IE IN= 222.05 (12" NW)  
IE OUT= 222.05 (24" NE)

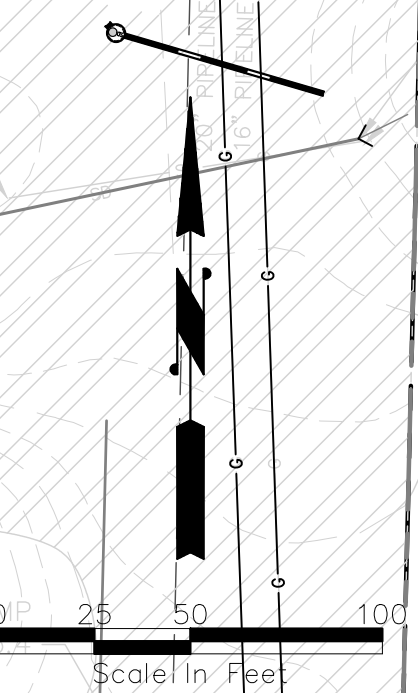
CB 14A, TYPE 1  
N= 330475.60  
E= 1312410.27  
RIM= 227.99  
IE OUT= 225.00 (12" SE)

**STORM STRUCTURES \***

- 20A TYPE 2-48"  
EMERGENCY OVERFLOW  
RIM 224.66  
IE OUT= 220.80 (18" N)
- SDMH 18, SDMH 72"  
W/MATERIALS SEPARATOR  
N= 330667.56  
E= 1312350.40  
RIM= 226.00  
IE IN= 219.75 (24" SE)  
IE OUT= 219.75 (24" SW)

NOTE:  
SURFACE WATER PIPING  
CONSTRUCTED UNDER LDA #1&2  
SNOHOMISH COUNTY  
REQUIREMENTS

NOTE:  
DETENTION POND OUTLET PIPING  
REVISED AND APPROVED MARCH 17,  
2022 REVISED DRAWINGS FOR LDA #1.  
CONSTRUCTION UNDER LDA #2.



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6/9/2021  
4/21/21  
DATE

ROAD ALIGNMENT & LOT GRADING  
REVISION TO WATER MAIN LOCATION  
SYM

**GO EAST**  
**LANDFILL CLOSURE**  
**COMPOSITE UTILITY PLAN**

SCALE: AS SHOWN	DATE: 6/9/2021
DESIGNED BY: MP	CHECKED BY: MP
JOB NUMBER P09382.00	
DWG NAME: P09382_LF-CUP	
SHEET <b>11</b> OF <b>25</b>	

FILE NAME: P:\P09382\_00\_GO\_EAST\CAD\FIGURES\SHEETS\LANDFILL\_CLOSURE\_2018\ASBUILT\2018\_P09382\_LF-CUP.DWG  
SAVE TIME: 6/8/2022 10:00:25 AM  
PLOT TIME: 6/8/2022 10:16 AM  
XREF FILES: X09382\_SIT, X09382\_SITE, CONTOURSSET\_200FTBUFFER, X09382\_UT, X09382\_SD, X09382\_PREPLATBDR.

STANDARD SPECIFICATIONS

ALL WORK, MATERIALS, AND TESTING SHALL CONFORM TO THE LATEST AMENDED VERSION OF THE "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" PREPARED BY WSDOT/APWA, EXCEPT AS HEREIN SUPPLEMENTED OR MODIFIED.

HTTP://WWW.WSDOT.WA.GOV/BUSINESS/CONSTRUCTION/SPECIFICATIONS/AMENDMENTS/GSPS.HTM

THE STANDARD SPECIFICATIONS ARE MODIFIED BY THE PROVISIONS AND REQUIREMENTS LISTED BELOW, CALLOUT ON DRAWINGS AND REQUIREMENTS CONTAINED IN THE GO EAST LANDFILL CLOSURE PLAN WITH UPDATES TO JANUARY 2018 INCLUDING APPENDICES.

INTENT AND INTERPRETATION OF CONTRACT DOCUMENTS

- 1. INTENT OF THE CONTRACT DOCUMENTS: THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND WHAT IS CALLED FOR BY ONE IS AS BINDING AS IF CALLED FOR BY ALL...
2. DRAWINGS: DRAWINGS INCLUDE DESIGNS, LAYOUTS, CONDITIONS, SPECIFICATIONS, REQUIREMENTS, AND GENERAL DIRECTION...
3. ORDER OF PRECEDENCE OF CONTRACT DOCUMENTS: IN RESOLVING CONFLICTS RESULTING FROM ERRORS OR DISCREPANCIES IN ANY OF THE CONTRACT DOCUMENTS, THE ORDER OF PRECEDENCE SHALL BE AS FOLLOWS:

- 1) PERMITS FROM OTHER AGENCIES AS MAY BE REQUIRED BY LAW
2) CHANGE ORDERS
3) CONTRACT AGREEMENT
4) ADDENDA
5) CONTRACTOR'S BID (BID FORMS, IF ANY)
6) GO EAST LANDFILL CLOSURE PLAN WITH APPENDICES
7) DRAWINGS
8) WSDOT STANDARD SPECIFICATIONS AND CURRENT AMENDMENTS
9) TECHNICAL SPECIFICATIONS ON DRAWINGS

WITH REFERENCE TO THE DRAWINGS, THE ORDER OF PRECEDENCE IS AS FOLLOWS:

- 1) FIGURES GOVERN OVER SCALED DIMENSIONS
2) DETAILED DRAWINGS GOVERN OVER GENERAL DRAWINGS
3) ADDENDA/CHANGE ORDER DRAWINGS GOVERN OVER ANY OTHER DRAWINGS
4) DRAWINGS GOVERN OVER STANDARD DRAWINGS
5) DIRECTIONS AND SPECIFICATIONS

LIST OF APPLICABLE SPECIFICATIONS AND CONTROL DOCUMENTS

- 1. STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, PREPARED BY WSDOT/APWA, LATEST VERSION.
2. GO EAST LANDFILL CLOSURE PLAN REVISED JANUARY 2018.
3. GO EAST LANDFILL CLOSURE PLAN, APPENDIX A, GEOTECH REPORT BY ASSOCIATED EARTH SCIENCES, REVISED FEB. 28, 2013 WITH EXPLORATION LOGS.
4. GO EAST LANDFILL CLOSURE PLAN, APPENDIX E, GEOMEMBRANE LINER MANUAL AND LLDPE SPECIFICATION AND REQUIREMENTS.
5. GO EAST LANDFILL CLOSURE PLAN, APPENDIX I, WASTE EXCAVATION, SCREENING, AND DISPOSAL.
6. GO EAST LANDFILL CLOSURE PLAN, APPENDIX K, AND UPDATE OF THE CONSTRUCTION QUALITY ASSURANCE PLAN PREPARED TO SUPPORT THIS LDA DOCUMENT.
7. SILVER LAKE WATER AND SEWER DISTRICT, STANDARD SPECIFICATIONS AND DEVELOPER EXTENSION REQUIREMENTS FOR EXTENSION OF WATER SERVICE TO THE PROPERTY.

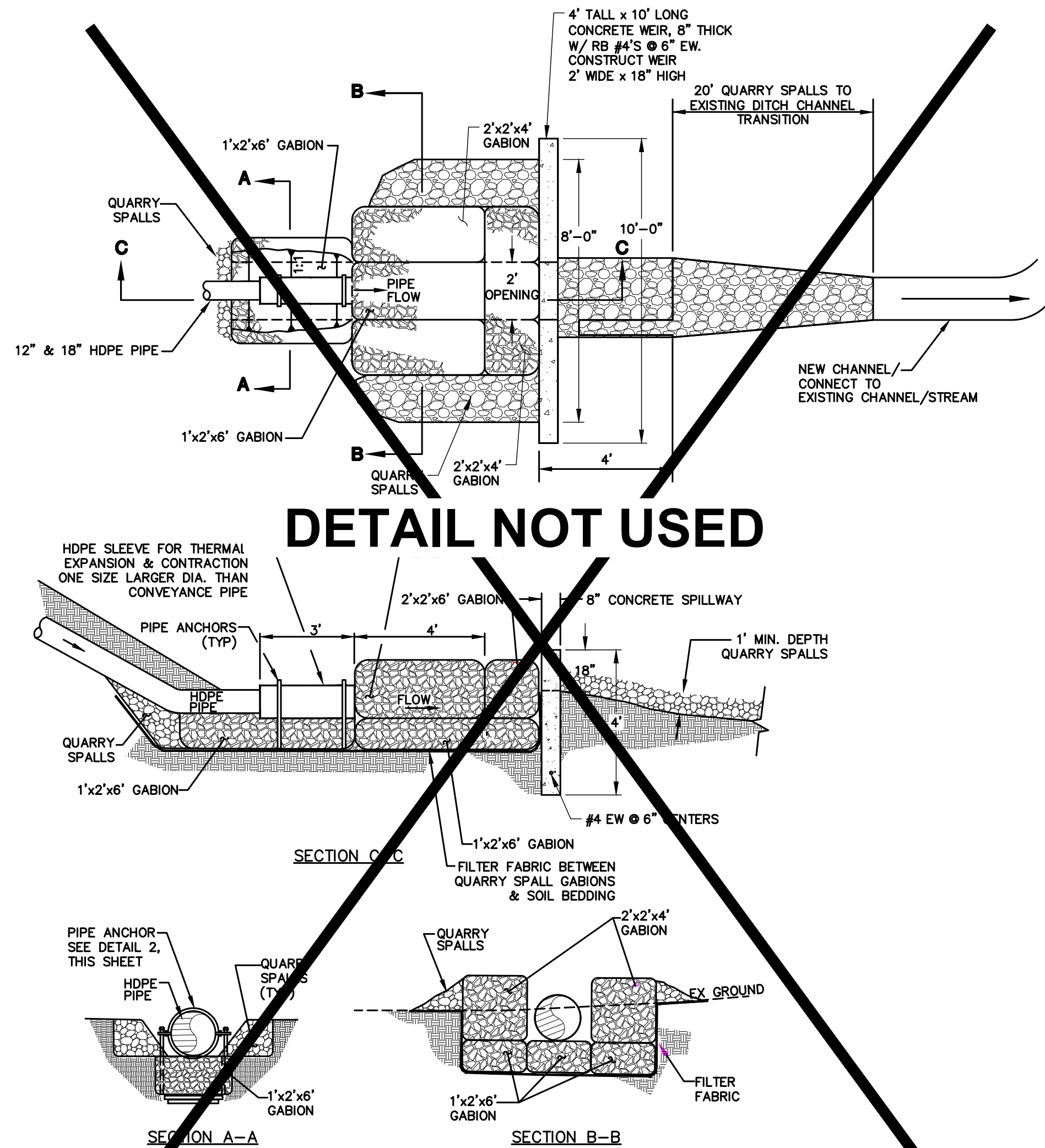
PERMITS AND APPROVALS REQUIRING COMPLIANCE

- 1. DEPARTMENT OF ECOLOGY, CONSTRUCTION STORMWATER GENERAL PERMIT (CSWGP) # WAR306901.
2. SNOHOMISH HEALTH DISTRICT, SOLID WASTE FACILITY PERMIT # SW-027.
3. DEPARTMENT OF THE ARMY, NATIONWIDE PERMIT (NWP) 29, # NWS-2014-552.
4. DEPARTMENT OF ECOLOGY LETTER DATED APRIL 20, 2017, NWR #29 APPROVAL MEETS REQUIREMENT OF WASHINGTON STATE 401 WATER QUALITY CERTIFICATION.
5. DEPARTMENT OF ECOLOGY LETTER JUNE 1, 2018, SHD PERMIT # SW-027, CONCURRENCE THAT PERMIT, AND FACILITY CLOSURE CONFORM TO APPLICABLE LAWS AND REGULATIONS AND APPROVED COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN.
6. FOREST PRACTICE PERMIT ISSUED FOR THE BAKERVIEW PROJECT.
7. APPLICABLE SNOHOMISH COUNTY STREET USE AND LDA AND OTHER RELATED PROJECT PERMITS.
8. WASHINGTON DEPARTMENT OF FISH AND WILDLIFE HYDRAULIC PROJECT APPROVAL PERMIT #2018-4-764+01.

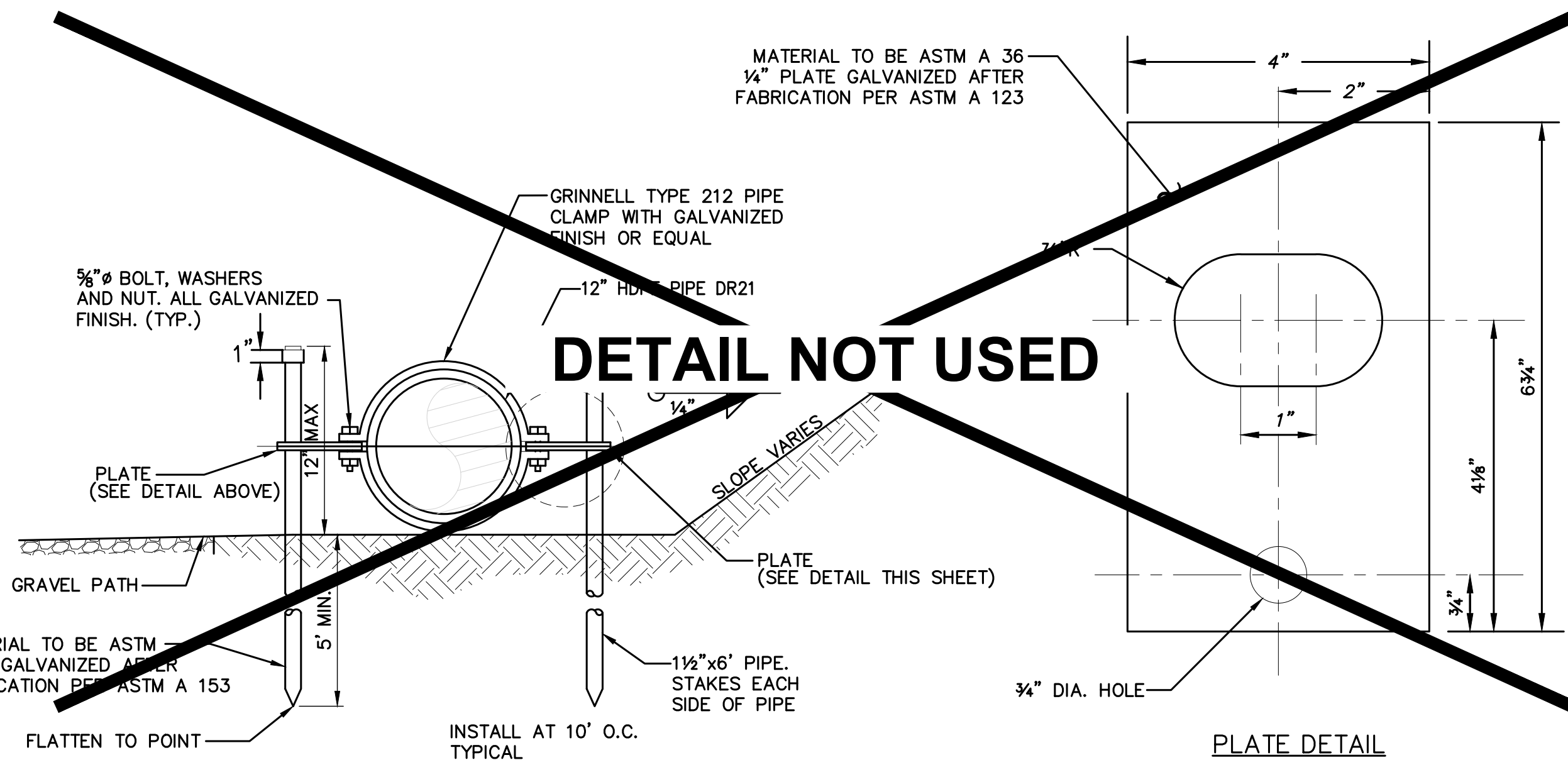
LANDFILL CLOSURE SPECIFICATIONS AND REQUIREMENTS

THE FOLLOWING SPECIFICATIONS APPLY TO THE GO EAST LANDFILL CLOSURE ACTIVITIES ONLY, AND NOT TO THE BAKERVIEW PLAT OR LAND DISTURBANCE ACTIVITY PERMIT ISSUED FOR THE BAKERVIEW PLAT WORK.

- 1. LOG, CLEAR, AND REMOVE VEGETATIVE MATERIAL FROM THE LANDFILL AREA. REMOVE LOGS AND BRUSH FROM SITE, CHIP AND STOCKPILE LIMBS TO BE PROTECTED ONSITE FOR FUTURE USE OR REMOVE FROM SITE AS DEEMED APPROPRIATE. COMPLY WITH FOREST PRACTICE PERMIT REQUIREMENTS.
2. REMOVE TOPSOIL/ORGANIC SOILS, STOCKPILE, AND COVER AND PROTECT ONSITE FOR FUTURE REUSE ON THE RECONFIGURED LANDFILL AREA IF ANY EXISTS.
3. REMOVE PREVIOUSLY PLACED "COVER" MATERIAL THAT IS NOT CONTAMINATED BY LANDFILL MATERIAL OVER THE LANDFILL LYING BELOW THE REMOVED TOPSOIL (ITEM 2 ABOVE), STOCKPILE ONSITE, AND PROTECT BY COVERING WITH PLASTIC SHEETING, OR EQUAL FOR FUTURE REUSE ON THE RECONFIGURED LANDFILL.
4. MAINTAIN PLASTIC SHEETING COVER OVER ALL EXPOSED LANDFILL NOT BEING WORKED, MAXIMUM ONE ACRE CAN BE WORKED AT ANY ONE TIME AND IT MUST BE COVERED NIGHTLY WITH PLASTIC SHEETING.
5. GRADE, PROOF-ROLL AND COMPACT THE LANDFILL SURFACE FOR THE AREA INSIDE THE "WEDGE" THAT IS TO REMAIN. SEE SECTION 9.0 SITE PREPARATION OF THE GEOTECH REPORT, APPENDIX A OF THE LANDFILL CLOSURE PLAN FOR FURTHER REQUIREMENTS.
6. STRUCTURAL FILL SHALL BE PLACED IN THE "WEDGE AREA" AND FILL AREAS OUTSIDE THE RECONFIGURED LANDFILL AS DESCRIBED IN SECTION 10.0 OF THE GEOTECH REPORT CONTAINED IN APPENDIX A OF THE LANDFILL CLOSURE PLAN.
7. SOILS PLACED OVER THE GEOMEMBRANE SHOULD HAVE A MAXIMUM PARTICLE SIZE OF 2 INCHES (NOT CRUSHED/FRACTURED) AND NOT CONTAIN ANY LANDFILL OR DELETERIOUS MATERIAL. IT IS ANTICIPATED COVER MATERIAL WILL BE FROM ONSITE EXCAVATION LOCATED OUTSIDE THE LANDFILL PROPER BUT COULD INCLUDE IMPORT MATERIAL INCLUDING TOPSOILS.
8. GEOMEMBRANE: THE GEOMEMBRANE SHALL BE LLDPE (LINEAR LOW DENSITY POLYETHYLENE GEOMEMBRANE) 40 MILS THICK AND DOUBLE-SIDED TEXTURED AND MEET THE REQUIREMENTS CONTAINED IN THE APPROPRIATE TABLE IN APPENDIX E OF THE LANDFILL CLOSURE PLAN.
9. GEOCOMPOSITE DRAINAGE LAYER: GEOCOMPOSITE DRAINAGE LAYER SHALL BE PLACED DIRECTLY OVER THE GEOMEMBRANE IN ALL AREAS, UNLESS SHOWN OTHERWISE.
10. SAND CUSHION GEOMEMBRANE SUBGRADE: PLACE OVER COMPACTED LANDFILL A 6-INCH LAYER OF ON-SITE SANDY SOIL AND GRADE AND COMPACT BY TRACK-WALKING WITH DOZER (MINIMUM 4 PASSES) TO PRODUCE A SMOOTH SUBGRADE FOR THE GEOMEMBRANE.
11. GAS TRENCH CONSTRUCTION: 11.1 GRAVEL GAS COLLECTION TRENCH: CONSTRUCT A MINIMUM 12-INCH-WIDE GRAVEL TRENCH FROM JUST UNDER THE GEOMEMBRANE.
12. GAS PROBES SHALL BE LOCATED AT A SPACING OF ABOUT 100 FEET AS SHOWN ON SHEET 4. PROBE SHALL BE SHOWN ON SHEET 8, DETAIL 7 AND BE INSTALLED BY A LICENSED WELL DRILLER AND UNDER THE DIRECTION OF A LICENSED GEOLOGIST.
13. STORM PIPING AND STRUCTURES: STORMWATER PIPING SHALL BE N-12 OR APPROVED EQUAL, AND STRUCTURES PER STANDARD SPECIFICATIONS.
14. TESOP AND LANDSCAPING: CONSTRUCT AND MAINTAIN AS SPECIFIED AND SHOWN ON THESE DRAWINGS.
15. COMPLY WITH SNOHOMISH COUNTY REQUIREMENTS AS PROVIDED ON SHEET 10.



1 GABION OUTFALL/ENERGY DISSIPATOR DETAIL NTS



2 PIPE ANCHOR DETAILS NTS

FILE NAME: P:\P09\09382\_00\_GO EAST\CAD\FIGURES\SHEETS\LANDFILL\_CLOSURE\2018\ASBUILT\2018\P09382\_LF-POND.DWG
SAVE TIME: 3/17/2022 1:22:37 PM
PLOT TIME: 6/8/2022 10:18 AM
XREF FILES: X09382\_SIV, X09382\_SITE, X09382\_CONTOURSSFT, X09382\_VCMAP, X09382\_BUFFER, X09382\_GR, X09382\_SD, X09382\_EC, X09382\_FILL\_AREAS, X09382\_PREPLATEBOR.

PACE logo and contact information: 11255 Kirkland Way, Suite 300, Kirkland, WA 98033, p. 425.827.2014 f. 425.827.9043



Table with project details: GO EAST LANDFILL CLOSURE, SCALE: MP, DATE: 6/9/2021, DESIGNED BY: MP, CHECKED BY: MP, JOB NUMBER: P09382.00, DWG NAME: P09382\_LF-POND, SHEET 14 OF 25.