

เอกสารแนบ 2-19

สำเนาเอกสารกรมธรรม์ประกันภัย



เอกสารแสดงรายละเอียดการประกันภัย

ซึ่งมีผลบังคับใช้ตั้งแต่วันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 กรกฎาคม 2568

๖. ตามสัญญา

- ทรัพย์สินเดิมของผู้จ้าง (Existing property)
10% ของความเสียหาย ขึ้นต่ำ 50,000.- บาท ต่อเหตุการณ์ที่เกิดขึ้นแต่ละครั้งและทุกครั้งที่
สำหรับทรัพย์สินเดิมของผู้จ้าง

10% ของความเสียหาย จำนวน 50,000.- บาท ค่าเหตุการณ์ที่เกิดขึ้นแต่ละครั้งจะหักจากรั้ว
สำหรับทรัพย์สินเดิมของผู้จ้าง

- ไม่มีความรู้ผิดส่วนแรก สำหรับการคาดถึง...และสิ่งผิด

- สำคัญที่สุดความเชื่อของชาวยุโรปที่มองว่า

- 10% ของความเสียหาย ขึ้นไป 50,000 บาท ต่อปี

- หรือการยกตัวลงยิ่งต่ำลง (VIBRIS) และลดการมีอิสระภายในไปและเมื่อถึงจุดนี้แล้วผู้วิจัยจะ

ขุดเจาะ/ติดตั้ง/ปรับปรุง/ซ่อมแซม/บำรุงรักษา/เคลื่อนย้าย/กำจัด/หรือดำเนินการอื่นใดเกี่ยวกับระบบสาธารณูปโภคใต้ดิน (Existing Underground Cables or Pipelines)

22

- (เงื่อนไขข้อกำหนดเพื่อให้ความสูญเสียหรือภัยอันเนื่องมาจากพายุ น้ำท่วม แผ่นดินไหว ที่เกิดขึ้นภายใน 72 ชั่วโมง ถือว่าเป็นเหตุการณ์ภัยครั้งเดียว)

- ### 3. Architects' Surveyors' and Consulting Engineers' Fees

4. Automatic Extension of Cover for Contract Works

(3 months subject to additional premium and term

- ## 5. Cessation of Works Clause



เอกสารแสดงรายละเอียดการประกันภัย

ซึ่งมีผลบังคับใช้ตั้งแต่วันที่ 25 พฤษภาคม 2555 ถึงวันที่ 25 กรกฎาคม 2556

၁။ ပုံစံပြန်လဲခြင်း

- จำค่าเงินหุ้นครองสูงสุดไม่เกิน 20,000,000 บาท ต่อครั้ง และตลอดระยะเวลาเข้าประชุม

ถ้า α เป็นจำนวนจริง

- [illegible]

๖. นายสมหมาย หะยา (กรรมการผู้จัดการ) และนายสุวิทย์

จากดวงใจผู้ครอง เติบโตมาจากการปกครอง และตลอดระยะเวลาที่ผ่านมา

๓. ผู้ดูแลระบบ (ผู้ดูแล)

หรือเสียชีวิตและความเสียหายนานัปการทั้งนี้ขึ้นอยู่กับคุณธรรมของบุคคลซึ่งเกิดจากภาวะที่เป็นจิตตามเหตุ

เป็นนิมิตหมายว่าพระบาทสมเด็จพระเจ้าอยู่หัวฯ ทรงมีพระบรมราชโองการโปรดเกล้าฯ ให้ตั้ง

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 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1



วิริยะประกันภัย THE WIRIYA INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๑๑๑ ถนนสุขุมวิท แขวงคลองเตย เขตคลองเตย กรุงเทพมหานคร 10110 โทร 0-2198-8888 www.wiriya.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) PUBLIC COMPANY LIMITED เลขที่ ๑๑๑ ถนนสุขุมวิท แขวงคลองเตย เขตคลองเตย กรุงเทพมหานคร 10110 โทร 0-2198-8888 www.wiriya.co.th

เอกสารนี้ถือเป็นส่วนหนึ่งของกรมธรรม์ประกันภัย (เลขที่ 22101/POL.0000080-304)

เอกสารนี้ใช้บังคับวันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 พฤษภาคม 2568

- (3 months)
6. Error & Omission
(Limit : Bht 20,000,000.- any one accident and in aggregate)
7. Clearance of Debris
(Limit : Bht 10,000,000.- any one accident and in aggregate)
8. Consequence of Faulty Design Clause (DE.3)
(Limit : Bht 10,000,000.- any one accident and in aggregate)
9. Consequential Loss to T/P
(Limit : Bht 10,000,000.- any one accident and in aggregate)
10. Cross Liability Clause
(20% of TCV)
11. Escalation Clause
(20% of TCV)
12. Extended Maintenance Period
(24 months)
13. Inland Transit Clause
(Limit : Bht 20,000,000.- any one accident and in aggregate)
14. Insured Contract Works Taken Over or Put into Use Clause
(45 days)
15. Loss Notification Clause
(45 days)
16. Mitigation Expenses
(Limit : Bht 20,000,000.- any one accident and in aggregate)
17. Off-Site Storage Clause
(Subject to 24 hours with security guard)
(Limit : Bht 20,000,000.- any one accident and in aggregate)
18. Piling Construction Clause
(MR121)
19. Plan and documents
(With Limit Bht. 20,000,000.- any one accident and in aggregate)
20. Principal's Employees & Representative clause for BI & PD
21. Principal's Employees Not Concerning with the Project as Third Party
22. Principal's Prospective Customers as T/P
(Limit Bht. 20,000,000.- any one accident and in aggregate)
23. Principal's Existing Property
(With VRWS
Limit : Bht. 10,000,000.- any one accident and in aggregate
Excess : Bht. 10% min 30,000.-any one occurrence and in aggregate)



วิริยะประกันภัย THE WIRIYA INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๑๑๑ ถนนสุขุมวิท แขวงคลองเตย เขตคลองเตย กรุงเทพมหานคร 10110 โทร 0-2198-8888 www.wiriya.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) PUBLIC COMPANY LIMITED เลขที่ ๑๑๑ ถนนสุขุมวิท แขวงคลองเตย เขตคลองเตย กรุงเทพมหานคร 10110 โทร 0-2198-8888 www.wiriya.co.th

เอกสารนี้ถือเป็นส่วนหนึ่งของกรมธรรม์ประกันภัย (เลขที่ 22101/POL.0000080-304)

เอกสารนี้ใช้บังคับวันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 พฤษภาคม 2568

24. Riot and Strike Clause
25. Sudden and unforeseen seepage and pollution clause
26. Sue & Labour Clause
(Limit Bht. 20,000,000.- any one accident and in aggregate)
27. Temporary Protection Clause
(Limit : Bht 20,000,000.- any one accident and in aggregate)
28. Temporary removal clause
29. Temporary Repairs Clause
(Limit Bht. 20,000,000.- any one accident and in aggregate)
30. Third Party Liability during Extended maintenance
(24 Months)
31. Third Party Standard Underground Cable & Pipeline Clause
(Limit Bht. 20,000,000.- any one accident and in aggregate)
32. Tool of Trade
(Limit : Bht 20,000,000.- any one accident and in aggregate)
33. VRWS for Total / Partial Collapse Clause (MR120)
(Limit Bht. 20,000,000.- any one accident and in aggregate)
34. Waiver of Subrogation
35. ABSOLUTE ASBESTOS EXCLUSION
ไม่คุ้มครองความเสียหายที่เกิดจากหรือเกี่ยวเนื่องกับสารแร่ใยหินใยหิน
36. Civil commotion exclusion clause
37. COMMUNICABLE DISEASE EXCLUSION LMA 5394
38. PROPERTY CYBER AND DATA ENDORSEMENT LMA 5400
39. Electronic Data and Internet Endorsement
40. Pollution exclusion clause
41. SANCTION LIMITATION AND EXCLUSION
เงินไม่คุ้มครองความเสียหายจากควาพละและบทลงโทษทางก้า
42. War and Terrorism Exclusion Endorsement
43. FULL NUCLEAR EXCLUSION (NMA 1975)
44. EXPEDITING EXPENSE EXCLUDING AIRFREIGHT CLAUSE (20% OF REPAIR COST)
เงินไม่คุ้มครองค่าใช้จ่ายส่วนที่เกิดความเสียหายซึ่งมีให้สำหรับการทำเหมานี้
(20% of repair cost of any damages including AIRFREIGHT)
45. Principals, Principals Representative's & Contractors Office Equipment & Machines at Site, Temporary Site Office, Labour Camp, Stores within or around to the Site
(including TPL 5 Km.)



วิริยะประกันภัย THE VIRIYA INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 55555, 55555 ถนนสุขุมวิท แขวงคลองเตย เขตวัฒนา กรุงเทพมหานคร 10110 โทร 0-2192-6688 www.wiriya.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) 55555, 55555 ถนนสุขุมวิท แขวงคลองเตย เขตวัฒนา กรุงเทพมหานคร 10110 โทร 0-2192-6688 www.wiriya.co.th

เอกสารนี้เป็นส่วนหนึ่งของกรมธรรม์ประกันภัย

เอกสารนี้ใช้เพื่อเป็นหลักฐานการประกันภัย (เลขที่ 22101/POL000000-304)

ผู้รับประกันภัย: บริษัทวิริยะประกันภัย จำกัด (มหาชน) 25555 ถึงวันที่ 25 พฤษภาคม 2558

ผู้รับประกันภัย:

1. ธนาคารพาณิชย์ จำกัด (มหาชน)



วิริยะประกันภัย THE VIRIYA INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 55555, 55555 ถนนสุขุมวิท แขวงคลองเตย เขตวัฒนา กรุงเทพมหานคร 10110 โทร 0-2192-6688 www.wiriya.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) 55555, 55555 ถนนสุขุมวิท แขวงคลองเตย เขตวัฒนา กรุงเทพมหานคร 10110 โทร 0-2192-6688 www.wiriya.co.th

เอกสารนี้เป็นส่วนหนึ่งของกรมธรรม์ประกันภัย

เอกสารนี้ใช้เพื่อเป็นหลักฐานการประกันภัย (เลขที่ 22101/POL000000-304)

ผู้รับประกันภัย: บริษัทวิริยะประกันภัย จำกัด (มหาชน) 25555 ถึงวันที่ 25 พฤษภาคม 2558

72 HOUR FLOOD/STORM/EARTHQUAKE CLAUSE

It is agreed that any loss of or damage to the property insured, arising during any one period of 72 consecutive hours caused by flood, storm, tempest, water damage, subsidence, collapse or earthquake shall be deemed as a single event and therefore to constitute one accident with regard to the sum insured and deductibles provided for in section II of this policy. The insured shall select the time from which any such period shall commence, but not two such selected periods shall overlap.

SUPPLIER COVERED AS THE THIRD PARTY

The insurance under Section III of this Policy is extended to include Suppliers of the Principal and their personal properties as third parties. Provided that such persons shall observe fulfill and be subject to terms exceptions limits provisions and conditions of this Policy insofar as they apply. It is understood that this Policy does not cover Professional Liability Subject otherwise to all other terms exceptions and conditions of this Policy.

ARCHITECTS' SURVEYORS' AND CONSULTING ENGINEERS' FEES CLAUSE

This Policy cover Architects' Surveyors' & Consulting Engineers' Fee necessarily incurred by the insured in the reinstatement of the property insured following upon its destruction or damage by any peril hereby insured against (but not any fees for the preparation of a claim or estimate of loss) not exceeding Baht 20,000,000.- any one accident and in aggregate per period of insurance.

AUTOMATIC EXTENSION OF CONTRACT PERIOD

It is hereby understood and agreed that the insurers shall automatically extend the period of insurance under the policy for 3 months if there is any delay in completion of the Contract at additional premium to be agreed Such additional premium to be payable on commencement of the extension in period.

CESSATION OF WORK

It is hereby declared and agreed that cover under the Policy shall not be suspended in the event of stoppage of work by the contractor on the contract site from any cause for a period not exceeding 3 months. In the event of partial or total cessation of work the insured shall and do all things reasonably practicable to protect the insured Property. Subject otherwise to all other terms exceptions and conditions of this Policy.



วิริยะประกันภัย
THE VIRTAN INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๒๒๘ ถนนราชดำเนินกลาง แขวงสามยุค เขตพระนคร กรุงเทพมหานคร ๑๐๐๐ โทร ๐-๒๖๒๔-๘๘๘๘ www.virtan.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๒๒๘ ถนนราชดำเนินกลาง แขวงสามยุค เขตพระนคร กรุงเทพมหานคร ๑๐๐๐ โทร ๐-๒๖๒๔-๘๘๘๘ www.virtan.co.th

เอกสารแนบฉบับนี้แสดงเงื่อนไขการประกันภัย

เอกสารแนบฉบับนี้แสดงเงื่อนไขการประกันภัย (แบบที่ 22101/PC/L0000060-304)

ผู้ซื้อประกันภัยนี้ควรอ่านเงื่อนไขการประกันภัยฉบับนี้ (แบบที่ 22101/PC/L0000060-304) วันที่ 25 พฤษภาคม 2565

ERROR AND OMISSION CLAUSE

If there is any material change in the risk insured during the period of insurance or if any defects or conditions of working are discovered which shows the risk more hazardous the usual the Insured shall notify the Insurers and take such precautions as circumstances may require.

(a) If the development or discovery of a defect in any property manufactured by or on behalf of the Insured shall indicate or suggest that a similar defect exists in the Insured Property the Insurers reserve the right to advise the Insured of intended suspension of the insurance on any such Insured Property at reasonable notice in respect of loss damage due to or arising out of the said defect.

(b) Any unintentional or inadvertent error or omission in name or description or amount or reporting or notification in respect of this Policy by one of the Insured shall not operate to the prejudice of any of the other Insureds, providing the error or omission is corrected when discovered by the Insured.

REMOVAL OF DEBRIS CLAUSE

The insurance by Policy include costs and expenses necessarily incurred by the Insured with the consent of the Insurer in:

a) removing debris

b) dismantling and/or demolishing

Following any loss or damage covered by this Policy. The liability of the Insurer under this clause shall not exceed Baht 20,000,000.- for any one accident and in aggregate.



วิริยะประกันภัย
THE VIRTAN INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๒๒๘ ถนนราชดำเนินกลาง แขวงสามยุค เขตพระนคร กรุงเทพมหานคร ๑๐๐๐ โทร ๐-๒๖๒๔-๘๘๘๘ www.virtan.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๒๒๘ ถนนราชดำเนินกลาง แขวงสามยุค เขตพระนคร กรุงเทพมหานคร ๑๐๐๐ โทร ๐-๒๖๒๔-๘๘๘๘ www.virtan.co.th

เอกสารแนบฉบับนี้แสดงเงื่อนไขการประกันภัย

เอกสารแนบฉบับนี้แสดงเงื่อนไขการประกันภัย (แบบที่ 22101/PC/L0000060-304)

ผู้ซื้อประกันภัยนี้ควรอ่านเงื่อนไขการประกันภัยฉบับนี้ (แบบที่ 22101/PC/L0000060-304) วันที่ 25 พฤษภาคม 2565

CONSEQUENCES OF FAULTY DESIGN CLAUSE

1. INSURANCE COVER

1.1 It is agreed and understood that Exclusion No.1 of the material Damage Section (Building and Civil Engineering Works) of the Policy deleted and replaced as follows: 'Loss or damage due to fault, defect, error, failure or omission in design, plans or specifications, but this Exclusion shall be limited to the structure or work directly affected and shall not extend to other structures, work or property lost or damaged as a consequence of such fault, defect error, failure or omission;

Provided always that

1.2 all terms, conditions and exclusions of the Policy shall apply insofar as they are not modified or replaced by the stipulations of this Endorsement.

2. PERIOD INSURANCE

The Period of Insurance for this Endorsement is identical with the contract works period specified in the Schedule.

3. SUM INSURED - ADDITIONAL PREMIUM

3.1 The Sum Insured is identical with the estimated total value of the contract works specified in the Schedule.

3.2 The Additional Premium due is included in the Total Premium shown in the Schedule.

CONSEQUENTIAL LOSS TO THIRD PARTY CLAUSE

It is agreed and understood that the coverage under Section III Third Party Liability (excluding the existing completed principal's property and cross liability Endorsement) of this policy is extended to include consequential loss due to the physical damage directly caused by the performance of the contract insured by this Policy for which the Insured is legally liable. Provided that the liability of the Insurers shall be subject to the limit and deductible stated below

Subject otherwise to the terms, provisions and conditions of this Policy.

Limit : Bht 10,000,000.- any one accident and in aggregate



วิริยะประกันภัย THE VIRIYAPRASANNA INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 15100, 15100 อาคารที่ 15 ถนนวิสุทธิกษัตริย์ แขวงวิสุทธิกษัตริย์ เขตวิสุทธิกษัตริย์ กรุงเทพมหานคร 10100 โทร 0-2126-6888 www.viriyaprasanna.com บริษัทวิริยะประกันภัย จำกัด (มหาชน) 15100 อาคารที่ 15 ถนนวิสุทธิกษัตริย์ แขวงวิสุทธิกษัตริย์ เขตวิสุทธิกษัตริย์ กรุงเทพมหานคร 10100 โทร 0-2126-6888 www.viriyaprasanna.com

เอกสารแนบสัญญาประกันภัย

เอกสารแนบสัญญาประกันภัยฉบับนี้ (ฉบับที่ 22101/POL/000000-304)
มีผลบังคับใช้ตั้งแต่วันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 กันยายน 2569

GROSS LIABILITY CLAUSE

1. Insurance Cover

- 1.1 it is agreed and understood that for the purpose of the third party liability section of the Policy, any person or body specified as the insured in the schedule shall be considered as a separate and distinct entity and the words "the insured" shall be considered as applying to each such person or body as if a separate Policy had been issued to each of them in his name alone. The insurers waive all rights of subrogation which they may have or acquire against the said persons or bodies.
- 1.2 nothing in this clause shall be deemed to increase the insurers' liability beyond the limits of indemnity state in the schedule.
- 1.3 all other terms, conditions and exclusions of the Policy shall apply insofar as they are not modified or replaced by the stipulations of this endorsement.

2. Special Exclusions

The insurers shall not be liable for :

- 2.1 any loss of or damage to property which is or could have been insured under the material damage section of the Policy
- 2.2 any loss of or damage to adjoining property which is owned by one of the insured.

3. Period of Insurance

The period of insurance for the endorsement is identical to the period of insurance specified in the schedule for the third party liability section.

4. Limit of Liability - Additional Premium

- 4.1 the limit of liability under this endorsement is the amount entered in the schedule under the third party liability section.
- 4.2 the additional premium due is calculated with regard to exposure and sum insured and included in the total premium shown in the schedule.



วิริยะประกันภัย THE VIRIYAPRASANNA INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 15100, 15100 อาคารที่ 15 ถนนวิสุทธิกษัตริย์ แขวงวิสุทธิกษัตริย์ เขตวิสุทธิกษัตริย์ กรุงเทพมหานคร 10100 โทร 0-2126-6888 www.viriyaprasanna.com บริษัทวิริยะประกันภัย จำกัด (มหาชน) 15100 อาคารที่ 15 ถนนวิสุทธิกษัตริย์ แขวงวิสุทธิกษัตริย์ เขตวิสุทธิกษัตริย์ กรุงเทพมหานคร 10100 โทร 0-2126-6888 www.viriyaprasanna.com

เอกสารแนบสัญญาประกันภัย

เอกสารแนบสัญญาประกันภัยฉบับนี้ (ฉบับที่ 22101/POL/000000-304)
มีผลบังคับใช้ตั้งแต่วันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 กันยายน 2569

ESCALATION CLAUSE

If during the period of insurance the actual Contract Price shall in excess of the Original Contract Price then the Sum Insured as shown in the Schedule of the Policy shall be increased by the amount of such excess but not exceeding in all 20% of the Sum Insured.

Upon completion of the Contract works, the Insured shall furnish to the Insurers a declaration of the actual Contract Price and if such price shall differ from the original Contract Price the premium will be adjusted accordingly by applying the agreed rate of any subsequent amended rating as may be agreed to the actual Contract Price.

In the event of loss or damage in respect of which payment is made by the Insurers the Insurance hereunder shall be maintained in force for the Sum Insured in consideration of the Insured having agreed to pay an appropriate reinstatement premium on the amount of the loss which premium shall be disregarded for the purpose of any adjustment of premium mentioned above.



วิริยะประกันภัย
THE VIREAN INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 12100, 12100 ถนนพหลโยธิน แขวงสามยุค กรุงเทพมหานคร 10600 โทร 0-2108-8888 www.virean.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) 12100, 12100 ถนนพหลโยธิน แขวงสามยุค กรุงเทพมหานคร 10600 โทร 0-2108-8888 www.virean.co.th

เอกสารนี้ถือเป็นส่วนหนึ่งของกรมธรรม์ประกันภัย (เลขที่ 22101/PCU/000060-304)

ซึ่งมีผลบังคับใช้ตั้งแต่วันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 พฤษภาคม 2569

EXTENDED MAINTENANCE COVER (24 MONTHS)

The insurance policy is extended for the maintenance period on condition that its cover shall be limited as follows :

1. INSURANCE COVER

- 1.1 It is agreed and understood that the insurers will indemnify the insured contractor (s) solely for loss of or damage to the policy insured under the material damage section of this policy, occurring during the maintenance period specified in the schedule and only when it is caused by
 - the contractor (s) whilst at the contract site for the purpose of doing any work in order to comply with the maintenance obligations under the contract
 - any act or omission of the contractor (s) whilst at the contract site during the contract works period specified in the schedule.
- 1.2 all terms, conditions, exclusions and endorsements of the policy referring to or contained in the material damage section shall apply insofar as they are not modified or replaced by the stipulations of this endorsement.

2. MAINTENANCE PERIOD

the maintenance period shall commence for the entire works upon completion of commissioning and testing or whenever the works are taken over or taken into use, whichever is earlier. It shall end on the date specified in the schedule. If individual parts of the works are tested, taken over or taken into use, the maintenance period shall begin and expire for each such part individually and shall not exceed the period in months specified in the schedule. The insured shall notify the insurers of such gradual taking over.

3. sum insured - additional premium
- 3.1 the sum insured is identical to the estimated total contract value at completion of the contract works.
- 3.2 the additional premium due is calculated on the sum insured and shall be adjusted for any change in such sum.



วิริยะประกันภัย
THE VIREAN INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 12100, 12100 ถนนพหลโยธิน แขวงสามยุค กรุงเทพมหานคร 10600 โทร 0-2108-8888 www.virean.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) 12100, 12100 ถนนพหลโยธิน แขวงสามยุค กรุงเทพมหานคร 10600 โทร 0-2108-8888 www.virean.co.th

เอกสารนี้ถือเป็นส่วนหนึ่งของกรมธรรม์ประกันภัย (เลขที่ 22101/PCU/000060-304)

ซึ่งมีผลบังคับใช้ตั้งแต่วันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 พฤษภาคม 2569

INLAND TRASIT CLAUSE

Notwithstanding anything contained herein to the contrary, it is hereby understood and agreed that the insurance under this Policy is extended to cover loss or damage to the property insured under Material Damage Section whilst such property is in transit by roadvehicles within Thailand to the Contract Site for the purpose of pursuing the contract works insured under this policy including the risk of loading and unloading.

Provided that the said property is not covered by other policies and the Liability of the insurer under this extension subject to the limit of indemnity and excess stated hereunder:-
Limit : Bht 20,000,000.- any one accident and in aggregate

COVER FOR INSURED CONTRACT WORKS TAKEN OVER OR PUT INTO SERVICE CLAUSE

It is agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the Policy or endorsed thereon and subject to the insured having paid the agreed extra premium, the insurance shall be extended to cover loss of or damage to parts of the insured contract works taken over or put into service if such loss or damage emanates from the construction of the items insured under section I and happens during the period of cover.

LOSS NOTIFICATION CLAUSE

It is understood and agreed that in the event of any occurrence which might give rise to a claim under the policy the insurers shall not in any case be liable for loss, damage or liability of which no notice has been received by the insurers within 45 days of its occurrence.

MITIGATION EXPENSES CLAUSE

It is hereby declared and agreed that this Policy extends to cover all expenses reasonably incurred by or on behalf of the insured in extinguishing fires or in mitigating, containing or suppressing loss, destruction or damage by any peril, hereby insured against, occurring at or adjacent to or immediately threatening the situation of any property insured by this Policy. It is further declared and agreed that the indemnity afforded by this clause shall include (but not be limited to) the payment of wages to insured's employees (other than full-time members of a works Fire Brigade), the cost of replenishing fire-fighting appliances; and the cost of replacing, reinstating or repairing materials and equipment lost, destroyed or damaged (including Directors', Partners', Proprietors', Employees' and Volunteers' clothing and personal effects). Provided always that the liability of the Company in respect of such wages and costs, shall also be limited to those necessarily and reasonably incurred.

Limit : Bht 20,000,000.- any one accident and in aggregate



วิริยะประกันภัย
THE VIRYAH INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 12100, 12100 ถนนพหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10000 โทร 0-2106-8888 www.virayah.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) 12100, 12100 ถนนพหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10000 โทร 0-2106-8888 www.virayah.co.th

เอกสารนี้เป็นเอกสารของบริษัทวิริยะประกันภัย จำกัด (มหาชน) (เลขที่ 221/01/PCU/0000000-3004)

ผู้ซื้อประกันภัยต้องปฏิบัติตามเงื่อนไข 25 พฤษภาคม 2565 ถึงวันที่ 25 พฤษภาคม 2565

OFF - SITE STORAGE CLAUSE(SUBJECT TO 24 HOURS WITH SECURITY GUARD)

It is agreed and understood that otherwise subject to the terms, exclusion, provision and conditions contained in the policy or endorsed thereon, the insurers shall indemnify the insured for loss of or damage to the insured property whilst being kept at location to be named

Limit : Bht 20,000,000.- any one accident and in aggregate

Subject otherwise to all other terms exceptions and conditions of this Policy.

PLING CONSTRUCTION

Notwithstanding the conditions, provisions and other endorsements of the Policy,

it is agreed and understood the insurers shall not be liable to indemnify the insured in respect of :

- Loss of or damaged to piles and/or casings due to misplacement jacking and/or extraction thereof,
- Costs incurred in case of abandoned piling work.
- Costs in Excess of Original Pile Value in Place (Piling TCV divided by number of piles)
- Costs incurred in rectifying undamaged piles which have deviated due to soil movement

PLANS AND DOCUMENTS CLAUSE

(Unit with Bht 20,000,000.- any one accident and in aggregate)

Notwithstanding anything herein contained to the contrary the insurance hereby is extended to indemnify the insured against the necessarily incurred costs of re-writing or re-drawing of plans, drawings or other contract documents lost, destroyed or damaged as a result of a peril insured hereunder wherever or whenever such loss, destruction or damage shall occur.

PRINCIPAL'S EMPLOYEES AND REPRESENTATIVE CLAUSE

The insurance under section III of this Policy is extended to included employee(s)

and/or representative(s) of the principal and their personal properties (other than the

employees and/or workers who are performing the contract insured) as the third party.

Provided that such persons shall observe full and be subject to terms exceptions limits

provisions and conditions of this Policy insofar as they apply.

It is understood that this Policy does not cover professional liability.

PRINCIPAL'S EMPLOYEES WHO NOT RELATED WITH THE PROJECT COVERED AS THIRD PARTY CLAUSE

This insurance under Section III of this Policy is extended to include Principal's Employees who

are not concerning with the project and their personal property as the Third Party.

Provided that such persons shall observe full and be subject to terms, exceptions, limits,

provision and conditions of this Policy insofar as they apply.

Limit of Indemnity: as per the limits stated in the Policy Schedule.



วิริยะประกันภัย
THE VIRYAH INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 12100, 12100 ถนนพหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10000 โทร 0-2106-8888 www.virayah.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) 12100, 12100 ถนนพหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10000 โทร 0-2106-8888 www.virayah.co.th

เอกสารนี้เป็นเอกสารของบริษัทวิริยะประกันภัย จำกัด (มหาชน) (เลขที่ 221/01/PCU/0000000-3004)

ผู้ซื้อประกันภัยต้องปฏิบัติตามเงื่อนไข 25 พฤษภาคม 2565 ถึงวันที่ 25 พฤษภาคม 2565

PRINCIPAL'S PROSPECTIVE CUSTOMER AS THIRD PARTY

The insurance under Section III of the policy is extended to include Principal's prospective

customers and their personal properties as the Third Party.

Provided that such persons shall observe full and be subject to terms exceptions limits

provisions and conditions of this policy insofar as they apply.

PRINCIPAL'S EXISTING PROPERTY CLAUSE

1. INSURANCE COVER

- 1.1 It is agreed and understood that the insurer will indemnify the insured for loss of or damage to existing property located on or immediately adjacent to the site and belonging to or held in care, custody or control by the Principal(s) or the Contractor(s) provided always that

- 1.2 such loss or damage is directly caused by the construction, erection or testing of

the works insured under the Material Damage Section(s) and occurring during

the Period of Insurance

- 1.3 a separate sum insured is entered in the Schedule under the Material Damage Section(s)

- 1.4 all terms, conditions and exclusions of the Policy shall apply hereof as they are not

modified or replaced by the stipulations of this Endorsement

2. SPECIAL EXCLUSIONS

This Endorsement shall not cover loss or damage due to :

- 2.1 forces of nature or any other cause not related to the contract works

3. PERIOD OF INSURANCE

The Period of Insurance for this Endorsement is identical to the contract works and test period specified in the Schedule but always excluding the maintenance period unless otherwise agreed

4. SUM INSURED - ADDITIONAL PREMIUM

- 4.1 The Sum insured under this additional cover is an aggregate limit for indemnities payable

during the insurance period and is Bht 10,000,000.- any one accident and in aggregate

Excess : Bht. 10% min 30,000.-any one occurrence and in aggregate

The Additional Premium is included in the Total Premium shown in the Schedule



วิริยะประกันภัย
THE VIYAPRASART INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 15100, 15105 อาคารวิริยะประกันภัย ถนนวิสุทธิกษัตริย์ แขวงวิสุทธิกษัตริย์ เขตพระนคร กรุงเทพมหานคร 10000 โทร 0-2108-8888 www.viyaprasart.com หรือโทร 0-2108-8888
THE VIYAPRASART INSURANCE PUBLIC COMPANY LIMITED 15100, 15105 151 Tower, Pichayongkarn Rd., Bangkok Bangkok 10000 THAILAND Tel 0-2108-8888 www.viyaprasart.com

เอกสารนี้ถือเป็นส่วนหนึ่งของกรมธรรม์ประกันภัยฉบับนี้ (เลขที่ 22101/POJ/000090-304)

ผู้รับประกันภัยและผู้รับประกันภัยที่ 28 พฤษภาคม 2565 ถึงวันที่ 28 พฤษภาคม 2569

RIOT AND STRIKE CLAUSE

1. INSURANCE COVER

It is hereby agreed and declared that, notwithstanding anything contained in the Policy to the contrary, the insurance under this Policy shall extend to cover Riot and Strike damage which, for the purpose of this Endorsement, shall mean subject always to the Special Conditions mentioned hereafter-loss or damage to the property insured directly caused by:

- 1.1 the act of any person taking part together with others in any disturbance of the public peace (Whether in connection with a strike or lock-out or not) not being an occurrence mentioned in Condition 2.4 of the Special Exclusions of this Endorsement
- 1.2 the action of any lawfully constituted authority in suppressing or attempting to suppress any such disturbance or in minimizing the consequences of any such disturbance
- 1.3 the willful act of any worker on strike or locked out carried out in furtherance of a strike or in resistance to a lock-out
- 1.4 the action of any lawfully constituted authority in preventing or attempting to prevent any such act or in minimizing the consequences of any such act

Provided always that

- 1.5 all the Conditions of this Policy shall apply in all respects to the insurance granted by this extension save insofar as the same are expressly varied by the following Special Conditions, and any reference to loss or damage in the Conditions of the Policy shall be deemed to include the perils hereby insured against
- 1.6 the following special Conditions shall apply only to the insurance granted by this extension and the Conditions of the Policy shall apply in all respects to the insurance granted by the Policy as if this Endorsement had not been made

SPECIAL CONDITIONS

2. SPECIAL EXCLUSIONS

This insurance does not cover:

- 2.1 loss or damage resulting from total or partial cessation of work or the retarding or interruption or cessation of any process or operation
 - 2.2 loss or damage occasioned by permanent or temporary dispossession resulting from confiscation, commandeering or requisition by any lawfully constituted authority
 - 2.3 loss or damage occasioned by permanent or temporary dispossession of any building resulting from the unlawful occupation by any person of such building
- PROVIDED nevertheless that the insurers are not relieved under 1.2 and 1.3 above of any liability to the insured in respect of physical damage to the property insured occurring before dispossession or during temporary dispossession having a cause otherwise covered by the Policy
- 2.4 This insurance does not cover any loss or damage occasioned by or through or in consequence, directly or indirectly, of any of the following occurrences:
 - 2.4.1 war, invasion, act of foreign enemy, hostilities or warfare operations (whether war be declared or not) civil war



วิริยะประกันภัย
THE VIYAPRASART INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 15100, 15105 อาคารวิริยะประกันภัย ถนนวิสุทธิกษัตริย์ แขวงวิสุทธิกษัตริย์ เขตพระนคร กรุงเทพมหานคร 10000 โทร 0-2108-8888 www.viyaprasart.com หรือโทร 0-2108-8888
THE VIYAPRASART INSURANCE PUBLIC COMPANY LIMITED 15100, 15105 151 Tower, Pichayongkarn Rd., Bangkok Bangkok 10000 THAILAND Tel 0-2108-8888 www.viyaprasart.com

เอกสารนี้ถือเป็นส่วนหนึ่งของกรมธรรม์ประกันภัยฉบับนี้ (เลขที่ 22101/POJ/000090-304)

ผู้รับประกันภัยและผู้รับประกันภัยที่ 28 พฤษภาคม 2565 ถึงวันที่ 28 พฤษภาคม 2569

2.4.2 mutiny, civil commotion, military rising, insurrection, rebellion, revolution, military or usurped power

2.4.3 any act of any person acting on behalf of or in connection with any organization with activities directed towards the overthrow by force of the Government de jure or de facto or to the influencing of it by terrorism or violence

In any action, suit or other proceeding, where the insurers allege that by reason of the provisions of this condition any loss or damage is not covered by this insurance, the burden of proving that such loss or damage is covered shall be upon the insured.

3. PERIOD OF INSURANCE

3.1 Commencement

This Riot and Strike cover shall commence on the following date :

COMMENCING DATE : As policy cover page / attachment

3.2 Termination:

his insurance may at any time be terminated by the Insurers on notice to that effect being given to the insured, in which case the insurers shall be liable to repay a pro-rate proportion of the premium for the unexpired term from the date of cancellation

4. SUM INSURED-ADDITIONAL PREMIUM

- 4.1 The sum insured is identical with the estimated total value of the contract works as entered in the Schedule of the Policy
- 4.2 The Additional Premium is included in the Total Premium shown in the Schedule



บริษัท วิริยะประกันภัย จำกัด (มหาชน) 121208, 121209, 121210 โทรสาร 0-2129-3088 www.viyah.co.th
THE VIYAH INSURANCE PUBLIC COMPANY LIMITED 121208, 121209, 121210 โทร 0-2129-3088 www.viyah.co.th
121211 โทรสาร 0-2129-3088 โทร 0-2129-3088 โทร 0-2129-3088 โทร 0-2129-3088 โทร 0-2129-3088

เอกสารแสดงรายละเอียดการประกันภัย

เอกสารนี้ให้ถือเป็นส่วนหนึ่งของกรมธรรม์ประกันภัยฉบับนี้ (เลขที่ 22101/POL/000060-304)

ผู้พิมพ์และผู้จำหน่าย ๒๕ พฤษภาคม ๒๕๖๕ ถึงวันที่ ๒๕ พฤษภาคม ๒๕๖๕

TEMPORARY REMOVAL

Subject to the aforementioned provisions the following Property Insured by this policy is covered

- whilst temporarily removed to any premises and in transit thereto and therefrom by road rail or inland waterway in Thailand.
- a) Deeds and other documents (including stamps thereon) manuscripts plans and writings of every description books (written and printed) and computer systems records for an amount not exceeding Baht (As Policy Cover Page/Attachment).
- b) Other property for cleaning renovation repair or other similar purposes for an amount not exceeding 10% of the Sum insured by the item after deducting therefrom the value of any building (exclusive of fixtures and fittings) stock in trade or merchandise insured thereby.

1) Stock in trade or merchandise

- 2) Property more specifically insured.
- 3) Motor vehicles and motor chassis licensed for normal road use.
- 4) Property held by the insured in trust other than machinery and plant.

It is hereby agreed that this Ins

damage under this policy where they are deemed necessary and to prevent interruption to the business of the insured. Any residual, resolvable or reasonable value of such repairs shall be deducted from the total amount of actual repairs or replacement, as defined in the Replacement Values.

endorsed thereon, and subject to the Insured having paid the agreed extra premium, this Insurance shall be extended for the maintenance period specified hereunder to cover loss of or damage to Third Parties:

 THIRD PARTY LIABILITY DURING EXTENDED MAINTENANCE (24 MONTHS) |

It is agreed and understood that otherwise subject to terms, exclusions, provisions and conditions contained in the Policy or any endorsement thereto, the Insurance shall be extended to cover the Insured, its employees, agents, independent contractors, subcontractors, and any other persons or entities, and subject to the Insured having paid the agreed extra premium, this Insurance shall be extended for the maintenance period specified hereunder to cover loss of or damage to Third Parties:

- Caused by the insured contractor(s)/ subcontractor (s) In the course of the operations carried out for the purpose of complying with the obligations under the maintenance provisions of the contract, Occurring during the maintenance period provided such loss or damage was caused on the site during the construction period before the certificate of completion for the lost or damaged section was issued.



วิริยะประกันภัย
THE VIRIYAP INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๒๒๘ ถนนสุขุมวิท แขวงคลองเตย เขตคลองเตย กรุงเทพมหานคร ๑๐๑๑๐ โทร ๐-๒๖๒๖-๘๘๘๘ www.viriyap.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) ๒๒๘ ถนนสุขุมวิท แขวงคลองเตย เขตคลองเตย กรุงเทพมหานคร ๑๐๑๑๐ โทร ๐-๒๖๒๖-๘๘๘๘ www.viriyap.co.th

เอกสารแนบกรมธรรม์ประกันภัย

เอกสารนี้ใช้บังคับสำหรับกรมธรรม์ประกันภัย (เลขที่ 22101/PCJ.0000080-304)
ซึ่งมีผลบังคับใช้ตั้งแต่วันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 พฤษภาคม 2566

THIRD PARTY STANDARD UNDERGROUND CABLE & PIPELINE CLAUSE

Notwithstanding the conditions, provisions and other endorsements of the policy, it is understood and agreed that the following special conditions shall apply :

The insurers shall not be liable under the policy to indemnify loss of or damage to existing underground cables or pipes of any kind (electric, cables, telephone cables, water and gas pipes, sewers and other pipelines, etc.) unless prior to the commencement of work the insured had requested and obtained from the public authorities or the owners of such an underground system the exact position of all cables or pipes the insured had traced their existence and indicated location

The indemnity shall in any case be restricted to the repair costs of such cables or pipes, Any consequential damage shall be excluded from the policy cover.

TOOL OF TRADE

It is agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the Policy or endorsed thereon, this insurance shall be extended to cover any accidental liability to third party arising from the use of road registered mobile plant at the site as a tool of trade which is the property of the contractor and their sub contractors but only in respect of such liability not to be insured under any other policy of insurance.



วิริยะประกันภัย
THE VIRIYAP INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๒๒๘ ถนนสุขุมวิท แขวงคลองเตย เขตคลองเตย กรุงเทพมหานคร ๑๐๑๑๐ โทร ๐-๒๖๒๖-๘๘๘๘ www.viriyap.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) ๒๒๘ ถนนสุขุมวิท แขวงคลองเตย เขตคลองเตย กรุงเทพมหานคร ๑๐๑๑๐ โทร ๐-๒๖๒๖-๘๘๘๘ www.viriyap.co.th

เอกสารแนบกรมธรรม์ประกันภัย

เอกสารนี้ใช้บังคับสำหรับกรมธรรม์ประกันภัย (เลขที่ 22101/PCJ.0000080-304)
ซึ่งมีผลบังคับใช้ตั้งแต่วันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 พฤษภาคม 2566

VIBRATION, REMOVAL OR WEAKENING OF SUPPORT (MR 120)

It is agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the Policy or endorsed thereon and subject to the insured having paid the agreed extra premium,

Section III of this insurance shall be extended to cover liability consequent upon loss or damage caused by vibration or by the removal or weakening of support.

Provided always that

- the insurers will indemnify the insured in respect of liability for loss or damage to any property or land or building only if such loss or damage results in the total or partial collapse;
 - the insurers will indemnify the insured in respect of liability for loss or damage to any property or land or building only if prior to the commencement of construction its condition is sound and the necessary loss prevention measures have been taken;
 - the insured if required shall before commencement of construction and at his own expense prepare a report on the condition of any endangered property or land or building.
- The insurers will not indemnify the insured in respect of liability for
- loss or damage which is foreseeable having regard to the nature of the construction work or the construction work or the manner of its execution,
 - superficial damage which neither impairs the stability of the property, land or buildings nor endangers their users,
 - the costs of loss prevention or minimization measures which become necessary during the period of insurance

Limit Bht. 20,000,000.- any one accident and in aggregate

WAIVER OF SUBROGATION

In the event of a claim arising under this Policy the Company agree to Waive any rights, remedies or relief to which they may become entitled by Subrogation against.

- (a) Any Company standing in the relation of Parent to Subsidiary (Subsidiary to Parent) to the Insured.
- (b) Any Company which is a subsidiary of a Parent Company of which the insured are themselves a subsidiary.

Provided such loss or damage does not arise from deliberate act or deliberate negligence of dishonesty or dishonesty



วิริยะประกันภัย THE VITAYA INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๒๕๐๘ ถนนพหลโยธิน แขวงสามยุค กรุงเทพมหานคร ๑๐๑๐ โทร ๐-๒๖๖๖-๘๘๘๘ www.vitaya.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๒๕๐๘ ถนนพหลโยธิน แขวงสามยุค กรุงเทพมหานคร ๑๐๑๐ โทร ๐-๒๖๖๖-๘๘๘๘

เอกสารนี้เป็นเอกสารของบริษัทวิริยะประกันภัย

เอกสารนี้เป็นเอกสารของบริษัทวิริยะประกันภัย (เลขที่ 22101/PCU/0000090-304)
ผู้ซื้อประกันภัยให้ดูที่หน้า 25 พฤษภาคม 2565

ASBESTOS EXCLUSION

This Policy does not cover any loss, liability, cost or expense directly or indirectly arising out of, resulting as a consequence of, or related to the manufacture, mining, processing, distribution, testing, remediation, removal, storage, disposal, sale, use of or exposure to asbestos or materials or products containing asbestos whether or not there is another cause of loss which may have contributed concurrently or in any sequence to a loss.

CIVIL COMMOTION EXCLUSION CLAUSE

It is hereby agreed and declared that notwithstanding anything contained in this Policy to the contrary, this insurance excludes loss, damage, cost or expense of whatsoever nature directly or indirectly caused by, resulting from or in connection with any of Civil Commotion regardless of any other cause or event contributing concurrently or in any other sequence to the loss;

Civil Commotion

For the purpose of this endorsement an act of Civil Commotion, which defined as an act of a large number of people acting together disrupting public peace and disturbance tumultuously with violence and a chain of destruction of a large number of properties, indicated by the cessation of more than one half of the normal activity of commercial / shopping or business areas or schools or public transportation in one city for at least 24 hours (twenty-four) hours consecutively commencing immediately before, during or after the event.

This endorsement also excludes loss, damage, cost or expense of whatsoever nature directly or indirectly caused by, resulting from or in connection with any action taken in controlling, preventing, suppressing or in any way relating to the above.

All other terms, conditions and exceptions remain unchanged.



วิริยะประกันภัย THE VITAYA INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๒๕๐๘ ถนนพหลโยธิน แขวงสามยุค กรุงเทพมหานคร ๑๐๑๐ โทร ๐-๒๖๖๖-๘๘๘๘ www.vitaya.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) เลขที่ ๒๕๐๘ ถนนพหลโยธิน แขวงสามยุค กรุงเทพมหานคร ๑๐๑๐ โทร ๐-๒๖๖๖-๘๘๘๘

เอกสารนี้เป็นเอกสารของบริษัทวิริยะประกันภัย

เอกสารนี้เป็นเอกสารของบริษัทวิริยะประกันภัย (เลขที่ 22101/PCU/0000090-304)
ผู้ซื้อประกันภัยให้ดูที่หน้า 25 พฤษภาคม 2565

COMMUNICABLE DISEASE EXCLUSION LMA B394

Notwithstanding any provision to the contrary within this reinsurance agreement, this reinsurance agreement excludes any loss, damage, liability, claim, cost or expense of whatsoever nature, directly or indirectly caused by, contributed to by, resulting from, arising out of, or in connection with a Communicable Disease or the fear or threat (whether actual or perceived) of a Communicable Disease regardless of any other cause or event contributing concurrently or in any other sequence thereto.

As used herein, a Communicable Disease means any disease which can be transmitted by means of any substance or agent from any organism to another organism where:

- 2.1. the substance or agent includes, but is not limited to, a virus, bacterium, parasite or other organism or any variation thereof, whether deemed living or not, and
- 2.2. the method of transmission, whether direct or indirect, includes but is not limited to, airborne transmission, bodily fluid transmission, transmission from or to any surface or object, solid, liquid or gas or between organisms, and
- 2.3. the disease, substance or agent can cause or threaten damage to human health or human welfare or can cause or threaten damage to, deterioration of, loss of value of, marketability of or loss of use of property.



บริษัท วีทีเอชประกันภัย จำกัด (มหาชน) 121/20, 121/65 อาคารบี และ อาคารซี ถนนสุขุมวิท กรุงเทพมหานคร 10400 โทร 0-2126-8988 จาก www.vth.co.th บริษัทมหาชนจำกัด 0107655000130
THE VTHV INSURANCE PUBLIC COMPANY LIMITED 121/20, 121/65 RS Tower, Sukhumvit Rd., District Bangkok 10400 THAILAND Tel 0-2126-8988 www.vthv.co.th

เอกสารแสดงรายละเอียดการประกันภัย

เอกสารนี้ให้ถือเป็นส่วนหนึ่งของกรมธรรม์ประกันภัยฉบับนี้ (เลขที่ 22101/POL/000060-304)

ตั้งมีผลบังคับใช้ตั้งแต่วันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 กรกฎาคม 2568

- 8.1 any error or omission or series of related errors or omissions involving access to, processing of, use of or operation of any Computer System; or
- 8.2 any partial or total unavailability or failure or series of related partial or total unavailability or failures to access, process, use or operate any Computer System.

Computer System means:

- 9.1 any computer, hardware, software, communications system, electronic device (including, but not limited to, smart phone, laptop, tablet, wearable device), server, cloud or microcontroller including any similar system or any configuration of the aforementioned and including any associated input, output, data storage device, networking equipment or back up system, owned or operated by the Insured or any other party.
10. Data means information, facts, concepts, code or any other information of any kind that is recorded or transmitted in a form to be used, accessed, processed, transmitted or stored by a Computer System.
11. Data Processing Media means any property insured by this Policy on which Data can be stored but not the Data itself.

- 8.1 any error or omission or series of related errors or omissions involving access to, processing of, use of or operation of any Computer System; or
 - 8.2 any partial or total unavailability or failure or series of related partial or total unavailability or failures to access, process, use or operate any Computer System.
- Computer System means:
- 9.1 any computer, hardware, software, communications system, electronic device (including, but not limited to, smart phone, laptop, tablet, wearable device), server, cloud or microcontroller including any similar system or any configuration of the aforementioned and including any associated input, output, data storage device, networking equipment or back up system, owned or operated by the Insured or any other party.
 10. Data means information, facts, concepts, code or any other information of any kind that is recorded or transmitted in a form to be used, accessed, processed, transmitted or stored by a Computer System.
 11. Data Processing Media means any property insured by this Policy on which Data can be stored but not the Data itself.



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เอกสารแสดงรายละเอียดการประกันภัย

เอกสารนี้ให้ถือเป็นส่วนหนึ่งของกรมธรรม์ประกันภัยฉบับนี้ (เลขที่ 22101/POL/000080-304)

ซึ่งมีผลบังคับใช้ตั้งแต่วันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 กรกฎาคม 2568

**เอกสารแนบท้ายว่าด้วยข้อจำกัด และข้อยกเว้นเกี่ยวกับมาตรการคว่ำบาตร
(Sanction Limitation and Exclusion Clause)**

(Section Limitation and Exclusion Clause)

ในเอกสารแนบท้ายเพื่อเป็นแผนผังแสดงสมรรถนะที่จำเป็นนี้ เป็นที่ชัดเจนว่า หากพิจารณาใดในเอกสารแนบท้ายนี้ จะถือว่าสมรรถนะที่ปรากฏในสมรรถนะที่จำเป็น หรือเอกสารแนบท้ายฉบับนี้ให้ข้อมูลความคาดหวังที่ปรากฏในเอกสารแนบท้ายนี้ใช้บังคับแทน

- ในเอกสารแนบท้ายนี้ จัดพิมพ์ขึ้นด้วยความที่ปรารถนาในเอกสารแนบท้ายนี้ หรือเอกสารแนบท้ายอื่น

กฎหมายหรือกฎระเบียบของ สหภาพยุโรป ประเทศญี่ปุ่น สหราชอาณาจักร หรือประเทศสหรัฐอเมริกา

[illegible]



วิริยะประกันภัย THE VIETNAM INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 112/8, 112/9 ถนนพหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10002 โทร. 0-2120-8888 www.vni.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) THE VIETNAM INSURANCE PUBLIC COMPANY LIMITED 112/8, 112/9 1st Floor, Nuchapongkarn Rd., Jungsang Suburb, Bangkok 10002 THAILAND โทร. 0-2120-8888 www.vni.co.th

เอกสารแนบสงวนลิขสิทธิ์

เอกสารนี้ถือลิขสิทธิ์สงวนลิขสิทธิ์โดยบริษัทวิริยะประกันภัย จำกัด (มหาชน) (เลขที่ 22101/POL.000000-304)

ผู้พิมพ์ฉบับนี้ให้ขึ้นวันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 กรกฎาคม 2566

WAR AND TERRORISM EXCLUSION

It is hereby agreed and declared that notwithstanding anything contained in this Policy to the contrary,

this Insurance excludes loss, damage, cost or expense of whatsoever nature directly or indirectly caused by, resulting from or in connection with any of the following regardless of any other cause or event contributing concurrently or in any other sequence to the loss;

- (1) war, invasion, acts of foreign enemies, hostilities or war like operations (whether war be declared or not), civil war, rebellion, revolution, insurrection, civil commotion assuming the proportions of or amounting to an uprising, military or usurped power; or
- (2) any act of terrorism

For the purpose of this endorsement an act of terrorism means an act, including but not limited to the use of force or violence and/or the threat thereof, of any person or group(s) of persons, whether acting alone or on behalf of or in connection with any organization(s) or government(s), committed for political, religious, ideological or similar purposes including the intention to influence any government and/or to put the public, or any section of the public, in fear.

This endorsement also excludes loss, damage, cost or expense of whatsoever nature directly or indirectly caused by, resulting from or in connection with any action taken in controlling, preventing, suppressing or in any way relating to (1) and (2) above.

In the event that any portion of this endorsement is found to be invalid or unenforceable, the remainder shall remain in full force and effect.

All other terms and conditions remain unchanged.

FULL NUCLEAR EXCLUSION (NMA 1975)

i) Nuclear Energy Risks in accordance with the Nuclear Energy Risks Exclusion Clause NMA 1975(a) and;

- ii) Any other liability, loss, cost or expense of whatsoever nature directly or indirectly caused by, resulting from, arising out of or in connection with nuclear reaction, nuclear radiation or radioactive contamination regardless of any other cause not contributing concurrently or in any other sequence to the loss, save where such liability, loss, cost or expense arises under insurances expressly exempted from NMA 1975(a) in respect of which the Insurer has specifically granted cover.

Subject to otherwise all other terms, exceptions and conditions of this Policy.



วิริยะประกันภัย THE VIETNAM INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 112/8, 112/9 ถนนพหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10002 โทร. 0-2120-8888 www.vni.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) THE VIETNAM INSURANCE PUBLIC COMPANY LIMITED 112/8, 112/9 1st Floor, Nuchapongkarn Rd., Jungsang Suburb, Bangkok 10002 THAILAND โทร. 0-2120-8888 www.vni.co.th

เอกสารแนบสงวนลิขสิทธิ์

เอกสารนี้ถือลิขสิทธิ์สงวนลิขสิทธิ์โดยบริษัทวิริยะประกันภัย จำกัด (มหาชน) (เลขที่ 22101/POL.000000-304)

ผู้พิมพ์ฉบับนี้ให้ขึ้นวันที่ 25 พฤษภาคม 2565 ถึงวันที่ 25 กรกฎาคม 2566

EXPEDITING COST & AIR FREIGHT 20% CLAUSE

"Extra Charges for Overtime Work, Night-Work, Work on Public Holidays and Express Freight excluding Airfreight"

1. Insurance Cover

- 1.1 It is agreed and understood that the Insurers will also indemnify the insured in respect of extra charges for overtime work, night-work, work on public holidays and express freight excluding airfreight.

Provided always that

- 1.2 such extra charges are incurred in connection with an indemnifiable loss of or damage to property insured under the policy

- 1.3 all other terms, conditions and exclusions of the policy shall apply insofar as they are not modified or replaced by the stipulations of this endorsement.

2. Period of Insurance

The period of Insurance is identical with the period specified in the schedule.

3. Sum Insured - Additional Premium

- 3.1 The sum insured under this additional cover is the limit of indemnity per event :

20% of repair costs of any damage.

- 3.2 The additional premium is calculated on the estimated total contract value and is included in the total premium shown in the schedule.

TEMPORARY OFFICE AND OFFICE EQUIPMENT CLAUSE-INCLUDING SITE OFFICE/LABOR CAMPS,

STORAGE WITHIN OR AROUND TO SITE.

Notwithstanding the conditions, provisions and other terms of the Policy, it is understood and agreed that the Insurer shall be liable to indemnify the insured under the coverage of

Section III for loss or damage to the Insured's site office and office equipment and Labor Camps, Storage, as may be specified in the Schedule for and amount not exceeding the amount specified in the Schedule. Unless specifically specified in the Schedule, the general deductibles applied.

Limit : Bht 20,000,000.- any one accident and in aggregate

Excess : Bht 20,000.- each and every loss



วิริยะประกันภัย
THE VIRIYAH INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) เลขที่ 121/28, 121/29 ถนนวิภาวดีรังสิต แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10000 โทร 0 2129 8888 www.viriyah.co.th เลขบัญชี 010755000129
THE VIRIYAH INSURANCE PUBLIC COMPANY LIMITED 121/28, 121/29 RBS Tower, Ratchadapisek Rd., Din Daeng Bangkok 10400 THAILAND Tel. 0 2129 8888 www.viriyah.co.th

CONTRACT WORKS INSURANCE POLICY

Whereas the Insured named in the Schedule hereto has made to THE VIRIYAH INSURANCE PUBLIC COMPANY LIMITED. (hereinafter called "the Insurers") a written proposal by completing a Questionnaire which together with any other statements made in writing by the Insured for the purpose of this Policy is deemed to be incorporated herein.

Now this Policy witnesses that in consideration of the Insured having paid to the Insurers the premium mentioned in the Schedule the Insurers will indemnify the Insured in the manner and to the extent hereinafter provided.

Provided always that the due observance and fulfilment of the terms, conditions and exceptions of this Policy in so far as they relate to anything to be done or complied with by the Insured and the truth of the statements and answers in the proposal(s) shall be conditions precedent to the right of the Insured to recover hereunder.

The Schedule and the Section(s) shall be deemed to be incorporated in and form part of this Policy and the expression "this Policy" wherever used in this contract shall be read as including the Schedule and the Section(s). Any word or expression to which a specific meaning has been attached in any part of this Policy or of the Schedule or of the Section(s) shall bear such meaning wherever it may appear.

GENERAL CONDITIONS

1 The Insured at his own expense shall take all reasonable precaution to prevent loss, damage or liability and to comply with sound engineering practice, statutory, requirements and manufacturers' recommendations designed to ensure the safe working of plant and equipment. The Insured shall also maintain in efficient condition all contract works, construction plant, equipment and construction or erection machinery insured by this Policy.

2 The Insured shall immediately notify the Insurers in writing of any material change in the risk insured hereunder: in such case continuance of the insurance shall be subject to terms and conditions to be agreed.

3 Representatives of the Insurers shall at any reasonable time have access to the site or premises and to all pertinent data, documents, drawings, etc. and shall have the right to inspect any property insured.

4 In the event of any occurrence which might give rise to a claim under the Policy, the Insured shall:

4.1 Immediately notify the Insurers by telephone or telegram as well as in writing and supply all such particulars and proofs of claim as may be required by the Insurers;

4.2 take all steps within his power to minimise the extent of the loss or damage;

4.3 preserve the damaged property and make it available for inspection by a representative or surveyor of the Insurers;

4.4 inform the police authorities in case of loss or damage due to theft or burglary;

4.5 send to the Insurers immediately on receipt any writ, summons or other proceedings which may be commenced against the Insured.

The Insurers shall not in any case be liable for loss, damage or liability of which no notice has been received by the Insurers within 14 days of its occurrence.

Upon notification being given to the Insurers under this condition, the Insured may carry out the repairs or replacement of any minor damage; in all other cases a representative of the Insurers shall have the opportunity of inspecting the loss or damage before any repairs or alterations are effected. Nothing herein shall prevent the Insured from taking such steps as are absolutely necessary for the security and continuation of the contract work.

The Insured shall not be entitled to abandon any property to the Insurers whether taken possession of by the Insurers or not. The Insured shall at the expense of the Insurers do and concur in doing and permit to be done all such acts and things as may be necessary or required by the Insurers in the interest of any rights or remedies, or of obtaining relief or indemnity from parties (other than those insured under this Policy) to which the Insurers shall be or would become entitled or subrogated upon their paying for or making good any loss or damage under the Policy, whether such acts and things shall be or become necessary or required before or after the Insured's indemnification by the Insurers.



วิริยะประกันภัย
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บริษัท วิริยะประกันภัย จำกัด (มหาชน) เลขที่ 121/28, 121/29 ถนนวิภาวดีรังสิต แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10000 โทร 0 2129 8888 www.viriyah.co.th เลขบัญชี 010755000129
THE VIRIYAH INSURANCE PUBLIC COMPANY LIMITED 121/28, 121/29 RBS Tower, Ratchadapisek Rd., Din Daeng Bangkok 10400 THAILAND Tel. 0 2129 8888 www.viriyah.co.th

6 Arbitration clause : In case of any disputes, differences or claims arising out of this policy between the company and person(s) who has/have right of claims under this policy, the company shall, if person (s) who has/have right of claims wishes, agree to settle such disputes, differences or claims through Arbitration in accordance with the Department of Insurance's directive on Arbitration.

7 In the event of

7.1 material change in the risk;

7.2 the termination of the Contract by the Principal,

7.3 withdrawal from the Contract by any main Contractor;

7.4 stoppage of work occasioned by any other cause, except seasonal interruption, for a period exceeding one calendar month; this policy shall be avoided unless its continuance be admitted by endorsement signed by and on behalf of the Insurers.

8 This insurance is not to be called upon in contribution and is only to pay any loss hereon if and so far as not recoverable under any other insurance.

GENERAL EXCLUSIONS

The Insurers will not indemnify the Insured in respect of

1 The excesses stated in the Schedule to be borne by the Insured,

2 Consequential loss of any kind or liquidated damages or penalties for delay or detention or in connection with guarantees of performance or efficiency,

3 Willful act or wilful negligence of any director, manager or responsible site official of the Insured,

4 Loss or destruction of or damage to any property whatsoever or any loss or expense whatsoever resulting or arising therefrom or any consequential loss or any legal liability of whatsoever nature directly or indirectly caused by or contributed to by or arising from ionising radiations or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel. For the purpose of this exclusion only contamination shall include any self-assisting process of nuclear fission,

5 Any loss, destruction, damage or legal liability directly or indirectly caused by or contributed to by or arising from nuclear weapons material,

6 Loss, damage or liability directly or indirectly caused by or arising out of war, invasion, act of foreign enemy, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection, mutiny, riot, strike, lock-out, civil commotion, military or usurped power, or malicious persons acting on behalf of or in connection with any political organisation, confiscation, commandeering, requisition or destruction of or damage to property by order of the government de jure or de facto or by any public authority.

In any action, suit or other proceeding where the Insurers allege that by reason of the provisions of Exclusion (6) above any loss, destruction, damage or liability is not covered by this insurance the burden of proving that such loss, destruction, damage or liability is covered shall be upon the Insured.



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บริษัท วิริยะประกันภัย จำกัด (มหาชน) 121/26, 121/25 ถนนพหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10000 โทร 0 2129 8888 www.viyah.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) 121/26, 121/25 ถนนพหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10000 โทร 0 2129 8888 www.viyah.co.th

Section 1

BUILDING AND CIVIL ENGINEERING WORKS

If at any time during the period of insurance stated in the Schedule the property described in the Schedule shall suffer any unforeseen or accidental loss or damage from any cause, other than those specifically excluded, necessitating repair or replacement, the Insurers will indemnify the Insured in respect of all such loss or damage up to an amount not exceeding in respect of each of the items specified in the Schedule the sum set opposite thereto and not exceeding in all the total sum expressed in the said Schedule as insured hereby, except so far as reinstatement may be made as follows:

Payments in respect of claims under this Section of the policy shall not reduce the Sum Insured but the Insured shall pay to the Insurers an additional premium at an agreed rate on the amount of the payment pro rata from the date of loss to the expiry of the Policy. Such additional premium shall be disregarded for the purpose of any adjustment of premium.

The Insurers will also reimburse the Insured for the cost of Clearance of Debris following upon any event giving rise to a claim under this Policy but not exceeding in all the sum set opposite thereto in the Schedule.

EXCLUSIONS

The Insurers shall not be liable for:

- 1 loss or damage due to faulty design;
- 2 normal making good;
- 3 cost of replacement or rectification of defective material and/or workmanship, but this exclusion shall be limited to the part or parts immediately affected and shall not be deemed to exclude loss or damage resulting from an accident due to such defective material and/or workmanship;
- 4 wear and tear, corrosion, oxidation, deterioration due to lack of use and normal atmospheric conditions;
- 5 mechanical and/or electrical breakdown or derangement of construction plant and construction machinery;
- 6 loss of or damage to vehicles licensed for general road use or waterborne vessels or aircraft;
- 7 loss of or damage to files, drawings, accounts, bills, currency, stamps, deeds, evidences of debt, notes, securities or cheques;
- 8 loss discovered only at the time of taking an inventory.

PERIOD OF INSURANCE

Construction Period

The liability of the Insurers shall commence, notwithstanding any date to the contrary specified in the Schedule, after unloading of the property specified in the Schedule at the Contract Site and shall expire on the date specified in the Schedule.

The Insurer's liability expires also for any part of the insured contract works taken over or taken into use (whichever shall be earlier) by the Principal prior to the expiry date specified in the Schedule.



วิริยะประกันภัย
THE VIYAH INSURANCE

บริษัท วิริยะประกันภัย จำกัด (มหาชน) 121/26, 121/25 ถนนพหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10000 โทร 0 2129 8888 www.viyah.co.th บริษัทวิริยะประกันภัย จำกัด (มหาชน) 121/26, 121/25 ถนนพหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10000 โทร 0 2129 8888 www.viyah.co.th

Maintenance Period

If a maintenance period is specified in the Schedule, the liability of the Insurers during this period shall be limited to any loss or damage occasioned by the Insured Contractor(s) in the course of operations carried out for the purpose of complying with the obligations under the Maintenance Clause of the contract.

SUM INSURED

It is a requirement of this insurance that the amounts of insurance stated in the Schedule shall represent:

- for item 1: the full value of the contract works at the completion of the construction, inclusive of materials, wages, freight, customs duties, dues and materials or items supplied by the Principal;
- for item 2: the current value at the time of concluding the insurance;
- for item 3: the replacement value.

The Insured undertakes to notify the Insurers of any facts resulting in a material increase or decrease of the sums insured, provided always that such increase or decrease shall take effect only after the same has been recorded on the Policy by the Insurers, before the occurrence of any claim hereunder.

LOSS SETTLEMENT

Items, 1, 2 and 3

The Insured shall satisfy the Insurers by such reasonable evidence as may be required that the loss or damage in respect of which a claim is made has actually arisen from one of the risks insured against.

The Insurers will make payments on the basis of valid bills and documents after repairs have been effected or replacement has taken place, as the case may be. The cost of any provisional repairs will be borne by the Insurers if such repairs constitute part of the final repairs and do not increase the total repair expenses. The cost of any alterations, additions and/or improvements which may be undertaken as a result of any loss or damage shall not be recoverable hereunder.

In addition for Item 3, the following conditions are applicable:

In the event of any loss or damage the basis of any settlement under this Policy shall be

- 1 in the case of any damage which can be repaired-the cost of repairs necessary to restore the property to its condition immediately before the occurrence of the damage less salvage, or
- 2 in the case of a total loss-the actual value of the property immediately before the occurrence of the loss less salvage.

All damage which can be repaired shall be repaired, but if the cost of repairing any damage equals or exceeds the value of the property immediately before the occurrence of the damage, the settlement shall be made on the basis provided for in (2) above. If, in the event of loss or damage, it is found that the sum insured is less than the amount required to be insured, then the amount recoverable by the Insured under this Policy shall be reduced in such proportion as the sum insured bears to the amount required to be insured.



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THE VRIYAH INSURANCE PUBLIC COMPANY LIMITED 121/26, 121/65 Soi Tower, Ratchadapisek Rd., Dinadeng Bangkok 10400 THAILAND Tel. 0 216 8888 www.vriyah.co.th

MACHINERY ERECTION

The Insurers will also reimburse the Insured for the cost of Clearance of Debris following upon any event giving rise to a claim under this Policy but not exceeding in all the sum set opposite thereto in the Schedule.

The Insurers shall not be liable for:

The Insurers shall not be liable for:

- PERIOD OF INSURANCE

our second-hand property the Insurance hereunder ceases immediately testing commences.



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THE VRIYAH INSURANCE PUBLIC COMPANY LIMITED 121/26, 121/65 Soi Tower, Ratchadapisek Rd., Dinadeng Bangkok 10400 THAILAND Tel. 0 216 8888 www.vriyah.co.th

It is a requirement of this insurance that the amounts of insurance stated in the Schedule shall represent:

It is a requirement of this insurance that the amounts of insurance stated in the Schedule shall represent:

The Insured undertakes to notify the Insurers of any facts resulting in a material increase or decrease of the sums insured, provided always that such increase or decrease shall take effect only after the same has been recorded on the Policy by the Insurers, before the occurrence of any claim hereunder.

The insured shall satisfy the insurers by such reasonable evidence as may be required that the loss or damage in respect of which a claim is made has actually arisen from one of the risks insured against.

in the event of any loss or damage the basis of any settlement under this Policy shall be

- The cost of any provisional repairs will be borne by the Insurers if such repairs constitute part of the final repairs and do not increase the total repair expenses.

11. In the event of loss or damage, it is found that the sum insured is less than the amount required to be insured, then the amount recoverable by the Insured under this Policy shall be reduced in such proportion as the sum insured bears to the amount required to be insured.



บริษัท วิริยะประกันภัย จำกัด (มหาชน) 121/126, 121/126 ถนนพหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพมหานคร 10000 โทร 0 2128 8888 www.viriyah.co.th หรือโทร 02756000139
THE VIRYAH INSURANCE PUBLIC COMPANY LIMITED 121/126, 121/126 Rd Tower, Rachadapisek Rd., Dusitang Bangkok 10400 THAILAND Tel. 0 2128 8888 www.viriyah.co.th

Section III

THIRD PARTY LIABILITY

The Insurers will indemnify the Insured against all sums which the Insured shall become legally liable to pay as compensation for

- 1 accidental bodily injury or illness to any person
 - 2 accidental loss of or damage to property
- occurring in direct connection with the performance of the contract insured by this policy and happening on or in the immediate vicinity of the Contract Site during the Period of Insurance.

In respect of a claim for compensation to which the indemnity provided herein applies, the Insurers will in addition indemnify the Insured against

- 1 all costs and expenses of litigation recovered by any claimant from the Insured, and
 - 2 all costs and expenses of litigation incurred with the written consent of the Insurers in resisting any claim.
- The Liability of the Insurers under this section shall not exceed the limits or indemnity stated in the Schedule.

EXCLUSIONS

The Insurers will not indemnify the Insured in respect of

- 1 expenditure incurred in repairing or replacing any work or property covered or coverable under Section I and/or II of this Policy;
- 2 damage to any property or land or building caused by vibration or by the removal or weakening of support or injury or damage to any person or property occasioned by or resulting from any such damage.
- 3 Liability arising out of
 - 30 bodily injury to or illness of employees or workmen of the Contractor(s) or the Principal or any other firm connected with the contract work or members of their families;
 - 31 loss of or damage to property belonging to or held in care, custody or control of the Contractor(s), the Principal or any other firm connected with the contract work or an employee or workman of one of the aforesaid;
 - 32 any accident caused by vehicles licensed for general road use or by waterborne vessels or aircraft;
 - 33 any contract or agreement unless such liability would have attached in the absence of such contract or agreement;
 - 34 technical or professional advice given by the Insured or by any person acting on behalf of the Insured.

SPECIAL CONDITIONS

The Insured shall not negotiate, pay, settle, admit or repudiate any claim under the Policy without the consent of the Insurers, who shall be entitled, if they so desire, to take over and conduct in the name of the Insured the defence or settlement of any claim or to prosecute for their own benefit in the name of the Insured any claim for indemnity or damages or otherwise and shall have full discretion in the conduct of any proceedings or in the settlement of any claim and the Insured shall give all such information and assistance as the Insurers may require. The Insurers may in respect of any claim or claims pay to the Insured the amount of their maximum liability as stated in the Schedule or such lesser sum for which the claim or claims can be settled (subject in other case to deduction of any sum or sums already paid on account or such claim or claims) and thereafter the Insurers shall be under no further liability in respect of such claim or claims except for payment of costs and expenses incurred prior to the date of such payment and for which the Insurers may be liable hereunder.

เอกสารแนบ 2-20

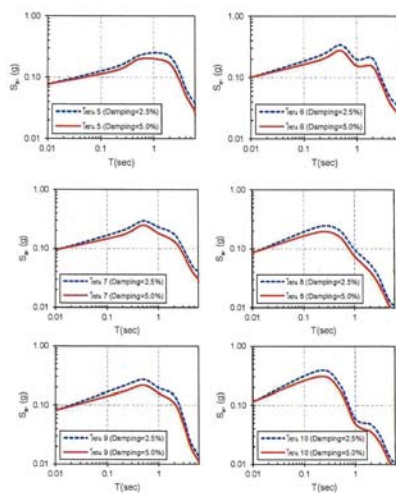
เอกสารรายงานการไม่ปฏิบัติตาม
มาตรการ โดยสำนักงานเขตบางกอกน้อย

เอกสารแนบ 2-21
รายการคำนวณโครงสร้าง
รองรับแผ่นดินไหว

รายการคำนวณโครงสร้างรองรับแผ่นดินไหว

โครงการ ตึกคอนโด จรัญฯ-ปิ่นเกล้า (PHASE 2) อาคาร A

ที่ตั้งโครงการ
กรุงเทพมหานคร



รูปแสดงสเปกตรัมของคานรองรับการออกแบบด้วยวิธีเชิงพลศาสตร์สำหรับโซนต่างๆ
ของพื้นที่ในกรุงเทพมหานคร

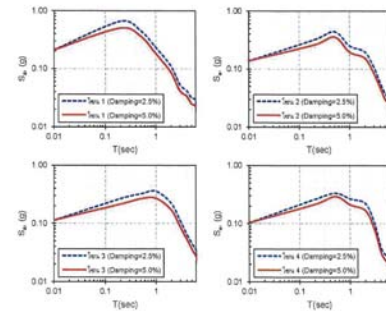
SEISMIC DESIGN CRITERIA

ข้อกำหนดในการออกแบบ

- การออกแบบใช้วิธีพลศาสตร์ตามกฎกระทรวงเรื่อง กำหนดการรับน้ำหนัก ความต้านทาน ความคงทนของอาคาร และพื้นดินรองรับอาคารในการต้านทานแรงสั่นสะเทือนของแผ่นดินไหว พ.ศ. 2564
- นวัตกรรมในการออกแบบด้านการสั่นสะเทือนของแผ่นดินไหว มยผ. 1301/1302-61 ของกรมโยธาธิการและผังเมือง กระทรวงมหาดไทย
- มาตรฐาน ACI318-1999

แผ่นดินไหวสำหรับการออกแบบ

Spectrum สำหรับการออกแบบของพื้นที่ในกรุงเทพมหานคร โซน 5 โดยที่ อาคารคอนกรีตเสริมเหล็กที่มีความสูงไม่เกิน 60 เมตร ใช้อัตราส่วนความเร่งไม่เกินร้อยละ 5 และอาคารคอนกรีตเสริมเหล็กที่มีความสูงเกินกว่า 60 เมตร ให้ใช้อัตราส่วนความเร่งไม่เกินร้อยละ 2.5



ตารางที่ 1.4-4 ค่าความเร่งตอบสนองของคานรับสำหรับการออกแบบ ด้วยวิธีเชิงพลศาสตร์สำหรับพื้นที่โซนต่างๆ (อัตราส่วนความเร่ง 2.5%) ของพื้นที่ในกรุงเทพมหานคร

Seq	S _a (0.01s)	S _a (0.2 s)	S _a (0.5 s)	S _a (1.0s)	S _a (2.0 s)	S _a (3.0 s)	S _a (4.0 s)	S _a (5.0 s)	S _a (6.0 s)
1	0.451	0.451	0.451	0.233	0.110	0.053	0.042	0.031	0.029
2	0.439	0.439	0.439	0.249	0.116	0.100	0.058	0.038	0.030
3	0.320	0.320	0.320	0.353	0.217	0.109	0.064	0.044	0.034
4	0.330	0.330	0.330	0.264	0.218	0.100	0.039	0.029	0.027
5	0.220	0.220	0.220	0.250	0.223	0.126	0.067	0.047	0.036
6	0.340	0.340	0.340	0.190	0.207	0.093	0.053	0.040	0.035
7	0.291	0.291	0.291	0.231	0.177	0.109	0.064	0.046	0.040
8	0.210	0.210	0.210	0.097	0.055	0.033	0.018	0.012	0.011
9	0.269	0.269	0.269	0.194	0.144	0.061	0.026	0.017	0.013
10	0.225	0.225	0.225	0.059	0.047	0.031	0.017	0.012	0.010

ตารางที่ 1.4-5 ค่าความเร่งตอบสนองของคานรับสำหรับการออกแบบ ด้วยวิธีเชิงพลศาสตร์สำหรับพื้นที่โซนต่างๆ (อัตราส่วนความเร่ง 5.0%) ของพื้นที่ในกรุงเทพมหานคร

Seq	S _a (0.01s)	S _a (0.2 s)	S _a (0.5 s)	S _a (1.0s)	S _a (2.0 s)	S _a (3.0 s)	S _a (4.0 s)	S _a (5.0 s)	S _a (6.0 s)
1	0.360	0.360	0.360	0.101	0.065	0.041	0.034	0.024	0.022
2	0.352	0.352	0.352	0.193	0.151	0.084	0.047	0.030	0.024
3	0.262	0.262	0.262	0.265	0.166	0.085	0.052	0.035	0.026
4	0.287	0.287	0.287	0.207	0.163	0.078	0.032	0.023	0.020
5	0.191	0.191	0.191	0.199	0.160	0.094	0.053	0.037	0.028
6	0.272	0.272	0.272	0.154	0.150	0.077	0.042	0.031	0.026
7	0.246	0.246	0.246	0.101	0.132	0.084	0.051	0.036	0.030
8	0.162	0.162	0.162	0.075	0.041	0.025	0.015	0.010	0.009
9	0.214	0.214	0.214	0.156	0.107	0.048	0.022	0.014	0.011
10	0.179	0.179	0.179	0.049	0.035	0.023	0.014	0.010	0.009

ตารางที่ 1.4-6 ค่าความเร่งตอบสนองของสิ่งปลูกสร้างสำหรับการออกแบบ ด้วยวิธีพลศาสตร์สำหรับพื้นดิน

โดยค่า α (อัตราส่วนความยาว 2.5%) ของพื้นที่ดินอย่างถูกต้อง

S_a โดย	S_a (0.01 s)	S_a (0.2 s)	S_a (0.5 s)	S_a (1.0 s)	S_a (2.0 s)	S_a (3.0 s)	S_a (4.0 s)	S_a (5.0 s)	S_a (6.0 s)
1	0.208	0.684	0.451	0.233	0.110	0.053	0.042	0.031	0.029
2	0.136	0.318	0.439	0.249	0.196	0.108	0.058	0.038	0.030
3	0.111	0.266	0.320	0.353	0.217	0.109	0.064	0.044	0.034
4	0.102	0.260	0.330	0.264	0.218	0.100	0.039	0.029	0.027
5	0.075	0.148	0.220	0.250	0.223	0.126	0.067	0.047	0.038
6	0.099	0.226	0.340	0.198	0.207	0.093	0.053	0.040	0.035
7	0.093	0.200	0.291	0.231	0.177	0.103	0.064	0.066	0.040
8	0.085	0.236	0.210	0.097	0.055	0.033	0.018	0.012	0.011
9	0.080	0.205	0.269	0.194	0.144	0.061	0.026	0.017	0.013
10	0.115	0.383	0.225	0.059	0.047	0.031	0.017	0.012	0.010

ตารางที่ 1.4-7 ค่าความเร่งตอบสนองของสิ่งปลูกสร้างสำหรับการออกแบบ ด้วยวิธีพลศาสตร์สำหรับพื้นดิน

โดยค่า α (อัตราส่วนความยาว 5.0%) ของพื้นที่ดินอย่างถูกต้อง

S_a โดย	S_a (0.01 s)	S_a (0.2 s)	S_a (0.5 s)	S_a (1.0 s)	S_a (2.0 s)	S_a (3.0 s)	S_a (4.0 s)	S_a (5.0 s)	S_a (6.0 s)
1	0.208	0.495	0.360	0.181	0.085	0.041	0.034	0.024	0.022
2	0.136	0.257	0.352	0.193	0.151	0.084	0.047	0.030	0.024
3	0.111	0.212	0.262	0.265	0.166	0.085	0.052	0.035	0.026
4	0.102	0.211	0.297	0.207	0.163	0.078	0.032	0.023	0.020
5	0.075	0.128	0.191	0.199	0.168	0.094	0.053	0.037	0.029
6	0.099	0.189	0.272	0.154	0.150	0.077	0.042	0.031	0.026
7	0.093	0.167	0.246	0.181	0.132	0.084	0.051	0.036	0.030
8	0.085	0.189	0.162	0.075	0.041	0.025	0.015	0.010	0.008
9	0.080	0.165	0.214	0.156	0.107	0.048	0.022	0.014	0.011
10	0.115	0.301	0.179	0.049	0.035	0.023	0.014	0.010	0.008

MS-101

น้ำหนักบรรทุก

DL = 0.21 m Post-tensioned Slab 504 kg/sq.m

= 0.25 m RC Flat Slab 600 kg/sq.m

SDL = 325 kg/sq.m

LL = 200 kg/sq.m

Design Load Combinations

การรวมผลของแรงสำหรับการออกแบบ

$U = 1.2D + 1.0L + 1.0E$

$U = 0.9D + 1.0E$

E = Earthquake Load จากวิธีวิเคราะห์ด้วยวิธี Elastic Response Spectrum Analysis โดยใช้ค่าแรงเฉือนที่ฐานนี้เท่ากับค่าจากวิธี Equivalent Static Force Procedure

Structural Stiffness

Items	I_{eff}
Beam	$0.35 I_g$
Column	$0.7 I_g$
Wall non crack	$0.7 I_g$
Wall crack	$0.35 I_g$
Flat Slab	$0.25 I_g$

MS-103

แรงเฉือนที่ฐานอาคาร (Seismic Base Shear, V) คำนวณจาก

$$V = (C_s)(W)$$

โดยที่ C_s คือสัมประสิทธิ์ผลตอบสนองของระบบดินไหว

W คือน้ำหนักโครงสร้างระบบสถิตของอาคาร ตามที่กำหนดในหัวข้อที่ 2.8.2

สัมประสิทธิ์ผลตอบสนองของระบบดินไหว (C_s) คำนวณจาก

$$C_s = S_e (I/R)$$

โดยที่ S_e คือค่าความเร่งตอบสนองเชิงสเปกตรัมสำหรับการออกแบบ ตามตารางที่ 1.4-4

R คือตัวประกอบปรับลดผลตอบสนอง ตามที่กำหนดในหัวข้อที่ 2.3.1

I คือตัวประกอบความสำคัญอาคาร ตามที่กำหนดในหัวข้อที่ 1.5

และ C_s จะต้องไม่เกินน้อยกว่า 0.01

ระบบโครงสร้างโดยยาวของอาคารเป็น ระบบโครงสร้างโดยใช้กำแพงรับแรงเฉือนแบบธรรมดาเป็นระบบต้านทานแรงด้านข้าง โดยที่

ประเภทความสำคัญอาคาร; $I = 1.00$

ตัวประกอบปรับลดผลตอบสนอง; $R = 5.0$

ตัวประกอบกำลังเสริม; $\Omega_0 = 2.5$

ตัวประกอบขยายค่าการโค้งตัว; $C_d = 4.5$

Model Combination: CQC method

Directional Combination: SRSS

MS-102

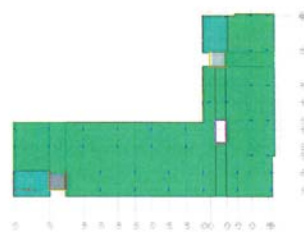
Structural Model

Method of Analysis: Finite Element Method (Frame & Shell Element)

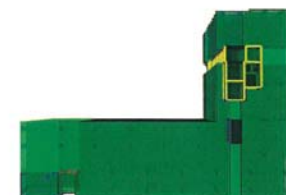
Modeling Detail : Column & Beam > 2-nodes frame element

Walls > 4 - nodes shell element

Slabs > 4 - nodes shell element

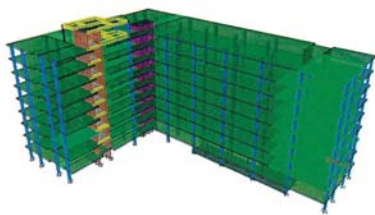


Typical Plan



Top View

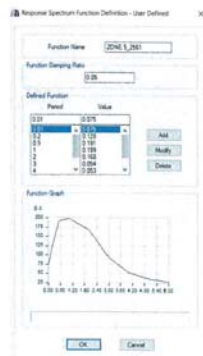
MS-104



3D - Model

Mathematical Model

การวิเคราะห์โครงสร้าง ใช้แบบจำลอง Finite Element แบบสามมิติโดยใช้โปรแกรม ETABS



Response Spectrum Function Definition

K3-105

ผลการวิเคราะห์โดยวิธีพหุคูณและตัวคูณปรับค่า

จำนวนโหมดที่พิจารณาจะต้องเพียงพอที่จะทำให้ผลการขอย่นน้ำหนักประสิทธิผลเชิงโหมด (Effective Modal Weight, or Modal Weight Participation) ในแต่ละทิศทางมีค่าไม่น้อยกว่าร้อยละ 90 ของน้ำหนักประสิทธิผลทั้งหมด

ผลการวิเคราะห์โดยวิธีพหุคูณและตัวคูณปรับค่าได้ค่าสำหรับ 18 โหมดแรกดังนี้

Mode	Periods (sec.)	Model Participating Mass Ratios				
		SUM UX	SUM UY	SUM RX	SUM RY	SUM RZ
1	1.441	0.5670	0.0009	0.0004	0.2621	0.1113
2	1.117	0.6008	0.5178	0.2511	0.2797	0.2207
3	1.062	0.6761	0.6719	0.3270	0.3228	0.6671
4	0.348	0.8100	0.6725	0.3295	0.5748	0.6988
5	0.258	0.8157	0.8323	0.6119	0.5845	0.7090
6	0.233	0.8438	0.8432	0.6342	0.6304	0.8455
7	0.156	0.8937	0.8496	0.6371	0.7248	0.8577
8	0.118	0.9030	0.8956	0.7257	0.7426	0.8616
9	0.097	0.9030	0.8997	0.7322	0.7427	0.9171
10	0.096	0.9326	0.9116	0.7600	0.8123	0.9187
11	0.078	0.9401	0.9163	0.7762	0.8312	0.9187
12	0.071	0.9418	0.9360	0.8217	0.8355	0.9236
13	0.068	0.9542	0.9362	0.8227	0.8680	0.9281
14	0.057	0.9587	0.9476	0.8508	0.8795	0.9481
15	0.054	0.9622	0.9596	0.8587	0.8898	0.9557
16	0.052	0.9724	0.9585	0.8797	0.9169	0.9575
17	0.046	0.9747	0.9631	0.8924	0.9235	0.9596
18	0.043	0.9753	0.9681	0.9058	0.9257	0.9629

K3-106

Analysis Model Period



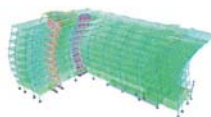
Mode 1 Period 1.441 seconds



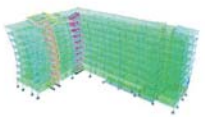
Mode 2 Period 1.117 seconds



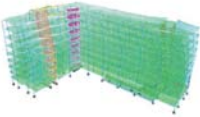
Mode 3 Period 1.062 seconds



Mode 4 Period 0.348 seconds



Mode 5 Period 0.258 seconds



Mode 6 Period 0.233 seconds

K3-107

แผนเงื่อนไขการกระทำโครงสร้าง

Story	Load Case	Location	P (T)	VX (T)	VY (T)	T (T-m)	MX (T-m)	MY (T-m)
Top Roof	SPECX Max	Top	0.00	2.07	0.93	61.43	0.02	0.01
Top Roof	SPECX Max	Bottom	0.00	2.07	0.93	61.43	1.85	4.20
Top Roof	SPECY Max	Top	0.00	1.00	2.42	112.56	0.01	0.00
Top Roof	SPECY Max	Bottom	0.00	1.00	2.42	112.57	4.84	2.02
Lift Room	SPECX Max	Top	0.00	4.11	1.76	112.64	1.84	4.18
Lift Room	SPECX Max	Bottom	0.00	4.11	1.76	112.64	2.90	6.68
Lift Room	SPECY Max	Top	0.00	1.71	5.01	230.59	4.84	2.01
Lift Room	SPECY Max	Bottom	0.00	1.71	5.01	230.59	7.85	3.05
RWT1	SPECX Max	Top	0.00	4.45	1.86	119.15	2.90	6.68
RWT1	SPECX Max	Bottom	0.00	4.45	1.86	119.15	4.01	9.38
RWT1	SPECY Max	Top	0.00	1.80	5.43	249.87	7.85	3.05
RWT1	SPECY Max	Bottom	0.00	1.80	5.43	249.87	11.11	4.14
Roof	SPECX Max	Top	0.00	49.33	8.29	789.61	4.01	9.38
Roof	SPECX Max	Bottom	0.00	49.33	8.29	789.64	25.86	152.22
Roof	SPECY Max	Top	0.00	9.04	57.92	2245.49	11.11	4.14
Roof	SPECY Max	Bottom	0.00	9.04	57.92	2245.53	178.05	29.78
Story8	SPECX Max	Top	0.00	96.02	14.53	1439.88	25.86	152.22
Story8	SPECX Max	Bottom	0.00	96.02	14.53	1439.92	66.21	431.88
Story8	SPECY Max	Top	0.00	15.08	112.41	4263.71	178.05	29.78
Story8	SPECY Max	Bottom	0.00	15.08	112.41	4263.75	502.83	71.96
Story7	SPECX Max	Top	0.00	134.23	19.99	1982.69	66.21	431.88
Story7	SPECX Max	Bottom	0.00	134.23	19.99	1982.73	121.76	822.71
Story7	SPECY Max	Top	0.00	20.19	156.92	5965.70	502.83	71.96
Story7	SPECY Max	Bottom	0.00	20.19	156.92	5965.74	956.07	128.75
Story6	SPECX Max	Top	0.00	165.23	24.27	2423.01	121.76	822.71
Story6	SPECX Max	Bottom	0.00	165.23	24.27	2423.05	189.90	1303.75
Story6	SPECY Max	Top	0.00	24.28	192.72	7229.44	956.07	128.75
Story6	SPECY Max	Bottom	0.00	24.28	192.72	7229.49	1511.80	197.41
Story5	SPECX Max	Top	0.00	189.84	27.79	2768.66	189.90	1303.75
Story5	SPECX Max	Bottom	0.00	189.84	27.79	2768.69	267.98	1855.41
Story5	SPECY Max	Top	0.00	27.72	220.78	8275.30	1511.80	197.41
Story5	SPECY Max	Bottom	0.00	27.72	220.78	8275.35	2146.79	275.69
Story4	SPECX Max	Top	0.00	208.40	30.31	3023.65	267.98	1855.41
Story4	SPECX Max	Bottom	0.00	208.40	30.31	3023.68	353.42	2459.19
Story4	SPECY Max	Top	0.00	30.28	241.69	9066.79	2146.79	275.69
Story4	SPECY Max	Bottom	0.00	30.28	241.69	9066.82	2839.65	361.40

K3-108

Story	Load Case	Location	P (T)	VX (T)	VY (T)	T (T-m)	MX (T-m)	MY (T-m)
Story3	SPECX Max	Top	0.00	221.04	32.00	3195.15	353.42	2459.19
Story3	SPECX Max	Bottom	0.00	221.04	32.00	3195.17	443.46	3096.63
Story3	SPECY Max	Top	0.00	32.03	255.77	9612.88	2839.65	361.40
Story3	SPECY Max	Bottom	0.00	32.03	255.77	9612.91	3570.38	432.02
Story2	SPECX Max	Top	0.00	228.02	33.25	3291.83	443.46	3096.63
Story2	SPECX Max	Bottom	0.00	228.02	33.25	3291.84	537.59	3760.89
Story2	SPECY Max	Top	0.00	33.23	263.33	9914.59	3570.38	432.02
Story2	SPECY Max	Bottom	0.00	33.23	263.33	9914.61	4332.76	546.88
Story1	SPECX Max	Top	0.00	230.22	33.80	3325.27	537.59	3760.89
Story1	SPECX Max	Bottom	0.00	230.22	33.80	3325.27	603.11	4219.12
Story1	SPECY Max	Top	0.00	33.80	265.56	10007.20	4332.76	546.88
Story1	SPECY Max	Bottom	0.00	33.80	265.56	10007.20	4860.32	612.80
UWT	SPECX Max	Top	0.00	230.24	33.80	3325.47	603.11	4219.12
UWT	SPECX Max	Bottom	0.00	230.24	33.80	3325.47	619.50	4332.93
UWT	SPECY Max	Top	0.00	33.80	265.58	10007.69	4860.32	612.80
UWT	SPECY Max	Bottom	0.00	33.80	265.58	10007.69	4991.78	629.24

ผลการวิเคราะห์โดยวิธีทางทฤษฎี แรงเฉือนที่ฐานมีค่า ดังนี้

สำหรับแผ่นดินไหวในทิศทาง X: $VX = 230.24 \text{ Tons}$
 สำหรับแผ่นดินไหวในทิศทาง Y: $VY = 265.58 \text{ Tons}$

การคำนวณโดยวิธีจลจลน์เทียบท่า

$H = 26.15 \text{ m}$

T ทิศทาง X = 1.441 sec ให้อ่านไม่เกิน 0.02H (1.5) = 0.785 sec, ใช้ T = 0.785 sec

T ทิศทาง Y = 1.117 sec ให้อ่านไม่เกิน 0.02H (1.5) = 0.785 sec, ใช้ T = 0.785 sec

$I = 1.00, R = 5.0$

S_a ทิศทาง X = 0.196 (จากตารางที่ 1.4-5, T = 0.785)

S_a ทิศทาง Y = 0.196 (จากตารางที่ 1.4-5, T = 0.785)

ประเภทการออกแบบด้านฐานรากแผ่นดินไหว เป็น "ประเภท ค"

C_s ทิศทาง X = $S_a(I/R) = 0.0392 > 0.01$

C_s ทิศทาง Y = $S_a(I/R) = 0.0392 > 0.01$

K3-109

$WSD8 = 1.0D + 0.75L + 0.75W$

$WSD9 = 1.0D + 0.75L - 0.75W$

$WSD10 = 1.0D + 1.0W$

$WSD11 = 1.0D - 1.0W$

สำหรับการออกแบบด้วยวิธีกำลัง

$USD1 = 1.4D + 1.4SD$

$USD2 = 1.4D + 1.4SD + 1.7L$

$UEQ1 = 1.20D + 1.20SD + 1.00L + 1.00EQX$

$UEQ1-1 = 1.20D + 1.20SD + 1.00L - 1.00EQX$

$UEQ2 = 1.20D + 1.20SD + 1.00L + 1.00EQY$

$UEQ2-1 = 1.20D + 1.20SD + 1.00L - 1.00EQY$

$UEQ3 = 0.9D + 0.9SD + 1.00EQX$

$UEQ3-1 = 0.9D + 0.9SD - 1.00EQX$

$UEQ4 = 0.9D + 0.9SD + 1.00EQY$

$UEQ4-1 = 0.9D + 0.9SD - 1.00EQY$

$UWL1 = 1.05D + 1.05SD + 1.275L + 1.275W$

$UWL2 = 1.05D + 1.05SD + 1.275L - 1.275W$

$UWL3 = 0.9D + 0.9SD + 1.30W$

$UWL4 = 0.9D + 0.9SD - 1.30W$

K3-111

$W = 10305.2627 \text{ Tons}$

ค่าแรงเฉือนที่ฐานในทิศทาง X เท่ากับ $V = 0.0392(10305.2627) = 403.97 \text{ Tons}$

ค่าแรงเฉือนที่ฐานในทิศทาง Y เท่ากับ $V = 0.0392(10305.2627) = 403.97 \text{ Tons}$

ปรับค่าแรงเฉือนที่ใช้ในการออกแบบด้วยวิธีเชิงทฤษฎีโดยคูณด้วยค่า 0.85 V/V_i

ทิศทาง X: Scale Factor = $0.85 \times 403.97 / 230.24 = 1.49$

ทิศทาง Y: Scale Factor = $0.85 \times 403.97 / 265.58 = 1.30$

ดังนั้น แผ่นดินไหวใช้ควบคุมปรับค่าการตอบสนอง ในการออกแบบ ดังต่อไปนี้

$EQX = 1.49(SPX) + 0.39(SPY)$

$EQY = 0.45(SPX) + 1.30(SPY)$

การคำนวณด้วยวิธี

สำหรับการออกแบบด้วยวิธีน้ำหนักแรงเฉือนได้

$WSD1 = 1.0D + 1.0L$

$WSD2 = 1.0D + 0.7EQX$

$WSD2-1 = 1.0D - 0.7EQX$

$WSD3 = 1.0D + 0.7EQY$

$WSD3-1 = 1.0D - 0.7EQY$

$WSD4 = 1.0D + 0.75L + 0.525EQX$

$WSD4-1 = 1.0D + 0.75L - 0.525EQX$

$WSD5 = 1.0D + 0.75L + 0.525EQY$

$WSD5-1 = 1.0D + 0.75L - 0.525EQY$

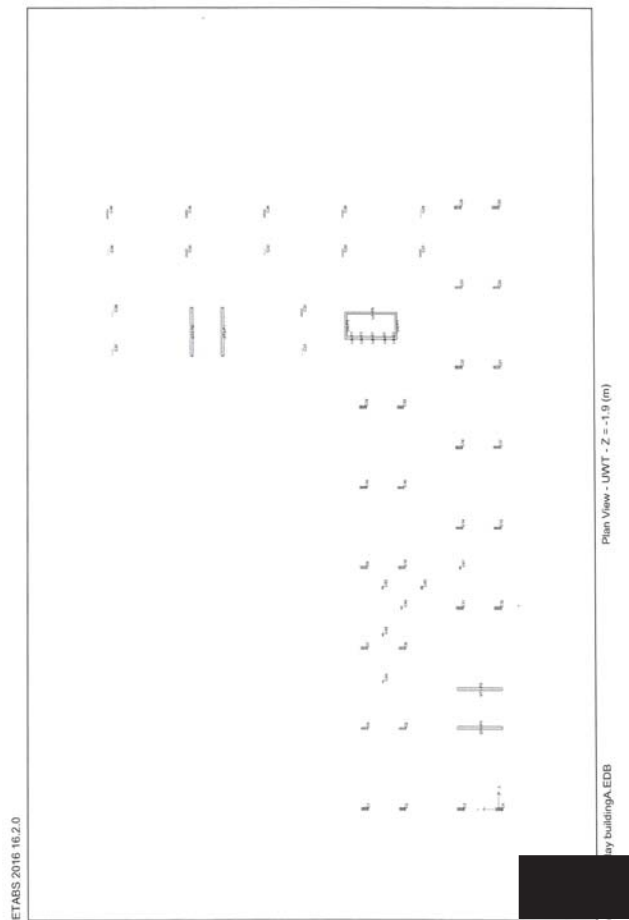
$WSD6 = 0.6D + 0.7EQX$

$WSD6-1 = 0.6D - 0.7EQX$

$WSD7 = 0.6D + 0.7EQY$

$WSD7-1 = 0.6D - 0.7EQY$

K3-110



K3-112

Load Combinations

Name	Load Case/Combo	Scale Factor	Type
WSD1	Dead	1	Linear Add
WSD1	SDL	1	
WSD1	Live	1	
WSD2	Dead	1	Linear Add
WSD2	SDL	1	
WSD2	EQXX	0.7	
WSD3	Dead	1	Linear Add
WSD3	SDL	1	
WSD3	EQYY	0.7	
WSD4	Dead	1	Linear Add
WSD4	SDL	1	
WSD4	Live	0.75	
WSD4	EQXX	0.525	
WSD5	Dead	1	Linear Add
WSD5	SDL	1	
WSD5	Live	0.75	
WSD5	EQYY	0.525	
WSD6	Dead	0.6	Linear Add
WSD6	SDL	0.6	
WSD6	EQXX	0.7	
WSD7	Dead	0.6	Linear Add
WSD7	SDL	0.6	
WSD7	EQYY	0.7	
WDEAD	Dead	1	Linear Add
WDEAD	SDL	1	
USD1	Dead	1.4	Linear Add
USD1	SDL	1.4	
USD1	Live	1.7	
UEQ1	Dead	1.2	Linear Add
UEQ1	SDL	1.2	
UEQ1	Live	1	
UEQ1	EQXX	1	
UEQ2	Dead	1.2	Linear Add
UEQ2	SDL	1.2	
UEQ2	Live	1	
UEQ2	EQYY	1	
UEQ3	Dead	0.9	Linear Add
UEQ3	SDL	0.9	
UEQ3	EQXX	1	
UEQ4	Dead	0.9	Linear Add
UEQ4	SDL	0.9	
UEQ4	EQYY	1	
USD2	Dead	1.4	Linear Add
USD2	SDL	1.4	
WSD Env	WSD1	1	Envelope
WSD Env	WSD2	1	
WSD Env	WSD3	1	
WSD Env	WSD4	1	
WSD Env	WSD5	1	

Page 1 of 4

K3-113

Load Combinations

Name	Load Case/Combo	Scale Factor	Type
WSD6 Env	WSD6	1	
WSD7 Env	WSD7	1	
WSD8 Env	WSD8	1	
WSD9 Env	WSD9	1	
WSD10 Env	WSD10	1	
WSD11 Env	WSD11	1	
WSD12 Env	WSD12	1	
WSD13 Env	WSD13	1	
WSD14 Env	WSD14	1	
WSD15 Env	WSD15	1	
WSD16 Env	WSD16	1	
WSD17 Env	WSD17	1	
USD ENV	USD1	1	Envelope
USD ENV	UEQ1	1	
USD ENV	UEQ2	1	
USD ENV	UEQ3	1	
USD ENV	UEQ4	1	
USD ENV	USD2	1	
USD ENV	UWL1	1	
USD ENV	UWL2	1	
USD ENV	UWL3	1	
USD ENV	UWL4	1	
USD ENV	UEQ1-1	1	
USD ENV	UEQ2-1	1	
USD ENV	UEQ3-1	1	
USD ENV	UEQ4-1	1	
EQXX	SPECX	1.49	Linear Add
EQXX	SPECY	0.39	
EQYY	SPECX	0.45	Linear Add
EQYY	SPECY	1.3	
WSD8	Dead	1	Linear Add
WSD8	SDL	1	
WSD8	Live	0.75	
WSD8	WIND	0.75	
WSD9	Dead	1	Linear Add
WSD9	SDL	1	
WSD9	Live	0.75	
WSD9	WIND	-0.75	
WSD10	Dead	1	Linear Add
WSD10	SDL	1	
WSD10	WIND	1	
WSD11	Dead	1	Linear Add
WSD11	SDL	1	
WSD11	WIND	-1	
UWL1	Dead	1.05	Linear Add
UWL1	SDL	1.05	
UWL1	Live	1.275	
UWL1	WIND	1.275	
UWL2	Dead	1.05	Linear Add

Page 2 of 4

K3-114

Load Combinations

Name	Load Case/Combo	Scale Factor	Type
UWL2	SDL	1.05	
UWL2	Live	1.275	
UWL2	WIND	-1.275	
UWL3	Dead	0.9	Linear Add
UWL3	SDL	0.9	
UWL3	WIND	1.3	
UWL4	Dead	0.9	Linear Add
UWL4	SDL	0.9	
UWL4	WIND	-1.3	
UEP1	Dead	1.4	Linear Add
UEP1	SDL	1.4	
UEP1	Live	1.7	
UEP2	Dead	0.9	Linear Add
UEP2	SDL	0.9	
WSD2-1	Dead	1	Linear Add
WSD2-1	SDL	1	
WSD3-1	EQXX	-0.7	
WSD3-1	Dead	1	Linear Add
WSD3-1	SDL	1	
WSD3-1	EQYY	-0.7	
WSD4-1	Dead	1	Linear Add
WSD4-1	SDL	1	
WSD4-1	Live	0.75	
WSD4-1	EQXX	-0.525	
WSD5-1	Dead	1	Linear Add
WSD5-1	SDL	1	
WSD5-1	Live	0.75	
WSD5-1	EQYY	-0.525	
WSD6-1	Dead	0.6	Linear Add
WSD6-1	SDL	0.6	
WSD6-1	EQXX	-0.7	
WSD7-1	Dead	0.6	Linear Add
WSD7-1	SDL	0.6	
WSD7-1	EQYY	-0.7	
UEQ1-1	Dead	1.2	Linear Add
UEQ1-1	SDL	1.2	
UEQ1-1	Live	1	
UEQ1-1	EQXX	-1	
UEQ2-1	Dead	1.2	Linear Add
UEQ2-1	SDL	1.2	
UEQ2-1	Live	1	
UEQ2-1	EQYY	-1	
UEQ3-1	Dead	0.9	Linear Add
UEQ3-1	SDL	0.9	
UEQ3-1	EQXX	-1	
UEQ4-1	Dead	0.9	Linear Add
UEQ4-1	SDL	0.9	
UEQ4-1	EQYY	-1	
WSD8-1	Dead	1	Linear Add

Page 3 of 4

K3-115

Load Combinations

Name	Load Case/Combo	Scale Factor	Type
WSD9-1	SDL	1	
WSD9-1	Live	0.75	
WSD9-1	WIND	0.56	
WSD9-1	Dead	1	Linear Add
WSD9-1	SDL	1	
WSD9-1	Live	0.75	
WSD9-1	WIND	-0.56	
WSD10-1	Dead	1	Linear Add
WSD10-1	SDL	1	
WSD10-1	WIND	0.75	
WSD11-1	Dead	1	Linear Add
WSD11-1	SDL	1	
WSD11-1	WIND	-0.75	

Page 4 of 4

K3-116

Column Forces: Service Load Env.

Story	Column	Load Case	P	V2	V3	T	M2	M3
			tnnf	tnnf	tnnf	tnnf-m	tnnf-m	tnnf-m
Lib Room	C31	WSD Env Min	-45.13	-0.80	-8.79	-0.16	-1.76	-2.52
Lib Room	C32	WSD Env Min	-55.03	-5.30	-8.24	-0.26	-1.65	-2.25
RWT1	C31	WSD Env Min	-45.43	-0.81	-8.80	-0.16	-1.65	-1.45
RWT1	C32	WSD Env Min	-55.33	-5.31	-8.25	-0.26	-1.65	-2.20
Roof	C1	WSD Env Min	-12.44	-5.13	-0.83	-0.22	-0.51	-6.46
Roof	C2	WSD Env Min	-14.64	-6.02	-0.86	-0.22	-0.51	-7.68
Roof	C3	WSD Env Min	-15.55	-5.50	-2.11	-0.22	-1.98	-6.97
Roof	C4	WSD Env Min	-11.13	-5.19	-0.92	-0.22	-0.62	-6.60
Roof	C5	WSD Env Min	-24.18	-1.20	-1.07	-0.22	-0.83	-1.49
Roof	C6	WSD Env Min	-27.14	-1.41	-2.41	-0.22	-2.26	-1.75
Roof	C7	WSD Env Min	-22.94	-1.35	-0.97	-0.22	-0.76	-1.64
Roof	C8	WSD Env Min	-27.68	-1.87	-1.46	-0.22	-1.21	-2.33
Roof	C9	WSD Env Min	-22.48	-1.31	-0.57	-0.22	-0.33	-1.59
Roof	C10	WSD Env Min	-29.64	-1.87	-0.45	-0.22	-0.12	-2.07
Roof	C11	WSD Env Min	-29.58	-2.22	-4.13	-0.22	-4.49	-2.80
Roof	C12	WSD Env Min	-21.75	-2.57	-2.11	-0.22	-2.04	-3.24
Roof	C13	WSD Env Min	-21.56	-2.13	-2.57	-0.22	-2.59	-2.63
Roof	C14	WSD Env Min	-29.64	-1.95	-4.28	-0.22	-4.69	-2.43
Roof	C15	WSD Env Min	-22.59	-1.34	-0.45	-0.22	-0.22	-1.64
Roof	C16	WSD Env Min	-29.57	-1.69	-0.32	-0.22	0.00	-2.10
Roof	C17	WSD Env Min	-21.66	-2.19	-2.54	-0.22	-2.58	-2.71
Roof	C18	WSD Env Min	-30.31	-1.97	-4.36	-0.22	-4.84	-2.46
Roof	C19	WSD Env Min	-19.93	-1.24	-0.35	-0.22	-0.12	-1.49
Roof	C20	WSD Env Min	-26.84	-1.61	-0.10	-0.22	0.24	-1.99
Roof	C21	WSD Env Min	-22.42	-2.19	-2.72	-0.22	-2.77	-2.72
Roof	C22	WSD Env Min	-27.24	-1.89	-4.10	-0.22	-4.49	-2.36
Roof	C23	WSD Env Min	-24.18	-1.88	-3.29	-0.22	-3.46	-2.31
Roof	C24	WSD Env Min	-23.22	-2.42	-2.47	-0.22	-2.46	-3.00
Roof	C25	WSD Env Min	-13.16	0.32	-1.74	-0.22	-1.59	0.82
Roof	C26	WSD Env Min	-12.53	0.23	-2.39	-0.22	-2.30	0.41
Roof	C27	WSD Env Min	-22.04	-2.72	-2.27	-0.22	-2.97	-2.39
Roof	C28	WSD Env Min	-18.20	-1.04	-3.31	-0.22	-4.26	-0.50
Roof	C29	WSD Env Min	-27.16	-4.10	-2.34	-0.22	-2.77	-3.18
Roof	C30	WSD Env Min	-27.18	-1.69	-2.11	-0.22	-2.48	-0.95
Roof	C31	WSD Env Min	-61.24	-2.01	-3.39	-0.22	-4.59	-0.75
Roof	C32	WSD Env Min	-70.07	-4.45	-2.89	-0.22	-3.81	-4.13
Roof	C33	WSD Env Min	-30.24	-1.66	-1.71	-0.22	-2.00	-0.81
Roof	C34	WSD Env Min	-26.95	-0.89	-2.05	-0.22	-2.41	-0.27
Roof	C35	WSD Env Min	-28.35	-2.64	-2.83	-0.22	-3.45	-1.90
Roof	C36	WSD Env Min	-28.61	-0.92	-2.71	-0.22	-3.23	-0.34
Roof	C37	WSD Env Min	-11.93	-0.70	0.92	-0.22	1.37	-0.25
Roof	C38	WSD Env Min	-16.71	-2.01	0.94	-0.22	1.40	-1.62
Roof	C39	WSD Env Min	-15.64	-0.30	1.37	-0.22	2.01	0.26
Roof	C40	WSD Env Min	-12.69	-0.21	0.89	-0.13	1.32	0.23
Story8	C1	WSD Env Min	-27.66	-3.88	-0.77	-0.23	-0.56	-5.64
Story8	C2	WSD Env Min	-33.45	-4.67	-0.73	-0.23	-0.53	-6.78
Story8	C3	WSD Env Min	-33.21	-4.23	-1.58	-0.23	-1.78	-6.17
Story8	C4	WSD Env Min	-24.88	-4.05	-0.80	-0.23	-0.64	-5.87

Page 1 of 9

K3-117

Column Forces: Service Load Env.

Story	Column	Load Case	P	V2	V3	T	M2	M3
			tnnf	tnnf	tnnf	tnnf-m	tnnf-m	tnnf-m
Story8	C5	WSD Env Min	-53.70	-0.98	-0.86	-0.23	-0.86	-1.41
Story8	C6	WSD Env Min	-61.83	-1.12	-1.56	-0.23	-1.96	-1.64
Story8	C7	WSD Env Min	-51.24	-1.06	-0.84	-0.23	-0.88	-1.54
Story8	C8	WSD Env Min	-63.62	-1.47	-1.01	-0.23	-1.17	-2.15
Story8	C9	WSD Env Min	-50.34	-1.03	-0.61	-0.23	-0.57	-1.49
Story8	C10	WSD Env Min	-67.49	-1.32	-0.42	-0.23	-0.33	-1.94
Story8	C11	WSD Env Min	-67.44	-1.36	-2.89	-0.23	-3.93	-2.57
Story8	C12	WSD Env Min	-48.65	-2.02	-1.47	-0.23	-1.79	-2.93
Story8	C13	WSD Env Min	-48.38	-1.64	-1.72	-0.23	-2.25	-2.39
Story8	C14	WSD Env Min	-67.61	-1.52	-2.97	-0.23	-4.12	-2.24
Story8	C15	WSD Env Min	-50.47	-1.06	-0.53	-0.23	-0.49	-1.53
Story8	C16	WSD Env Min	-67.33	-1.34	-0.34	-0.23	-0.24	-1.96
Story8	C17	WSD Env Min	-48.61	-1.68	-1.70	-0.23	-2.27	-2.45
Story8	C18	WSD Env Min	-68.88	-1.54	-2.99	-0.23	-4.22	-2.36
Story8	C19	WSD Env Min	-44.95	-0.96	-0.48	-0.23	-0.44	-1.41
Story8	C20	WSD Env Min	-61.81	-1.29	-0.21	-0.23	-0.06	-1.89
Story8	C21	WSD Env Min	-50.18	-1.69	-1.80	-0.23	-2.40	-2.47
Story8	C22	WSD Env Min	-62.79	-1.51	-2.85	-0.23	-3.97	-2.21
Story8	C23	WSD Env Min	-55.13	-1.44	-2.31	-0.23	-3.14	-2.11
Story8	C24	WSD Env Min	-51.93	-1.85	-1.71	-0.23	-2.23	-2.71
Story8	C25	WSD Env Min	-29.65	0.43	-1.32	-0.23	-1.58	0.67
Story8	C26	WSD Env Min	-27.97	0.15	-1.68	-0.23	-2.13	0.26
Story8	C27	WSD Env Min	-51.34	-2.02	-1.88	-0.23	-2.75	-2.29
Story8	C28	WSD Env Min	-40.38	-1.05	-2.61	-0.23	-3.80	-0.77
Story8	C29	WSD Env Min	-59.33	-1.71	-1.44	-0.23	-2.17	-2.14
Story8	C30	WSD Env Min	-55.54	-0.92	-1.28	-0.23	-1.95	-0.77
Story8	C31	WSD Env Min	-81.60	-0.33	-3.07	-0.23	-4.39	-0.13
Story8	C32	WSD Env Min	-95.10	-2.65	-2.46	-0.23	-3.55	-3.40
Story8	C33	WSD Env Min	-66.73	-0.85	-1.01	-0.23	-1.56	-0.51
Story8	C34	WSD Env Min	-55.15	-0.65	-1.23	-0.23	-1.87	-0.38
Story8	C35	WSD Env Min	-62.29	-1.12	-1.92	-0.23	-2.88	-1.31
Story8	C36	WSD Env Min	-58.15	-0.60	-1.71	-0.23	-2.60	-0.37
Story8	C37	WSD Env Min	-25.40	-0.47	0.95	-0.23	1.36	-0.20
Story8	C38	WSD Env Min	-35.49	-1.24	0.96	-0.23	1.37	-1.29
Story8	C39	WSD Env Min	-34.27	-0.23	1.36	-0.23	1.95	0.18
Story8	C40	WSD Env Min	-26.22	-0.38	0.94	-0.13	1.32	0.20
Story7	C1	WSD Env Min	-42.85	-4.17	-0.94	-0.23	-0.94	-5.88
Story7	C3	WSD Env Min	-54.92	-4.55	-1.86	-0.23	-2.21	-6.48
Story7	C4	WSD Env Min	-38.70	-4.35	-0.96	-0.23	-1.00	-6.17
Story7	C5	WSD Env Min	-83.16	-1.09	-1.02	-0.23	-1.23	-1.60
Story7	C6	WSD Env Min	-96.91	-1.25	-1.87	-0.23	-2.42	-1.86
Story7	C7	WSD Env Min	-79.40	-1.19	-1.01	-0.23	-1.26	-1.74
Story7	C8	WSD Env Min	-99.72	-1.61	-1.23	-0.23	-1.59	-2.37
Story7	C9	WSD Env Min	-78.06	-1.16	-0.73	-0.23	-0.92	-1.69
Story7	C10	WSD Env Min	-105.47	-1.46	-0.54	-0.23	-0.67	-2.17
Story7	C11	WSD Env Min	-105.40	-1.90	-3.24	-0.23	-4.34	-2.81
Story7	C12	WSD Env Min	-77.61	-2.19	-1.68	-0.23	-2.11	-3.19
Story7	C13	WSD Env Min	-75.10	-1.82	-1.94	-0.23	-2.56	-2.66

Page 2 of 9

K3-118

Column Forces: Service Load Env.

Story	Column	Load Case	P	V2	V3	T	M2	M3
			tnnf	tnnf	tnnf	tnnf-m	tnnf-m	tnnf-m
Story7	C14	WSD Env Min	-105.67	-1.67	-2.30	-0.23	-4.50	-2.49
Story7	C15	WSD Env Min	-78.33	-1.18	-0.62	-0.23	-0.81	-1.72
Story7	C16	WSD Env Min	-105.21	-1.47	-0.42	-0.23	-0.55	-2.18
Story7	C17	WSD Env Min	-75.44	-1.86	-1.89	-0.23	-2.56	-2.72
Story7	C18	WSD Env Min	-107.59	-1.69	-3.31	-0.23	-4.59	-2.52
Story7	C19	WSD Env Min	-69.95	-1.14	-0.55	-0.23	-0.73	-1.65
Story7	C20	WSD Env Min	-96.94	-1.46	-0.31	-0.23	-0.38	-2.17
Story7	C21	WSD Env Min	-77.80	-1.87	-2.07	-0.23	-2.81	-2.74
Story7	C22	WSD Env Min	-98.55	-1.68	-3.25	-0.23	-4.50	-2.49
Story7	C23	WSD Env Min	-86.23	-1.61	-2.67	-0.23	-3.72	-2.37
Story7	C24	WSD Env Min	-80.63	-2.06	-1.99	-0.23	-2.74	-3.02
Story7	C25	WSD Env Min	-46.17	0.37	-1.56	-0.23	-2.15	0.50
Story7	C26	WSD Env Min	-43.33	0.07	-1.98	-0.23	-2.72	0.08
Story7	C27	WSD Env Min	-80.44	-2.43	-1.98	-0.23	-2.90	-2.99
Story7	C28	WSD Env Min	-62.67	-1.29	-2.74	-0.23	-3.97	-1.36
Story7	C29	WSD Env Min	-91.75	-2.41	-1.60	-0.23	-2.37	-2.91
Story7	C30	WSD Env Min	-83.95	-1.26	-1.45	-0.23	-2.15	-1.32
Story7	C31	WSD Env Min	-102.52	-0.87	-3.08	-0.23	-4.43	-0.78
Story7	C32	WSD Env Min	-121.33	-3.22	-2.49	-0.23	-3.62	-4.07
Story7	C33	WSD Env Min	-103.36	-1.03	-1.15	-0.23	-1.75	-1.06
Story7	C34	WSD Env Min	-83.29	-0.86	-1.39	-0.23	-2.07	-0.83
Story7	C35	WSD Env Min	-96.82	-1.61	-2.12	-0.23	-3.12	-1.87
Story7	C36	WSD Env Min	-87.83	-0.80	-1.94	-0.23	-2.86	-0.75
Story7	C37	WSD Env Min	-38.93	-0.60	0.92	-0.23	1.29	-0.47
Story7	C38	WSD Env Min	-54.33	-1.52	0.94	-0.23	1.30	-1.62
Story7	C39	WSD Env Min	-52.86	-0.33	1.33	-0.23	1.85	-0.09
Story7	C40	WSD Env Min	-39.72	-0.43	0.90	-0.13	1.23	-0.09
Story6	C1	WSD Env Min	-58.01	-4.16	-1.06	-0.23	-1.47	-5.87
Story6	C2	WSD Env Min	-71.05	-4.91	-1.03	-0.23	-1.45	-7.05
Story6	C3	WSD Env Min	-74.74	-4.52	-1.96	-0.23	-2.71	-6.53
Story6	C4	WSD Env Min	-52.59	-4.33	-1.06	-0.23	-1.50	-6.24
Story6	C5	WSD Env Min	-112.46	-1.11	-1.10	-0.23	-1.72	-1.72
Story6	C6	WSD Env Min	-132.35	-1.27	-1.89	-0.23	-2.86	-1.99
Story6	C7	WSD Env Min	-107.40	-1.21	-1.11	-0.23	-1.74	-1.85
Story6	C8	WSD Env Min	-136.03	-1.61	-1.29	-0.23	-2.02	-2.47
Story6	C9	WSD Env Min	-105.61	-1.18	-0.83	-0.23	-1.37	-1.81
Story6	C10	WSD Env Min	-143.57	-1.47	-0.62	-0.23	-1.09	-2.30
Story6	C11	WSD Env Min	-143.67	-1.88	-3.21	-0.23	-4.64	-2.91
Story6	C12	WSD Env Min	-102.61	-2.17	-1.68	-0.23	-2.42	-3.28
Story6	C13	WSD Env Min	-101.72	-1.82	-1.90	-0.23	-2.78	-2.79
Story6	C14	WSD Env Min	-143.83	-1.68	-3.24	-0.23	-4.73	-2.63
Story6	C15	WSD Env Min	-105.84	-1.20	-0.70	-0.23	-1.20	-1.83
Story6	C16	WSD Env Min	-143.20	-1.48	-0.48	-0.23	-0.91	-2.30
Story6	C17	WSD Env Min	-102.14	-1.86	-1.82	-0.23	-2.72	-2.84
Story6	C18	WSD Env Min	-146.44	-1.69	-3.22	-0.23	-4.76	-2.64
Story6	C19	WSD Env Min	-94.99	-1.19	-0.62	-0.23	-1.03	-1.88
Story6	C20	WSD Env Min	-132.20	-1.50	-0.35	-0.23	-0.70	-2.33
Story6	C21	WSD Env Min	-105.27	-1.87	-1.95	-0.23	-2.98	-2.38

Column Forces: Service Load Env.

Story	Column	Load Case	P	V2	V3	T	M2	M3
			tnuf	tnuf	tnuf	tnuf-m	tnuf-m	tnuf-m
Story5	C30	WSD Env Min	-140.54	-1.41	-1.30	-0.22	-2.11	-2.55
Story5	C31	WSD Env Min	-146.16	-1.11	-2.88	-0.22	-4.23	-2.03
Story5	C32	WSD Env Min	-177.37	-3.35	-2.29	-0.22	-3.46	-5.14
Story5	C33	WSD Env Min	-177.03	-1.13	-1.05	-0.22	-1.76	-2.07
Story5	C34	WSD Env Min	-138.98	-1.06	-1.26	-0.22	-2.05	-1.95
Story5	C35	WSD Env Min	-167.47	-1.65	-2.03	-0.22	-3.16	-2.71
Story5	C36	WSD Env Min	-146.75	-0.93	-1.84	-0.22	-2.89	-1.71
Story5	C37	WSD Env Min	-66.21	-0.69	0.96	-0.22	1.27	-1.24
Story5	C38	WSD Env Min	-92.24	-1.63	0.98	-0.22	1.24	-2.38
Story5	C39	WSD Env Min	-90.10	-0.44	1.34	-0.22	1.74	-0.90
Story5	C40	WSD Env Min	-66.54	-0.60	0.90	-0.12	1.16	-1.22
Story4	C1	WSD Env Min	-87.84	-3.94	-1.14	-0.19	-2.93	-5.72
Story4	C2	WSD Env Min	-108.77	-4.73	-1.07	-0.19	-2.85	-6.89
Story4	C3	WSD Env Min	-114.41	-4.39	-2.02	-0.19	-4.11	-6.48
Story4	C4	WSD Env Min	-80.43	-4.23	-1.12	-0.19	-2.90	-6.29
Story4	C5	WSD Env Min	-170.32	-9.98	-1.11	-0.19	-2.92	-1.72
Story4	C6	WSD Env Min	-204.59	-1.08	-1.73	-0.19	-3.81	-1.93
Story4	C7	WSD Env Min	-162.39	-1.10	-1.17	-0.19	-2.90	-1.88
Story4	C8	WSD Env Min	-209.65	-1.42	-1.17	-0.19	-2.89	-2.40
Story4	C9	WSD Env Min	-159.80	-1.09	-0.90	-0.19	-2.19	-1.87
Story4	C10	WSD Env Min	-220.43	-1.33	-0.58	-0.19	-1.96	-2.34
Story4	C11	WSD Env Min	-220.96	-1.59	-3.03	-0.19	-5.26	-2.74
Story4	C12	WSD Env Min	-156.36	-1.85	-1.49	-0.19	-1.14	-1.05
Story4	C13	WSD Env Min	-154.47	-1.64	-1.64	-0.19	-3.18	-2.77
Story4	C14	WSD Env Min	-220.60	-1.49	-2.98	-0.19	-5.13	-2.63
Story4	C15	WSD Env Min	-160.32	-1.08	-0.73	-0.19	-2.02	-1.85
Story4	C16	WSD Env Min	-219.76	-1.31	-0.41	-0.19	-1.60	-2.28
Story4	C17	WSD Env Min	-154.89	-1.64	-1.52	-0.19	-2.98	-2.77
Story4	C18	WSD Env Min	-224.79	-1.48	-2.92	-0.19	-5.03	-2.60
Story4	C19	WSD Env Min	-144.76	-1.09	-0.64	-0.19	-1.80	-1.85
Story4	C20	WSD Env Min	-203.97	-1.36	-0.30	-0.19	-1.33	-2.33
Story4	C21	WSD Env Min	-159.48	-1.66	-1.66	-0.19	-3.28	-2.81
Story4	C22	WSD Env Min	-207.90	-1.53	-2.93	-0.19	-5.12	-2.65
Story4	C23	WSD Env Min	-180.74	-1.42	-2.37	-0.19	-4.59	-2.43
Story4	C24	WSD Env Min	-166.29	-1.89	-1.67	-0.19	-3.58	-3.14
Story4	C25	WSD Env Min	-95.71	0.40	-1.37	-0.19	-3.36	0.22
Story4	C26	WSD Env Min	-88.75	0.02	-1.65	-0.19	-3.72	-0.28
Story4	C27	WSD Env Min	-171.27	-2.45	-1.73	-0.19	-3.77	-5.07
Story4	C28	WSD Env Min	-129.56	-1.53	-2.38	-0.19	-3.66	-3.73
Story4	C29	WSD Env Min	-190.96	-2.26	-1.26	-0.19	-2.11	-4.46
Story4	C30	WSD Env Min	-168.52	-1.39	-1.13	-0.19	-1.94	-3.26
Story4	C31	WSD Env Min	-168.63	-1.14	-2.65	-0.19	-3.94	-3.72
Story4	C32	WSD Env Min	-207.11	-3.29	-2.10	-0.19	-3.25	-5.67
Story4	C33	WSD Env Min	-214.28	-1.05	-0.92	-0.19	-1.64	-3.57
Story4	C34	WSD Env Min	-166.34	-1.07	-1.11	-0.19	-1.91	-2.59
Story4	C35	WSD Env Min	-203.63	-1.54	-1.90	-0.19	-3.06	-3.07
Story4	C36	WSD Env Min	-173.84	-0.95	-1.71	-0.19	-2.78	-2.26
Story4	C37	WSD Env Min	-79.89	-0.69	1.04	-0.19	1.33	-1.71

Page 5 of 9

K3-121

Column Forces: Service Load Env.

Story	Column	Load Case	P	V2	V3	T	M2	M3
			tnuf	tnuf	tnuf	tnuf-m	tnuf-m	tnuf-m
Story4	C38	WSD Env Min	-111.25	-1.63	1.05	-0.19	1.30	-2.82
Story4	C39	WSD Env Min	-108.75	-0.45	1.41	-0.19	1.78	-1.38
Story4	C40	WSD Env Min	-79.75	-0.65	0.94	-0.11	1.19	-2.00
Story3	C1	WSD Env Min	-102.25	-2.93	-1.10	-0.16	-3.83	-5.89
Story3	C2	WSD Env Min	-127.72	-4.83	-0.93	-0.16	-3.58	-7.31
Story3	C3	WSD Env Min	-134.03	-4.47	-1.83	-0.16	-4.69	-6.84
Story3	C4	WSD Env Min	-94.32	-4.28	-1.02	-0.16	-3.67	-6.53
Story3	C5	WSD Env Min	-198.73	-0.67	-0.79	-0.16	-3.00	-1.28
Story3	C6	WSD Env Min	-241.43	-0.72	-1.18	-0.16	-3.46	-1.45
Story3	C7	WSD Env Min	-189.03	-0.93	-0.78	-0.16	-2.73	-1.72
Story3	C8	WSD Env Min	-247.16	-1.34	-0.75	-0.16	-2.77	-2.27
Story3	C9	WSD Env Min	-186.48	-0.83	-0.75	-0.16	-2.64	-1.52
Story3	C10	WSD Env Min	-259.28	-0.95	-0.88	-0.16	-2.15	-1.77
Story3	C11	WSD Env Min	-260.17	-1.34	-2.65	-0.16	-5.17	-2.81
Story3	C12	WSD Env Min	-182.87	-1.52	-1.34	-0.16	-3.59	-2.71
Story3	C13	WSD Env Min	-180.51	-1.31	-1.48	-0.16	-3.50	-2.37
Story3	C14	WSD Env Min	-259.30	-1.18	-2.80	-0.16	-5.42	-2.23
Story3	C15	WSD Env Min	-187.08	-0.90	-0.76	-0.16	-2.59	-1.67
Story3	C16	WSD Env Min	-258.43	-1.08	-0.37	-0.16	-2.05	-2.04
Story3	C17	WSD Env Min	-180.83	-1.36	-1.36	-0.16	-3.24	-2.47
Story3	C18	WSD Env Min	-264.41	-1.32	-2.76	-0.16	-5.28	-2.33
Story3	C19	WSD Env Min	-169.29	-0.87	-0.74	-0.16	-2.41	-1.58
Story3	C20	WSD Env Min	-240.47	-1.09	-0.33	-0.16	-1.83	-2.01
Story3	C21	WSD Env Min	-186.08	-1.36	-1.55	-0.16	-3.64	-2.48
Story3	C22	WSD Env Min	-245.45	-1.27	-2.81	-0.16	-5.45	-2.36
Story3	C23	WSD Env Min	-212.89	-1.13	-2.24	-0.16	-4.97	-2.13
Story3	C24	WSD Env Min	-194.60	-1.61	-1.63	-0.16	-4.13	-2.85
Story3	C25	WSD Env Min	-112.06	0.59	-1.47	-0.16	-4.28	0.38
Story3	C26	WSD Env Min	-103.30	0.18	-1.37	-0.16	-4.32	-0.14
Story3	C27	WSD Env Min	-202.40	-2.11	-1.55	-0.16	-2.56	-5.59
Story3	C28	WSD Env Min	-151.44	-1.40	-2.12	-0.16	-3.33	-4.60
Story3	C29	WSD Env Min	-225.33	-1.89	-1.04	-0.16	-1.86	-4.76
Story3	C30	WSD Env Min	-196.09	-1.25	-0.93	-0.16	-1.72	-3.91
Story3	C31	WSD Env Min	-191.34	-1.08	-2.39	-0.16	-3.63	-3.45
Story3	C32	WSD Env Min	-238.12	-3.06	-1.82	-0.16	-2.87	-6.08
Story3	C33	WSD Env Min	-251.95	-0.82	-0.77	-0.16	-1.48	-2.96
Story3	C34	WSD Env Min	-193.24	-0.97	-0.93	-0.16	-1.71	-3.17
Story3	C35	WSD Env Min	-240.56	-1.21	-1.76	-0.16	-2.91	-3.20
Story3	C36	WSD Env Min	-204.59	-0.84	-1.55	-0.16	-2.61	-2.72
Story3	C37	WSD Env Min	-93.53	-0.66	1.16	-0.16	1.48	-2.27
Story3	C38	WSD Env Min	-130.28	-1.54	1.11	-0.16	1.31	-3.25
Story3	C39	WSD Env Min	-127.43	-0.41	1.47	-0.16	1.80	-1.92
Story3	C40	WSD Env Min	-92.74	-0.66	0.99	-0.09	1.22	-2.87
Story2	C1	WSD Env Min	-116.15	-3.04	-1.01	-0.11	-4.99	-4.32
Story2	C2	WSD Env Min	-146.69	-3.30	-0.95	-0.11	-5.03	-4.41
Story2	C3	WSD Env Min	-153.35	-3.15	-2.05	-0.11	-6.50	-4.38
Story2	C4	WSD Env Min	-107.92	-3.22	-1.16	-0.11	-5.18	-4.67
Story2	C5	WSD Env Min	-226.74	-0.89	-1.75	-0.11	-6.31	-2.07

Page 6 of 9

K3-122

Column Forces: Service Load Env.

Story	Column	Load Case	P	V2	V3	T	M2	M3
			tnuf	tnuf	tnuf	tnuf-m	tnuf-m	tnuf-m
Story2	C6	WSD Env Min	-278.83	-0.78	-2.14	-0.11	-7.06	-1.93
Story2	C7	WSD Env Min	-215.00	-0.76	-2.14	-0.11	-6.95	-1.63
Story2	C8	WSD Env Min	-285.26	-0.82	-1.38	-0.11	-5.42	-1.75
Story2	C9	WSD Env Min	-212.65	-1.04	-1.35	-0.11	-4.97	-2.29
Story2	C10	WSD Env Min	-298.57	-1.81	-0.77	-0.11	-4.03	-3.92
Story2	C11	WSD Env Min	-299.95	-0.83	-3.82	-0.11	-8.28	-1.83
Story2	C12	WSD Env Min	-208.82	-0.99	-0.97	-0.11	-3.93	-2.03
Story2	C13	WSD Env Min	-206.33	-1.24	-1.63	-0.11	-3.69	-2.66
Story2	C14	WSD Env Min	-298.28	-1.29	-2.33	-0.11	-5.38	-2.82
Story2	C15	WSD Env Min	-213.41	-0.71	-0.67	-0.11	-3.24	-1.55
Story2	C16	WSD Env Min	-297.40	-0.83	-0.20	-0.11	-2.56	-1.82
Story2	C17	WSD Env Min	-296.41	-1.02	-0.97	-0.11	-3.40	-2.18
Story2	C18	WSD Env Min	-304.41	-0.87	-2.40	-0.11	-5.39	-1.95
Story2	C19	WSD Env Min	-193.49	-0.69	-0.72	-0.11	-3.22	-1.54
Story2	C20	WSD Env Min	-277.56	-0.85	-0.25	-0.11	-2.55	-1.86
Story2	C21	WSD Env Min	-212.26	-1.05	-1.25	-0.11	-4.12	-2.24
Story2	C22	WSD Env Min	-283.76	-0.98	-2.51	-0.11	-6.02	-2.13
Story2	C23	WSD Env Min	-245.48	-0.80	-2.17	-0.11	-6.22	-1.82
Story2	C24	WSD Env Min	-222.75	-1.26	-1.42	-0.11	-4.97	-2.53
Story2	C25	WSD Env Min	-128.24	0.66	-1.12	-0.11	-4.89	0.26
Story2	C26	WSD Env Min	-117.36	0.18	-1.39	-0.11	-5.48	-0.40
Story2	C27	WSD Env Min	-234.26	-1.67	-1.36	-0.11	-2.49	-6.36
Story2	C28	WSD Env Min	-172.84	-1.13	-1.92	-0.11	-3.34	-5.54
Story2	C29	WSD Env Min	-260.50	-1.43	-0.77	-0.11	-1.60	-5.26
Story2	C30	WSD Env Min	-223.12	-1.10	-0.68	-0.11	-1.49	-4.87
Story2	C31	WSD Env Min	-213.99	-0.70	-2.03	-0.11	-3.19	-3.71
Story2	C32	WSD Env Min	-270.14	-2.40	-1.78	-0.11	-5.35	-6.52
Story2	C33	WSD Env Min	-290.18	-0.42	-0.59	-0.11	-1.35	-3.19
Story2	C34	WSD Env Min	-219.62	-0.86	-0.68	-0.11	-1.50	-3.93
Story2	C35	WSD Env Min	-278.44	-0.85	-1.54	-0.11	-2.73	-2.49
Story2	C36	WSD Env Min	-222.93	-0.73	-1.35	-0.11	-2.50	-3.35
Story2	C37	WSD Env Min	-107.10	-0.36	1.17	-0.11	1.34	-2.31
Story2	C38	WSD Env Min	-149.42	-1.31	1.31	-0.11	1.61	-3.45
Story2	C39	WSD Env Min	-146.17	-0.20	1.60	-0.11	1.95	-2.14
Story2	C40	WSD Env Min	-105.44	-0.48	1.68	-0.06	1.36	-3.46
Story1	C1	WSD Env Min	-135.68	-1.60	-1.93	-0.04	-6.27	-1.10
Story1	C2	WSD Env Min	-181.10	-1.29	-2.00	-0.04	-6.29	-1.12
Story1	C3	WSD Env Min	-186.87	-1.37	-2.91	-0.04	-6.45	-1.28
Story1	C4	WSD Env Min	-127.25	-1.65	-2.28	-0.04	-6.33	-1.42
Story1	C5	WSD Env Min	-249.92	-3.57	-3.57	-0.07	-6.58	-4.39
Story1	C6	WSD Env Min	-306.16	-3.02	-4.64	-0.04	-7.58	-3.86
Story1	C7	WSD Env Min	-228.58	-1.19	-3.36	-0.07	-7.41	-1.46</

Column Forces: Service Load Env.

Story	Column	Load Case	P tnuf	V2 tnuf	V3 tnuf	T tnuf-m	M2 tnuf-m	M3 tnuf-m
UWT	C22	WSD Env Min	-325.43	-1.58	-3.27	-0.07	-8.19	-2.87
UWT	C23	WSD Env Min	-280.81	-1.02	-3.00	-0.06	-8.35	-2.11
UWT	C24	WSD Env Min	-254.08	-1.48	-2.32	-0.06	-7.80	-2.60
UWT	C25	WSD Env Min	-142.82	0.15	-1.61	-0.04	-7.06	-0.84
UWT	C26	WSD Env Min	-130.18	-0.19	-1.99	-0.04	-7.33	-1.04
UWT	C27	WSD Env Min	-269.37	-2.93	-1.54	-0.06	-2.23	-10.14
UWT	C28	WSD Env Min	-196.99	-2.05	-1.49	-0.04	-1.97	-7.93
UWT	C29	WSD Env Min	-299.37	-2.46	-0.89	-0.06	-1.70	-8.32
UWT	C30	WSD Env Min	-253.73	-2.33	-0.83	-0.06	-1.72	-8.22
UWT	C31	WSD Env Min	-238.77	-1.34	-1.39	-0.04	-1.56	-5.66
UWT	C32	WSD Env Min	-304.69	-3.36	-2.08	-0.06	-2.48	-7.93
UWT	C33	WSD Env Min	-331.25	-1.16	-0.32	-0.04	-1.10	-5.21
UWT	C34	WSD Env Min	-249.02	-1.95	-0.83	-0.06	-1.72	-6.83
UWT	C35	WSD Env Min	-330.91	-1.77	-1.64	-0.06	-2.32	-5.98
UWT	C36	WSD Env Min	-265.00	-1.76	-1.32	-0.06	-2.29	-5.96
UWT	C37	WSD Env Min	-121.25	-0.98	0.63	-0.04	0.00	-4.10
UWT	C38	WSD Env Min	-170.15	-1.70	0.87	-0.04	0.15	-4.49
UWT	C39	WSD Env Min	-166.44	-0.94	1.01	-0.04	0.19	-4.06
UWT	C40	WSD Env Min	-119.62	-1.43	0.70	-0.02	0.23	-5.94
UWT	C41	WSD Env Min	-27.93	-0.35	-7.04	-0.04	-0.49	-0.51
UWT	C42	WSD Env Min	-34.71	-2.16	-1.03	0.00	-0.34	-0.68
UWT	C43	WSD Env Min	-35.22	-1.73	-1.90	0.00	-0.40	-0.68
UWT	C44	WSD Env Min	-41.65	-3.50	-1.69	0.00	-0.42	-0.85
UWT	C45	WSD Env Min	-37.98	-4.27	-1.15	0.00	-0.37	-0.70
UWT	C46	WSD Env Min	-31.68	-2.42	-1.19	-0.01	-0.35	-0.68

Page 9 of 9

K3-125

Column Forces: Strength Load Env.

Story	Column	Load Case	P tnuf	V2 tnuf	V3 tnuf	T tnuf-m	M2 tnuf-m	M3 tnuf-m
Lift Room	C31	USD ENV Min	-68.34	-1.10	-12.59	-0.32	-2.09	-3.53
Lift Room	C32	USD ENV Min	-81.02	-7.71	-12.22	-0.40	-1.84	-3.17
RWT1	C31	USD ENV Min	-69.20	-1.11	-12.59	-0.22	-0.45	-1.97
RWT1	C32	USD ENV Min	-81.38	-7.73	-12.22	-0.40	-0.60	-3.22
Roof	C1	USD ENV Min	-171.12	-8.83	-1.13	-0.31	-0.66	-8.55
Roof	C2	USD ENV Min	-21.23	-8.04	-1.13	-0.31	-0.62	-10.20
Roof	C3	USD ENV Min	-21.81	-7.48	-3.01	-0.31	-2.82	-9.44
Roof	C4	USD ENV Min	-14.99	-7.01	-1.29	-0.31	-0.86	-8.87
Roof	C5	USD ENV Min	-35.12	-1.69	-1.44	-0.31	-1.08	-2.09
Roof	C6	USD ENV Min	-38.38	-1.98	-3.36	-0.31	-3.13	-2.44
Roof	C7	USD ENV Min	-33.21	-1.92	-1.29	-0.31	-0.97	-2.34
Roof	C8	USD ENV Min	-40.31	-2.69	-1.95	-0.31	-1.59	-3.36
Roof	C9	USD ENV Min	-32.65	-1.86	-0.72	-0.31	-0.37	-2.26
Roof	C10	USD ENV Min	-43.07	-2.37	-0.49	-0.31	-0.01	-2.96
Roof	C11	USD ENV Min	-42.97	-3.19	-5.91	-0.31	-6.43	-4.02
Roof	C12	USD ENV Min	-30.86	-3.68	-3.04	-0.31	-2.94	-4.64
Roof	C13	USD ENV Min	-31.30	-3.05	-3.68	-0.31	-3.70	-3.77
Roof	C14	USD ENV Min	-43.07	-2.79	-6.12	-0.31	-6.72	-3.47
Roof	C15	USD ENV Min	-32.82	-1.91	-0.56	-0.31	-0.22	-2.33
Roof	C16	USD ENV Min	-42.97	-2.41	-0.33	-0.31	0.15	-3.00
Roof	C17	USD ENV Min	-31.46	-3.14	-3.64	-0.31	-3.69	-3.89
Roof	C18	USD ENV Min	-44.05	-2.83	-6.23	-0.31	-6.86	-3.54
Roof	C19	USD ENV Min	-28.32	-1.71	-0.44	-0.31	-0.10	-2.05
Roof	C20	USD ENV Min	-38.99	-2.25	-0.03	-0.31	0.48	-2.78
Roof	C21	USD ENV Min	-32.57	-3.14	-3.88	-0.31	-3.95	-3.90
Roof	C22	USD ENV Min	-39.58	-2.69	-5.85	-0.31	-6.41	-3.35
Roof	C23	USD ENV Min	-35.13	-2.68	-4.67	-0.31	-4.91	-3.29
Roof	C24	USD ENV Min	-33.73	-3.48	-3.51	-0.31	-3.49	-4.30
Roof	C25	USD ENV Min	-18.78	0.89	-2.47	-0.31	-2.25	1.35
Roof	C26	USD ENV Min	-17.74	0.44	-3.39	-0.31	-3.25	0.73
Roof	C27	USD ENV Min	-31.96	-3.85	-5.21	-0.31	-4.20	-3.36
Roof	C28	USD ENV Min	-25.76	-1.41	-4.70	-0.31	-6.06	-0.63
Roof	C29	USD ENV Min	-37.44	-5.82	-3.38	-0.31	-4.00	-4.51
Roof	C30	USD ENV Min	-38.78	-2.33	-3.01	-0.31	-3.54	-1.28
Roof	C31	USD ENV Min	-88.35	-2.89	-4.83	-0.31	-6.62	-1.06
Roof	C32	USD ENV Min	-97.78	-6.10	-4.05	-0.31	-5.45	-5.70
Roof	C33	USD ENV Min	-43.78	-2.22	-2.40	-0.31	-2.81	-0.99
Roof	C34	USD ENV Min	-38.83	-1.16	-2.92	-0.31	-3.42	-0.28
Roof	C35	USD ENV Min	-39.82	-3.67	-3.98	-0.31	-4.88	-2.60
Roof	C36	USD ENV Min	-41.11	-1.19	-3.85	-0.31	-4.60	-0.37
Roof	C37	USD ENV Min	-15.81	-0.97	1.45	-0.31	2.14	-0.32
Roof	C38	USD ENV Min	-23.77	-2.88	1.49	-0.31	2.18	-2.34
Roof	C39	USD ENV Min	-22.60	-0.34	2.14	-0.31	3.11	0.46
Roof	C40	USD ENV Min	-18.00	-0.25	1.39	-0.18	2.05	0.37
Story8	C1	USD ENV Min	-38.25	-5.16	-1.07	-0.32	-0.74	-7.49
Story8	C2	USD ENV Min	-48.58	-6.22	-0.98	-0.32	-0.66	-9.03

Page 1 of 9

K3-126

Column Forces: Strength Load Env.

Story	Column	Load Case	P tnuf	V2 tnuf	V3 tnuf	T tnuf-m	M2 tnuf-m	M3 tnuf-m
Story8	C3	USD ENV Min	-49.46	-5.76	-2.26	-0.32	-2.52	-8.38
Story8	C4	USD ENV Min	-33.95	-5.50	-1.13	-0.32	-0.88	-7.95
Story8	C5	USD ENV Min	-78.10	-1.38	-1.18	-0.32	-1.14	-1.99
Story8	C6	USD ENV Min	-88.86	-1.57	-2.17	-0.32	-2.71	-2.29
Story8	C7	USD ENV Min	-74.38	-1.51	-1.15	-0.32	-1.16	-2.19
Story8	C8	USD ENV Min	-92.52	-2.12	-1.35	-0.32	-1.54	-3.09
Story8	C9	USD ENV Min	-73.21	-1.47	-0.82	-0.32	-0.73	-2.12
Story8	C10	USD ENV Min	-98.19	-1.88	-0.51	-0.32	-0.32	-2.76
Story8	C11	USD ENV Min	-98.08	-2.53	-4.15	-0.32	-5.64	-3.69
Story8	C12	USD ENV Min	-69.29	-2.90	-2.11	-0.32	-2.58	-4.20
Story8	C13	USD ENV Min	-70.34	-2.34	-2.47	-0.32	-3.22	-3.42
Story8	C14	USD ENV Min	-98.36	-2.17	-4.26	-0.32	-5.90	-3.19
Story8	C15	USD ENV Min	-73.40	-1.51	-0.71	-0.32	-0.63	-2.17
Story8	C16	USD ENV Min	-97.94	-1.91	-0.40	-0.32	-0.22	-2.79
Story8	C17	USD ENV Min	-70.68	-2.41	-2.43	-0.32	-3.25	-3.52
Story8	C18	USD ENV Min	-100.21	-2.20	-4.30	-0.32	-6.04	-3.24
Story8	C19	USD ENV Min	-64.74	-1.36	-0.65	-0.32	-0.57	-1.96
Story8	C20	USD ENV Min	-89.90	-1.80	-0.23	-0.32	0.03	-2.65
Story8	C21	USD ENV Min	-72.96	-2.43	-2.57	-0.32	-3.42	-3.54
Story8	C22	USD ENV Min	-91.34	-2.14	-4.09	-0.32	-5.68	-3.15
Story8	C23	USD ENV Min	-80.18	-2.04	-3.30	-0.32	-4.46	-2.99
Story8	C24	USD ENV Min	-75.51	-2.65	-2.44	-0.32	-3.17	-3.89
Story8	C25	USD ENV Min	-42.58	0.73	-1.89	-0.32	-2.25	1.11
Story8	C26	USD ENV Min	-39.73	0.31	-2.39	-0.32	-0.01	0.50
Story8	C27	USD ENV Min	-74.61	-2.85	-2.68	-0.32	-3.92	-3.23
Story8	C28	USD ENV Min	-57.25	-1.45	-3.73	-0.32	-5.43	-1.02
Story8	C29	USD ENV Min	-84.80	-2.41	-2.07	-0.32	-3.13	-3.01
Story8	C30	USD ENV Min	-80.18	-1.29	-1.82	-0.32	-2.77	-1.05
Story8	C31	USD ENV Min	-113.61	-0.45	-4.44	-0.32	-6.38	-0.13
Story8	C32	USD ENV Min	-130.81	-3.76	-3.53	-0.32	-5.13	-4.80
Story8	C33	USD ENV Min	-97.13	-0.85	-1.45	-0.32	-2.21	-0.60
Story8	C34	USD ENV Min	-80.03	-0.89	-1.74	-0.32	-2.65	-0.48
Story8	C35	USD ENV Min	-90.05	-1.55	-2.74	-0.32	-4.10	-1.77
Story8	C36	USD ENV Min	-84.41	-0.82	-2.46	-0.32	-3.72	-0.43
Story8	C37	USD ENV Min	-34.71	-0.66	1.46	-0.32	2.11	-0.25
Story8	C38	USD ENV Min	-51.28	-1.79	1.48	-0.32	2.12	-1.88
Story8	C39	USD ENV Min	-49.68	-0.30	2.10	-0.32	3.00	0.32
Story8	C40	USD ENV Min	-37.71	-0.52	1.44	-0.18	2.03	0.32
Story7	C1	USD ENV Min	-59.21	-5.57	-1.31	-0.33	-1.28	-7.87
Story7	C3	USD ENV Min	-77.07	-6.23	-2.65	-0.33	-3.14	-8.87
Story7	C4	USD ENV Min	-52.93	-5.93	-1.35	-0.33	-1.39	-8.41
Story7	C5	USD ENV Min	-130.97	-1.54	-1.41	-0.33	-1.67	-2.26
Story7	C6	USD ENV Min	-139.76	-1.76	-2.61	-0.33	-3.36	-2.61
Story7	C7	USD ENV Min	-115.28	-1.70	-1.38	-0.33	-1.70	-2.47
Story7	C8	USD ENV Min	-145.07	-2.32	-1.67	-0.33	-2.13	-3.40
Story7	C9	USD ENV Min	-113.55	-1.65	-0.98	-0.33	-1.23	-2.41

Page 2 of 9

K3-127

Column Forces: Strength Load Env.

Story	Column	Load Case	P tnuf	V2 tnuf	V3 tnuf	T tnuf-m	M2 tnuf-m	M3 tnuf-m
Story7	C10	USD ENV Min	-153.48	-2.08	-0.67	-0.33	-0.81	-3.09
Story7	C11	USD ENV Min	-153.44	-2.72	-4.65	-0.33	-6.23	-4.03
Story7	C12	USD ENV Min	-107.70	-3.14	-2.42	-0.33	-3.94	-4.57
Story7	C13	USD ENV Min	-109.21	-2.60	-2.79	-0.33	-3.66	-3.81
Story7	C14	USD ENV Min	-153.78	-2.39	-4.71	-0.33	-6.45	-3.56
Story7	C15	USD ENV Min	-113.80	-1.68	-0.83	-0.33	-1.08	-2.45
Story7	C16	USD ENV Min	-153.09	-2.10	-0.51	-0.33	-0.65	-3.11
Story7	C17	USD ENV Min	-109.72	-2.66	-2.71	-0.33	-3.65	-3.90
Story7	C18	USD ENV Min	-156.58	-2.42	-4.74	-0.33	-6.57	-3.61
Story7	C19	USD ENV Min	-101.03	-1.59	-0.74	-0.33	-0.99	-2.31
Story7	C20	USD ENV Min	-141.06	-2.06	-0.36	-0.33	-0.42	-3.04
Story7	C21	USD ENV Min	-113.15	-2.68	-2.95	-0.33	-4.01	-3.92
Story7	C22	USD ENV Min	-143.41	-2.39	-4.64	-0.33	-6.44	-3.54
Story7	C23	USD ENV Min	-125.44	-2.29	-3.80	-0.33	-5.30	-3.37
Story7	C24	USD ENV Min	-117.28	-2.96	-2.83	-0.33	-3.91	-4.33
Story7	C25	USD ENV Min	-66.32	0.64	-2.22	-0.33	-3.05	0.88
Story7	C26	USD ENV Min	-61.48	0.19	-2.81	-0.33	-3.86	0.25
Story7	C27	USD ENV Min	-117.56	-3.44	-2.82	-0.33	-4.14	-4.23
Story7	C28	USD ENV Min	-88.68	-1.79	-3.92	-0.33	-5.67	-1.87
Story7	C29	USD ENV Min	-132.38	-3.41	-2.31	-0.33	-3.41	-4.11
Story7	C30	USD ENV Min	-121.47	-1.76	-2.06	-0.33	-3.07	-1.83
Story7	C31	USD ENV Min	-139.90	-1.22	-4.49	-0.33	-6.46	-1.08
Story7	C32	USD ENV Min	-170.04	-4.54	-3.61	-0.33	-5.25	-5.75
Story7	C33	USD ENV Min	-156.44	-1.38	-1.61	-0.33	-2.48	-1.37
Story7	C34	USD ENV Min	-120.97	-1.18	-1.98	-0.33	-2.93	-1.10
Story7	C35	USD ENV Min	-140.71	-2.23	-3.02	-0.33	-4.44	-2.57
Story7	C36	USD ENV Min	-127.59	-1.09	-2.77	-0.33	-4.08	-0.99
Story7	C37	USD ENV Min	-53.59	0.84	-1.44	-0.33	-2.02	-0.64
Story7	C38	USD ENV Min	-78.79	2.19	1.45	-0.33	-2.02	-2.35
Story7	C39	USD ENV Min	-76.71	0.42	2.05	-0.33	2.85	-0.05
Story7	C40	USD ENV Min	-57.31	-0.60	1.39	-0.19	1.91	-0.08
Story6	C1	USD ENV Min	-80.04	3.50	-4.49	-0.32	-2.03	-7.90
Story6	C2	USD ENV Min	-103.24	6.58	-1.41	-0.32	-1.96	-4.49
Story6	C3	USD ENV Min	-104.69	6.20	-2.81	-0.32	-3.85	-9.00
Story6	C4	USD ENV Min	-71.97	3.91	-1.51	-0.32	-1.10	-8.55
Story6	C5	USD ENV Min	-163.61	-1.57	-1.52	-0.32	-2.36	-2.42
Story6	C6	USD ENV Min	-191.11	-1.78	-2.64	-0.32	-3.98	-2.79
Story6	C7	USD ENV Min	-155.89	-1.73	-1.52	-0.32	-2.40	-2.64
Story6	C8	USD ENV Min	-197.93	-2.32	-1.75	-0.32	-2.74	-3.55
Story6	C9	USD ENV Min	-153.64	-1.68	-1.14	-0.32	-1.88	-2.58
Story6	C10	USD ENV Min	-208.97	-2.10	-0.79	-0.32	-1.42	-3.28
Story6	C11	USD ENV Min	-209.07	-2.69	-4.82	-0.32	-6.66	-4.16
Story6	C12	USD ENV Min	-146.05	-3.11	-2.41	-0.32	-3.46	-4.69
Story6	C13	USD ENV Min	-147.97	-2.61	-2.72	-0.32	-3.98	-3.99
Story6	C14	USD ENV Min	-209.34	-2.40	-4.65	-0.32	-6.78	-3.76
Story6	C15	USD ENV Min	-153.98	-1.70	-0.96	-0.32	-1.15	-2.60

Column Forces: Strength Load Env.

Story	Column	Load Case	P tnuf	V2 tnuf	V3 tnuf	T tnuf-m	M2 tnuf-m	M3 tnuf-m
Story6	C16	USD ENV Min	-208.42	-2.11	-0.61	-0.32	-1.18	-2.29
Story6	C17	USD ENV Min	-148.57	-2.66	-2.60	-0.32	-3.89	-4.07
Story6	C18	USD ENV Min	-213.15	-2.42	-4.61	-0.32	-6.82	-3.78
Story6	C19	USD ENV Min	-137.22	-1.66	-0.85	-0.32	-1.50	-2.52
Story6	C20	USD ENV Min	-192.52	-2.12	-0.42	-0.32	-0.90	-3.28
Story6	C21	USD ENV Min	-153.13	-2.68	-2.79	-0.32	-4.25	-4.10
Story6	C22	USD ENV Min	-195.86	-2.42	-4.53	-0.32	-6.77	-3.77
Story6	C23	USD ENV Min	-170.94	-2.30	-3.70	-0.32	-5.73	-3.55
Story6	C24	USD ENV Min	-158.96	-2.97	-2.71	-0.32	-4.30	-4.53
Story6	C25	USD ENV Min	-90.05	0.57	-2.16	-0.32	-3.59	0.66
Story6	C26	USD ENV Min	-83.05	0.09	-2.70	-0.32	-4.34	0.00
Story6	C27	USD ENV Min	-160.86	-3.61	-2.76	-0.32	-4.17	-5.20
Story6	C28	USD ENV Min	-120.01	-2.02	-3.81	-0.32	-5.63	-2.90
Story6	C29	USD ENV Min	-180.31	-3.42	-2.19	-0.32	-3.37	-4.83
Story6	C30	USD ENV Min	-162.64	-1.90	-1.96	-0.32	-3.06	-2.66
Story6	C31	USD ENV Min	-167.30	-1.39	-4.37	-0.32	-6.35	-1.92
Story6	C32	USD ENV Min	-210.27	-4.66	-3.58	-0.32	-5.17	-6.51
Story6	C33	USD ENV Min	-204.07	-1.49	-1.58	-0.32	-2.51	-2.08
Story6	C34	USD ENV Min	-161.68	-1.37	-1.89	-0.32	-2.96	-1.87
Story6	C35	USD ENV Min	-191.81	-2.30	-2.95	-0.32	-4.49	-3.17
Story6	C36	USD ENV Min	-170.60	-1.24	-2.69	-0.32	-4.12	-1.65
Story6	C37	USD ENV Min	-72.53	-0.94	1.44	-0.32	1.98	-1.14
Story6	C38	USD ENV Min	-106.34	-2.28	1.47	-0.32	1.97	-2.82
Story6	C39	USD ENV Min	-103.77	-0.54	2.05	-0.32	2.76	-0.59
Story6	C40	USD ENV Min	-76.80	-0.77	1.38	-0.19	1.85	-0.79
Story5	C1	USD ENV Min	-100.65	-5.46	-1.60	-0.31	-2.99	-7.94
Story5	C2	USD ENV Min	-130.63	-6.53	-1.30	-0.31	-2.87	-9.53
Story5	C3	USD ENV Min	-132.32	-6.18	-2.90	-0.31	-4.79	-9.13
Story5	C4	USD ENV Min	-91.09	-5.92	-1.58	-0.31	-2.96	-8.71
Story5	C5	USD ENV Min	-205.93	-1.51	-1.55	-0.31	-3.13	-2.46
Story5	C6	USD ENV Min	-243.14	-1.70	-2.58	-0.31	-4.60	-2.82
Story5	C7	USD ENV Min	-196.08	-1.70	-1.58	-0.31	-3.12	-2.73
Story5	C8	USD ENV Min	-251.24	-2.25	-1.73	-0.31	-3.36	-3.60
Story5	C9	USD ENV Min	-193.38	-1.65	-1.23	-0.31	-2.59	-2.65
Story5	C10	USD ENV Min	-264.74	-2.04	-0.82	-0.31	-2.06	-3.34
Story5	C11	USD ENV Min	-265.08	-2.57	-4.54	-0.31	-7.09	-4.17
Story5	C12	USD ENV Min	-184.31	-2.98	-2.37	-0.31	-4.01	-4.67
Story5	C13	USD ENV Min	-186.49	-2.54	-2.64	-0.31	-4.37	-4.06
Story5	C14	USD ENV Min	-265.11	-2.32	-4.57	-0.31	-7.18	-3.82
Story5	C15	USD ENV Min	-193.83	-1.67	-1.05	-0.31	-2.31	-2.68
Story5	C16	USD ENV Min	-263.99	-2.05	-0.64	-0.31	-1.76	-3.35
Story5	C17	USD ENV Min	-187.13	-2.58	-2.49	-0.31	-4.20	-4.12
Story5	C18	USD ENV Min	-270.01	-2.33	-4.52	-0.31	-7.15	-3.85
Story5	C19	USD ENV Min	-173.28	-1.66	-0.95	-0.31	-2.11	-2.63
Story5	C20	USD ENV Min	-244.42	-2.09	-0.49	-0.31	-1.48	-3.38
Story5	C21	USD ENV Min	-192.78	-2.60	-2.72	-0.31	-4.64	-4.15

Page 4 of 9

K3-129

Column Forces: Strength Load Env.

Story	Column	Load Case	P tnuf	V2 tnuf	V3 tnuf	T tnuf-m	M2 tnuf-m	M3 tnuf-m
Story5	C22	USD ENV Min	-248.89	-2.17	-4.51	-0.31	-7.33	-3.87
Story5	C23	USD ENV Min	-216.77	-2.23	-3.70	-0.31	-4.33	-3.62
Story5	C24	USD ENV Min	-200.53	-2.91	-2.70	-0.31	-4.89	-4.62
Story5	C25	USD ENV Min	-113.75	0.59	-2.22	-0.31	-4.40	0.52
Story5	C26	USD ENV Min	-104.36	0.07	-2.70	-0.31	-5.03	-0.18
Story5	C27	USD ENV Min	-204.69	-3.85	-2.87	-0.31	-4.15	-6.22
Story5	C28	USD ENV Min	-151.21	-2.15	-3.87	-0.31	-5.52	-4.05
Story5	C29	USD ENV Min	-228.75	-3.43	-2.06	-0.31	-3.28	-5.62
Story5	C30	USD ENV Min	-203.60	-1.94	-1.85	-0.31	-3.00	-3.59
Story5	C31	USD ENV Min	-196.15	-1.57	-4.18	-0.31	-6.14	-2.87
Story5	C32	USD ENV Min	-251.68	-4.75	-3.32	-0.31	-5.01	-7.31
Story5	C33	USD ENV Min	-257.91	-1.53	-1.50	-0.31	-2.51	-2.82
Story5	C34	USD ENV Min	-202.00	-1.47	-1.79	-0.31	-2.93	-2.71
Story5	C35	USD ENV Min	-243.60	-2.30	-2.89	-0.31	-4.51	-3.76
Story5	C36	USD ENV Min	-213.32	-1.31	-2.63	-0.31	-4.13	-2.36
Story5	C37	USD ENV Min	-91.52	-0.98	1.49	-0.31	1.98	-1.72
Story5	C38	USD ENV Min	-133.94	-2.34	1.51	-0.31	1.94	-3.39
Story5	C39	USD ENV Min	-130.85	-0.59	2.07	-0.31	2.70	-1.20
Story5	C40	USD ENV Min	-96.14	-0.85	1.39	-0.18	1.81	-1.68
Story4	C1	USD ENV Min	-120.98	-5.26	-1.61	-0.28	-4.11	-7.73
Story4	C2	USD ENV Min	-158.09	-6.30	-1.48	-0.28	-3.96	-9.21
Story4	C3	USD ENV Min	-159.93	-5.98	-2.89	-0.28	-5.84	-8.96
Story4	C4	USD ENV Min	-110.33	-5.77	-1.59	-0.28	-4.08	-8.85
Story4	C5	USD ENV Min	-247.83	-1.37	-1.55	-0.28	-4.09	-2.42
Story4	C6	USD ENV Min	-296.04	-1.51	-2.42	-0.28	-5.34	-2.71
Story4	C7	USD ENV Min	-235.73	-1.58	-1.63	-0.28	-4.06	-2.69
Story4	C8	USD ENV Min	-305.11	-2.03	-1.58	-0.28	-3.98	-3.44
Story4	C9	USD ENV Min	-232.65	-1.55	-1.25	-0.28	-3.34	-2.66
Story4	C10	USD ENV Min	-320.88	-1.90	-0.75	-0.28	-2.67	-3.33
Story4	C11	USD ENV Min	-321.58	-2.27	-4.40	-0.28	-7.68	-3.89
Story4	C12	USD ENV Min	-222.47	-2.65	-2.14	-0.28	-4.46	-4.35
Story4	C13	USD ENV Min	-224.72	-2.35	-2.35	-0.28	-4.54	-3.98
Story4	C14	USD ENV Min	-321.15	-2.14	-4.28	-0.28	-7.36	-3.76
Story4	C15	USD ENV Min	-233.27	-1.54	-1.01	-0.28	-2.83	-2.64
Story4	C16	USD ENV Min	-319.89	-1.87	-0.52	-0.28	-2.17	-3.26
Story4	C17	USD ENV Min	-225.32	-2.35	-2.17	-0.28	-4.25	-3.97
Story4	C18	USD ENV Min	-327.24	-2.11	-4.20	-0.28	-7.22	-3.71
Story4	C19	USD ENV Min	-209.17	-1.53	-0.89	-0.28	-2.53	-2.59
Story4	C20	USD ENV Min	-296.88	-1.92	-0.36	-0.28	-1.81	-3.30
Story4	C21	USD ENV Min	-232.02	-2.38	-2.38	-0.28	-4.68	-4.02
Story4	C22	USD ENV Min	-302.64	-2.18	-4.19	-0.28	-7.33	-3.78
Story4	C23	USD ENV Min	-263.03	-2.02	-3.39	-0.28	-6.55	-3.47
Story4	C24	USD ENV Min	-241.94	-2.71	-2.39	-0.28	-5.11	-4.51
Story4	C25	USD ENV Min	-137.41	0.68	-1.96	-0.28	-4.79	0.47
Story4	C26	USD ENV Min	-125.34	0.12	-2.35	-0.28	-5.30	-0.28
Story4	C27	USD ENV Min	-249.18	-3.48	-2.47	-0.28	-3.95	-7.21

Page 5 of 9

K3-130

Column Forces: Strength Load Env.

Story	Column	Load Case	P tnuf	V2 tnuf	V3 tnuf	T tnuf-m	M2 tnuf-m	M3 tnuf-m
Story4	C28	USD ENV Min	-182.23	-2.15	-3.40	-0.28	-3.23	-5.28
Story4	C29	USD ENV Min	-277.91	-3.20	-1.80	-0.28	-3.02	-6.32
Story4	C30	USD ENV Min	-244.26	-1.96	-1.62	-0.28	-2.77	-4.60
Story4	C31	USD ENV Min	-227.02	-1.61	-3.84	-0.28	-5.71	-3.85
Story4	C32	USD ENV Min	-294.47	-4.67	-3.04	-0.28	-4.70	-8.07
Story4	C33	USD ENV Min	-312.19	-1.42	-1.32	-0.28	-2.35	-3.53
Story4	C34	USD ENV Min	-241.80	-1.50	-1.58	-0.28	-2.72	-3.64
Story4	C35	USD ENV Min	-296.26	-2.14	-2.72	-0.28	-4.37	-4.38
Story4	C36	USD ENV Min	-255.66	-1.32	-2.43	-0.28	-3.98	-3.15
Story4	C37	USD ENV Min	-110.62	-0.97	1.60	-0.28	2.07	-2.39
Story4	C38	USD ENV Min	-161.58	-2.33	1.61	-0.28	2.02	-4.02
Story4	C39	USD ENV Min	-157.97	-0.60	2.16	-0.28	2.75	-1.89
Story4	C40	USD ENV Min	-115.29	-0.92	1.45	-0.16	1.84	-2.78
Story3	C1	USD ENV Min	-140.96	-5.17	-1.56	-0.23	-5.41	-7.88
Story3	C2	USD ENV Min	-185.64	-6.43	-1.29	-0.23	-5.01	-9.72
Story3	C3	USD ENV Min	-187.54	-5.96	-2.59	-0.23	-6.67	-9.29
Story3	C4	USD ENV Min	-129.72	-5.70	-1.44	-0.23	-5.18	-8.85
Story3	C5	USD ENV Min	-289.17	-0.93	-1.09	-0.23	-4.20	-1.80
Story3	C6	USD ENV Min	-349.97	-1.00	-1.66	-0.23	-4.86	-2.01
Story3	C7	USD ENV Min	-274.67	-1.34	-1.08	-0.23	-3.83	-2.47
Story3	C8	USD ENV Min	-359.71	-1.80	-1.01	-0.23	-3.85	-3.31
Story3	C9	USD ENV Min	-271.35	-1.18	-1.04	-0.23	-3.71	-2.16
Story3	C10	USD ENV Min	-377.46	-1.35	-0.47	-0.23	-2.95	-2.51
Story3	C11	USD ENV Min	-378.66	-1.98	-3.52	-0.23	-6.81	-3.77
Story3	C12	USD ENV Min	-260.51	-2.21	-1.93	-0.23	-5.11	-3.95
Story3	C13	USD ENV Min	-262.61	-1.87	-2.13	-0.23	-5.02	-3.39
Story3	C14	USD ENV Min	-377.50	-1.68	-3.99	-0.23	-7.69	-3.18
Story3	C15	USD ENV Min	-272.21	-1.29	-1.06	-0.23	-3.63	-2.39
Story3	C16	USD ENV Min	-376.20	-1.55	-0.46	-0.23	-2.83	-2.91
Story3	C17	USD ENV Min	-263.07	-1.95	-1.95	-0.23	-4.63	-3.54
Story3	C18	USD ENV Min	-384.93	-1.74	-3.93	-0.23	-7.48	-3.33
Story3	C19	USD ENV Min	-244.86	-1.21	-1.04	-0.23	-3.41	-2.22
Story3	C20	USD ENV Min	-350.01	-1.53	-0.41	-0.23	-2.56	-2.84
Story3	C21	USD ENV Min	-270.72	-1.96	-2.21	-0.23	-5.19	-3.56
Story3	C22	USD ENV Min	-357.31	-1.80	-4.01	-0.23	-7.78	-3.36
Story3	C23	USD ENV Min	-399.82	-1.61	-3.21	-0.23	-7.12	-3.03
Story3	C24	USD ENV Min	-283.14	-2.29	-2.32	-0.23	-5.87	-4.05
Story3	C25	USD ENV Min	-181.02	0.95	-2.10	-0.23	-6.10	0.70
Story3	C26	USD ENV Min	-145.90	0.34	-2.23	-0.23	-6.14	-0.09
Story3	C27	USD ENV Min	-294.51	-2.99	-2.23	-0.23	-3.69	-7.95
Story3	C28	USD ENV Min	-213.04	-1.97	-3.04	-0.23	-4.79	-6.52
Story3	C29	USD ENV Min	-327.96	-2.67	-1.49	-0.23	-2.66	-4.74
Story3	C30	USD ENV Min	-284.54	-1.76	-1.33	-0.23	-2.44	-3.54
Story3	C31	USD ENV Min	-258.40	-1.53	-3.42	-0.23	-5.17	-4.89
Story3	C32	USD ENV Min	-338.88	-4.37	-2.61	-0.23	-4.09	-8.71
Story3	C33	USD ENV Min	-367.07	-1.10	-1.10	-0.23	-2.12	-4.11

Page 6 of 9

K3-131

Column Forces: Strength Load Env.

Column Forces: Strength L Envc.								
Story	Column	Lead Case	P tnuf	V2 tnuf	V3 tnuf	T tnuf-m	M2 tnuf-m	M3 tnuf-m
Story3	C34	USD ENV Min	-280.95	-1.36	-1.32	-0.23	-2.47	-4.47
Story3	C35	USD ENV Min	-350.03	-1.68	-2.51	-0.23	-4.13	-4.47
Story3	C36	USD ENV Min	-297.50	-1.17	-2.22	-0.23	-3.74	-3.81
Story3	C37	USD ENV Min	-129.84	-0.94	1.78	-0.23	2.39	-3.19
Story3	C38	USD ENV Min	-189.25	-2.22	-1.69	-0.23	2.03	-4.63
Story3	C39	USD ENV Min	-185.12	-0.56	2.25	-0.23	1.78	-2.67
Story3	C40	USD ENV Min	-134.19	-0.93	1.52	-0.13	1.89	-4.03
Story2	C1	USD ENV Min	-160.58	-4.10	-1.42	-0.15	-7.03	-6.01
Story2	C2	USD ENV Min	-213.22	-4.41	-1.31	-0.15	-7.05	-6.23
Story2	C3	USD ENV Min	-215.16	-4.27	-3.05	-0.15	-9.26	-6.30
Story2	C4	USD ENV Min	-140.09	-4.33	-1.65	-0.15	-7.63	-6.63
Story2	C5	USD ENV Min	-425.35	-1.25	-2.48	-0.15	-8.94	-2.94
Story2	C6	USD ENV Min	-305.54	-1.09	-2.98	-0.15	-9.89	-2.74
Story2	C7	USD ENV Min	-312.80	-1.17	-3.05	-0.15	-9.89	-2.31
Story2	C8	USD ENV Min	-415.16	-1.15	-3.05	-0.15	-7.48	-2.46
Story2	C9	USD ENV Min	-309.44	-1.60	-1.91	-0.15	-7.04	-3.50
Story2	C10	USD ENV Min	-436.56	-2.63	-1.92	-0.15	-5.61	-2.59
Story2	C11	USD ENV Min	-416.56	-1.16	-3.57	-0.15	-13.55	-5.57
Story2	C12	USD ENV Min	-298.24	-1.40	-1.39	-0.15	-5.58	-2.89
Story2	C13	USD ENV Min	-300.19	-1.83	-1.46	-0.15	-6.26	-3.91
Story2	C14	USD ENV Min	-314.27	-1.90	-3.43	-0.15	-8.06	-2.41
Story2	C15	USD ENV Min	-310.53	-1.01	-0.95	-0.15	-6.00	-2.21
Story2	C16	USD ENV Min	-432.94	-1.18	-0.23	-0.15	-3.56	-2.59
Story2	C17	USD ENV Min	-300.29	-1.46	-1.38	-0.15	-4.86	-3.11
Story2	C18	USD ENV Min	-443.18	-1.24	-3.49	-0.15	-8.05	-2.78
Story2	C19	USD ENV Min	-280.40	-0.97	-1.92	-0.15	-4.59	-3.17
Story2	C20	USD ENV Min	-404.01	-1.20	-0.30	-0.15	-3.57	-2.64
Story2	C21	USD ENV Min	-308.82	-1.49	-1.79	-0.15	-5.89	-3.18
Story2	C22	USD ENV Min	-413.09	-1.40	-3.62	-0.15	-8.67	-3.14
Story2	C23	USD ENV Min	-337.26	-1.13	-0.95	-0.15	-8.74	-2.58
Story2	C24	USD ENV Min	-324.09	-1.83	-2.04	-0.15	-7.12	-3.74
Story2	C25	USD ENV Min	-184.62	1.04	-1.59	-0.15	-6.97	0.50
Story2	C26	USD ENV Min	-166.02	0.33	-1.98	-0.15	-7.80	-0.49
Story2	C27	USD ENV Min	-340.87	-2.35	-1.87	-0.15	-3.38	-0.94
Story2	C28	USD ENV Min	-243.60	-1.59	-2.71	-0.15	-4.67	-7.88
Story2	C29	USD ENV Min	-179.17	-2.01	-1.11	-0.15	-2.31	-7.45
Story2	C30	USD ENV Min	-124.37	-1.56	-0.98	-0.15	-2.15	-6.91
Story2	C31	USD ENV Min	-290.38	-0.98	-2.90	-0.15	-4.68	-3.23
Story2	C32	USD ENV Min	-385.17	-3.79	-2.56	-0.15	-4.53	-9.20
Story2	C33	USD ENV Min	-422.75	-0.52	-0.84	-0.15	-1.93	-0.20
Story2	C34	USD ENV Min	-319.33	-1.20	-0.98	-0.15	-2.14	-5.56
Story2	C35	USD ENV Min	-605.19	-1.17	-2.21	-0.15	-3.95	-4.87
Story2	C36	USD ENV Min	-138.71	-1.01	-1.94	-0.15	-3.59	-4.71
Story2	C37	USD ENV Min	-149.30	-0.50	1.79	-0.15	-2.08	-3.23
Story2	C38	USD ENV Min	-217.67	-1.85	1.99	-0.15	2.48	-4.91
Story2	C39	USD ENV Min	-212.37	-0.25	1.44	-0.15	1.81	-2.93

Column Forces: Strength Load Env.

Story	Column	Load Case	P tnuf	V2 tnuf	V3 tnuf	T tnuf-m	M2 tnuf-m	M3 tnuf-m
Story2	C40	USD ENV Min	-152.55	-6.68	1.65	-0.89	2.09	-4.87
Story1	C1	USD ENV Min	-190.39	-2.29	-2.73	-0.06	-8.90	-1.70
Story1	C2	USD ENV Min	-265.06	-1.96	-2.82	-0.06	-8.92	-1.71
Story1	C3	USD ENV Min	-268.26	-2.08	-4.39	-0.06	-9.16	-1.93
Story1	C4	USD ENV Min	-178.96	-2.44	-3.33	-0.06	-8.99	-2.16
Story1	C5	USD ENV Min	-365.10	-5.54	-5.07	-0.10	-9.30	-6.57
Story1	C6	USD ENV Min	-447.67	-4.54	-6.54	-0.08	-11.00	-5.90
Story1	C7	USD ENV Min	-331.33	-1.56	-7.27	-0.10	-10.58	-2.07
Story1	C8	USD ENV Min	-456.15	-1.67	-4.40	-0.10	-8.84	-2.46
Story1	C9	USD ENV Min	-337.79	-2.75	-4.01	-0.12	-8.04	-2.68
Story1	C10	USD ENV Min	-463.72	-6.62	-2.84	-0.11	-7.56	-5.31
Story1	C11	USD ENV Min	-490.01	-2.24	-10.78	-0.19	-11.99	-4.42
Story1	C12	USD ENV Min	-340.86	-1.02	-1.76	-0.06	-6.05	-1.72
Story1	C13	USD ENV Min	-341.02	-1.85	-1.57	-0.06	-5.48	-1.99
Story1	C14	USD ENV Min	-488.96	-2.09	-2.97	-0.06	-5.66	-1.96
Story1	C15	USD ENV Min	-354.22	-0.92	-1.40	-0.06	-5.22	-1.29
Story1	C16	USD ENV Min	-496.16	-1.03	-6.90	-0.06	-5.11	-1.45
Story1	C17	USD ENV Min	-341.97	-1.25	-1.60	-0.06	-5.16	-1.79
Story1	C18	USD ENV Min	-508.56	-1.92	-4.31	-0.10	-7.73	-2.83
Story1	C19	USD ENV Min	-319.48	-0.95	-1.68	-0.06	-5.64	-1.30
Story1	C20	USD ENV Min	-462.37	-1.10	-1.17	-0.06	-5.49	-1.46
Story1	C21	USD ENV Min	-351.03	-1.88	-2.63	-0.08	-7.86	-2.56
Story1	C22	USD ENV Min	-474.89	-2.24	-4.73	-0.10	-9.36	-2.95
Story1	C23	USD ENV Min	-409.52	-1.45	-4.16	-0.08	-9.75	-2.27
Story1	C24	USD ENV Min	-370.87	-2.23	-3.19	-0.08	-9.54	-2.68
Story1	C25	USD ENV Min	-207.28	0.28	-2.27	-0.06	-8.92	-1.28
Story1	C26	USD ENV Min	-185.67	-0.24	-2.82	-0.06	-9.04	-1.33
Story1	C27	USD ENV Min	-391.70	-4.16	-2.00	-0.08	-2.01	-12.36
Story1	C28	USD ENV Min	-277.96	-2.91	-2.05	-0.06	-1.70	-9.86
Story1	C29	USD ENV Min	-435.15	-3.49	-1.29	-0.08	-1.78	-10.08
Story1	C30	USD ENV Min	-368.42	-3.32	-1.19	-0.08	-1.86	-10.04
Story1	C31	USD ENV Min	-328.40	-1.89	-2.02	-0.06	-1.41	-7.09
Story1	C32	USD ENV Min	-437.14	-4.64	-3.07	-0.08	-2.18	-9.21
Story1	C33	USD ENV Min	-482.13	-1.61	-0.74	-0.06	-1.20	-6.57
Story1	C34	USD ENV Min	-361.56	-2.78	-1.18	-0.08	-1.86	-8.32
Story1	C35	USD ENV Min	-465.17	-2.49	-2.40	-0.08	-2.14	-7.20
Story1	C36	USD ENV Min	-384.84	-2.50	-2.17	-0.08	-2.17	-7.20
Story1	C37	USD ENV Min	-171.28	-1.39	0.97	-0.06	-0.42	-5.10
Story1	C38	USD ENV Min	-247.35	-2.37	1.34	-0.06	-0.38	-5.28
Story1	C39	USD ENV Min	-241.44	-1.31	1.54	-0.06	-0.42	-5.07
Story1	C40	USD ENV Min	-173.26	-2.04	1.08	-0.03	-0.15	-7.38
UWT	C1	USD ENV Min	-190.74	-2.29	-2.73	-0.06	-10.27	-2.85
UWT	C2	USD ENV Min	-265.41	-1.96	-2.82	-0.06	-10.34	-2.70
UWT	C3	USD ENV Min	-268.61	-2.08	-4.39	-0.06	-11.13	-2.98
UWT	C4	USD ENV Min	-179.31	-2.44	-3.35	-0.06	-10.38	-3.19
UWT	C5	USD ENV Min	-404.89	-15.06	-5.54	-0.03	-12.79	-3.30

Page 8 of 9

43-133

Column Forces: Strength Load Env.

Story	Column	Load Case	P tnuf	V2 tnuf	V3 tnuf	T tnuf-m	M2 tnuf-m	M3 tnuf-m
UWT	C6	USD ENV Min	-489.46	-14.00	-9.05	-0.17	-11.60	-4.02
UWT	C7	USD ENV Min	-379.61	-5.96	-4.81	-0.03	-9.31	-3.40
UWT	C8	USD ENV Min	-496.34	-7.15	-3.17	-0.02	-9.47	-3.57
UWT	C9	USD ENV Min	-370.24	-4.20	-4.24	-0.03	-8.78	-4.14
UWT	C10	USD ENV Min	-498.50	-4.41	-4.30	-0.05	-5.58	-3.51
UWT	C11	USD ENV Min	-529.41	-8.77	-13.66	0.11	-11.34	-3.00
UWT	C12	USD ENV Min	-341.21	-1.02	-1.76	-0.06	-6.92	-2.24
UWT	C13	USD ENV Min	-341.37	-1.85	-1.57	-0.06	-6.27	-2.93
UWT	C14	USD ENV Min	-487.31	-2.09	-2.97	-0.06	-7.12	-3.03
UWT	C15	USD ENV Min	-354.57	-0.92	-1.40	-0.06	-5.92	-1.76
UWT	C16	USD ENV Min	-496.51	-1.03	-6.90	-0.06	-5.57	-1.98
UWT	C17	USD ENV Min	-342.32	-1.25	-1.60	-0.06	-5.94	-2.43
UWT	C18	USD ENV Min	-509.00	-1.92	-4.31	-0.10	-9.89	-3.83
UWT	C19	USD ENV Min	-319.83	-0.95	-1.68	-0.06	-6.48	-1.78
UWT	C20	USD ENV Min	-462.72	-1.10	-1.17	-0.06	-6.08	-2.03
UWT	C21	USD ENV Min	-351.43	-1.88	-2.63	-0.08	-9.18	-3.52
UWT	C22	USD ENV Min	-475.33	-2.24	-4.73	-0.10	-11.73	-4.09
UWT	C23	USD ENV Min	-409.93	-1.45	-4.16	-0.08	-11.84	-3.01
UWT	C24	USD ENV Min	-371.27	-2.23	-3.19	-0.08	-11.15	-3.81
UWT	C25	USD ENV Min	-207.62	0.28	-2.27	-0.06	-10.06	-1.15
UWT	C26	USD ENV Min	-186.02	-0.24	-2.82	-0.06	-10.45	-1.46
UWT	C27	USD ENV Min	-392.10	-4.16	-2.00	-0.08	-3.02	-14.46
UWT	C28	USD ENV Min	-278.31	-2.91	-2.05	-0.06	-2.74	-11.32
UWT	C29	USD ENV Min	-435.55	-3.49	-1.29	-0.08	-2.44	-11.83
UWT	C30	USD ENV Min	-368.83	-3.32	-1.19	-0.08	-2.47	-11.71
UWT	C31	USD ENV Min	-328.74	-1.89	-2.02	-0.06	-2.44	-8.04
UWT	C32	USD ENV Min	-437.55	-4.64	-3.07	-0.08	-3.73	-11.33
UWT	C33	USD ENV Min	-482.48	-1.61	-0.74	-0.06	-1.57	-7.38
UWT	C34	USD ENV Min	-361.96	-2.78	-1.18	-0.08	-2.46	-9.71
UWT	C35	USD ENV Min	-465.57	-2.49	-2.40	-0.08	-3.36	-8.45
UWT	C36	USD ENV Min	-385.24	-2.50	-2.17	-0.08	-3.28	-8.45
UWT	C37	USD ENV Min	-171.63	-1.39	0.96	-0.06	0.06	-5.80
UWT	C38	USD ENV Min	-247.70	-2.37	1.34	-0.06	0.30	-6.37
UWT	C39	USD ENV Min	-241.78	-1.31	1.54	-0.06	0.35	-5.73
UWT	C40	USD ENV Min	-173.58	-2.04	1.08	-0.03	0.39	-8.40
UWT	C41	USD ENV Min	-42.70	-0.35	-11.62	-0.05	-0.84	-0.72
UWT	C42	USD ENV Min	-34.58	-1.05	-1.43	0.00	-0.48	-0.97
UWT	C43	USD ENV Min	-34.81	-2.44	-3.44	-0.01	-0.57	-0.66
UWT	C44	USD ENV Min	-65.36	-4.98	-2.39	0.00	-0.59	-1.21
UWT	C45	USD ENV Min	-59.95	-6.69	-1.61	0.00	-0.53	-1.19
UWT	C46	USD ENV Min	-49.70	-3.47	-1.67	-0.01	-0.49	-1.05

Page 9 of 9

43-134

Pier Forces : Strength Load Env.

Story	Pier	Load Case	Location	P tnuf	V2 tnuf	V3 tnuf	T tnuf-m	M2 tnuf-m	M3 tnuf-m
Top Roof	ST2-P1	USD ENV Min	Top	-37.65	-18.70	-0.06	-0.40	-0.64	-15.18
Top Roof	ST2-P1	USD ENV Min	Bottom	-43.77	-18.70	-0.06	-0.40	-0.23	-48.57
Top Roof	ST2-P2	USD ENV Min	Top	-3.46	-19.63	-0.44	-0.84	0.53	-6.76
Top Roof	ST2-P2	USD ENV Min	Bottom	-9.57	-19.63	-0.44	-0.95	-8.23	-39.93
Lift Room	ST2-P1	USD ENV Min	Top	-135.25	-11.23	8.07	-12.01	-16.50	-113.03
Lift Room	ST2-P1	USD ENV Min	Bottom	-137.08	-11.23	8.07	-12.01	-1.26	-102.29
Lift Room	ST2-P2	USD ENV Min	Top	-9.57	-19.56	-5.25	-0.98	-8.23	-39.93
Lift Room	ST2-P2	USD ENV Min	Bottom	-11.41	-19.56	-5.25	-0.98	-11.38	-51.66
Lift Room	Lift-P1	USD ENV Min	Top	-2.68	-11.77	-2.66	-0.43	0.51	-1.71
Lift Room	Lift-P1	USD ENV Min	Bottom	-3.62	-11.77	-2.66	-0.43	0.15	-4.64
Lift Room	Lift-P5	USD ENV Min	Top	-2.30	-19.93	-0.81	-0.43	-3.59	-0.21
Lift Room	Lift-P5	USD ENV Min	Bottom	-3.11	-19.93	-0.81	-0.43	-2.59	-7.66
Lift Room	Lift-P6	USD ENV Min	Top	-13.44	-43.41	-1.11	-1.42	-0.08	-4.97
Lift Room	Lift-P6	USD ENV Min	Bottom	-15.42	-43.41	-1.11	-1.43	-0.12	-30.93
Lift Room	Lift-P8	USD ENV Min	Top	-21.76	-19.29	-7.77	0.30	-6.50	-5.25
Lift Room	Lift-P8	USD ENV Min	Bottom	-23.75	-19.29	-7.77	0.30	-7.01	-16.32
RWT1	ST2-P1	USD ENV Min	Top	-137.08	-11.28	7.96	-12.01	-1.26	-102.29
RWT1	ST2-P1	USD ENV Min	Bottom	-138.91	-11.28	7.96	-12.01	7.04	-92.71
RWT1	ST2-P2	USD ENV Min	Top	-11.41	-19.52	-5.25	-0.99	-11.38	-51.66
RWT1	ST2-P2	USD ENV Min	Bottom	-13.24	-19.52	-5.25	-0.99	-14.53	-63.77
RWT1	Lift-P1	USD ENV Min	Top	-6.62	-14.42	-3.02	-0.52	-0.18	8.10
RWT1	Lift-P1	USD ENV Min	Bottom	-7.42	-14.42	-3.02	-0.52	-1.40	-6.49
RWT1	Lift-P5	USD ENV Min	Top	-3.76	-19.04	-2.97	-0.12	-0.14	-2.03
RWT1	Lift-P5	USD ENV Min	Bottom	-4.37	-19.04	-2.97	-0.11	-5.15	-10.61
RWT1	Lift-P6	USD ENV Min	Top	-17.34	-42.21	-0.17	-2.02	0.09	-33.24
RWT1	Lift-P6	USD ENV Min	Bottom	-19.32	-42.21	-0.17	-2.03	-0.01	-58.52
RWT1	Lift-P8	USD ENV Min	Top	-29.77	-20.22	-13.66	0.45	-6.75	-33.32
RWT1	Lift-P8	USD ENV Min	Bottom	-31.75	-20.22	-13.66	0.44	-14.96	-45.09
Roof	ST1-P1	USD ENV Min	Top	-77.32	-34.09	-22.90	-1.71	-5.33	-5.57
Roof	ST1-P1	USD ENV Min	Bottom	-65.84	-34.09	-22.90	-1.72	-29.81	-96.36
Roof	ST1-P2	USD ENV Min	Top	-53.11	-34.53	-2.69	-4.12	-33.28	1.80
Roof	ST1-P2	USD ENV Min	Bottom	-61.44	-34.53	-2.69	-4.12	-1.94	-78.57
Roof	ST2-P1	USD ENV Min	Top	-198.31	-23.56	1.32	-2.56	24.81	-89.92
Roof	ST2-P1	USD ENV Min	Bottom	-207.03	-23.56	1.32	-2.62	-3.15	-131.43
Roof	ST2-P2	USD ENV Min	Top	-77.91	-40.40	-18.85	-1.10	1.32	-45.65
Roof	ST2-P2	USD ENV Min	Bottom	-86.63	-40.40	-18.85	-1.13	-23.59	-113.41
Roof	Lift-P1	USD ENV Min	Top	-48.36	-22.10	0.64	-0.59	-0.76	-18.50
Roof	Lift-P1	USD ENV Min	Bottom	-52.18	-22.10	0.64	-0.61	0.11	-33.85
Roof	Lift-P2	USD ENV Min	Top	-30.51	0.11	-1.55	-0.24	-0.11	-26.40
Roof	Lift-P2	USD ENV Min	Bottom	-31.74	0.11	-1.55	-0.23	-0.20	0.82
Roof	Lift-P3	USD ENV Min	Top	-33.64	-9.86	-3.18	-0.15	0.58	-34.14
Roof	Lift-P3	USD ENV Min	Bottom	-35.57	-9.86	-3.18	-0.16	-0.49	-11.24
Roof	Lift-P4	USD ENV Min	Top	-24.68	-10.76	-1.11	-0.10	0.30	-11.80
Roof	Lift-P4	USD ENV Min	Bottom	-25.91	-10.76	-1.11	-0.11	-1.76	-14.54
Roof	Lift-P5	USD ENV Min	Top	-41.88	-20.32	-0.32	-0.55	-0.20	-34.98
Roof	Lift-P5	USD ENV Min	Bottom	-45.70	-20.32	-0.32	-0.56	-0.33	-39.45
Roof	Lift-P6	USD ENV Min	Top	-191.70	-32.03	0.33	-1.24	-1.66	-20.11
Roof	Lift-P6	USD ENV Min	Bottom	-199.78	-32.03	0.33	-1.35	0.30	-77.98
Story8	ST1-P1	USD ENV Min	Top	-135.86	-25.72	-18.90	-2.50	0.19	-40.87
Story8	ST1-P1	USD ENV Min	Bottom	-144.38	-25.72	-18.90	-2.49	-27.31	-98.04
Story8	ST1-P2	USD ENV Min	Top	-128.22	-12.61	-6.28	-1.33	-24.46	-71.24
Story8	ST1-P2	USD ENV Min	Bottom	-136.71	-12.61	-6.28	-1.36	-23.67	-50.09
Story8	ST2-P1	USD ENV Min	Top	-272.25	-28.12	3.30	-2.82	-23.91	-119.91

Pier Forces : Strength Load Enw.

Story	Pier	Load Case	Location	P tonf	V2 tonf	V3 tonf	T tonf-m	M2 tonf-m	M3 tonf-m
Story6	L18-P6	USD ENV Min	Top	-272.13	-19.06	-0.35	-1.35	-2.02	-159.11
Story6	L18-P6	USD ENV Min	Bottom	-281.56	-19.06	-0.35	-1.40	-0.84	-329.64
Story5	ST1-P1	USD ENV Min	Top	-171.53	-63.20	-19.80	-2.23	-1.36	-40.16
Story5	ST1-P1	USD ENV Min	Bottom	-180.05	-63.20	-19.80	-2.21	-29.27	-204.71
Story5	ST1-P2	USD ENV Min	Top	-151.65	-60.50	-1.42	-3.24	-25.90	-40.64
Story5	ST1-P2	USD ENV Min	Bottom	-160.18	-60.50	-1.42	-3.28	-2.82	-197.02
Story5	ST2-P1	USD ENV Min	Top	-493.27	-59.42	2.72	-3.74	-32.28	-18.01
Story5	ST2-P1	USD ENV Min	Bottom	-501.99	-59.42	2.72	-3.79	3.26	-153.76
Story5	ST2-P2	USD ENV Min	Top	-347.12	-57.01	-17.20	-3.18	4.77	-10.49
Story5	ST2-P2	USD ENV Min	Bottom	-355.63	-57.01	-17.20	-3.23	-25.19	-140.63
Story5	L18-P1	USD ENV Min	Top	-232.50	-77.10	-0.13	-0.60	-0.66	-80.35
Story5	L18-P1	USD ENV Min	Bottom	-236.32	-77.10	-0.13	-0.64	-0.49	-127.72
Story5	L18-P2	USD ENV Min	Top	-80.97	-0.97	-2.19	-0.26	-0.62	-16.09
Story5	L18-P2	USD ENV Min	Bottom	-82.20	-0.97	-2.19	-0.25	-3.24	-1.43
Story5	L18-P3	USD ENV Min	Top	-103.65	-1.78	-3.47	-0.17	1.10	-5.10
Story5	L18-P3	USD ENV Min	Bottom	-105.57	-1.78	-3.47	-0.19	-5.08	-5.79
Story5	L18-P4	USD ENV Min	Top	-59.33	-5.77	-1.80	-0.14	-0.19	-3.32
Story5	L18-P4	USD ENV Min	Bottom	-60.57	-5.77	-1.80	-0.14	-2.65	-8.24
Story5	L18-P5	USD ENV Min	Top	-197.02	-41.73	-0.40	-0.52	-0.44	-51.22
Story5	L18-P5	USD ENV Min	Bottom	-200.84	-41.73	-0.40	-0.54	-0.80	-72.86
Story5	L18-P6	USD ENV Min	Top	-166.07	-195.17	-0.48	-1.38	-1.99	-137.65
Story5	L18-P6	USD ENV Min	Bottom	-174.16	-195.17	-0.48	-1.42	-1.51	-480.71
Story4	ST1-P1	USD ENV Min	Top	-449.95	-73.66	-19.20	-1.96	-0.34	-151.88
Story4	ST1-P1	USD ENV Min	Bottom	-458.47	-73.66	-19.20	-1.95	-28.63	-346.89
Story4	ST1-P2	USD ENV Min	Top	-425.23	-68.26	-0.99	-2.95	-24.54	-146.93
Story4	ST1-P2	USD ENV Min	Bottom	-433.76	-68.26	-0.99	-2.98	-2.60	-331.16
Story4	ST2-P1	USD ENV Min	Top	-566.26	-49.24	2.92	-2.51	-21.30	-109.00
Story4	ST2-P1	USD ENV Min	Bottom	-574.08	-49.24	2.92	-2.54	3.35	-291.03
Story4	ST2-P2	USD ENV Min	Top	-463.61	-66.12	-16.70	-2.89	5.27	-98.78
Story4	ST2-P2	USD ENV Min	Bottom	-472.32	-66.12	-16.70	-2.94	-24.62	-273.53
Story4	L18-P1	USD ENV Min	Top	-349.30	-90.19	-0.15	-0.60	-0.61	-84.81
Story4	L18-P1	USD ENV Min	Bottom	-353.11	-90.19	-0.15	-0.62	-0.01	-167.71
Story4	L18-P2	USD ENV Min	Top	-128.40	-4.36	-2.09	-0.24	-0.55	-22.08
Story4	L18-P2	USD ENV Min	Bottom	-129.64	-4.36	-2.09	-0.23	-3.15	-6.72
Story4	L18-P3	USD ENV Min	Top	-127.48	-5.66	-3.26	-0.17	1.29	-5.67
Story4	L18-P3	USD ENV Min	Bottom	-129.41	-5.66	-3.26	-0.18	-4.87	-12.94
Story4	L18-P4	USD ENV Min	Top	-42.24	-8.82	-1.75	-0.13	-0.19	-2.76
Story4	L18-P4	USD ENV Min	Bottom	-43.47	-8.82	-1.75	-0.13	-2.63	-14.91
Story4	L18-P5	USD ENV Min	Top	-272.09	-48.27	-0.46	-0.47	-0.42	-55.90
Story4	L18-P5	USD ENV Min	Bottom	-275.91	-48.27	-0.46	-0.48	-1.03	-100.32
Story4	L18-P6	USD ENV Min	Top	-508.56	-221.12	-0.58	-1.36	-1.84	-117.62
Story4	L18-P6	USD ENV Min	Bottom	-516.65	-221.12	-0.58	-1.39	-2.07	-638.19
Story3	ST1-P1	USD ENV Min	Top	-528.23	-83.61	-18.16	-1.69	1.86	-297.22
Story3	ST1-P1	USD ENV Min	Bottom	-536.76	-83.61	-18.16	-1.68	-27.43	-520.00
Story3	ST1-P2	USD ENV Min	Top	-498.24	-77.09	0.09	-2.28	-22.07	-284.39
Story3	ST1-P2	USD ENV Min	Bottom	-506.76	-77.09	0.09	-2.30	-1.34	-496.70
Story3	ST2-P1	USD ENV Min	Top	-638.64	-74.76	3.58	-2.14	-20.14	-248.22
Story3	ST2-P1	USD ENV Min	Bottom	-647.36	-74.76	3.58	-2.16	4.33	-481.98
Story3	ST2-P2	USD ENV Min	Top	-539.76	-70.91	-16.24	-2.39	6.32	-230.83
Story3	ST2-P2	USD ENV Min	Bottom	-548.48	-70.91	-16.24	-2.42	-24.09	-424.47
Story3	L18-P1	USD ENV Min	Top	-464.85	-104.91	-0.22	-0.51	-0.57	-71.79
Story3	L18-P1	USD ENV Min	Bottom	-468.67	-104.91	-0.22	-0.52	-0.86	-221.61
Story3	L18-P2	USD ENV Min	Top	-178.13	-0.46	-1.94	-0.22	-0.31	-13.22

Page 3 of 5

K3-137

Pier Forces : Strength Load Enw.

Story	Pier	Load Case	Location	P tonf	V2 tonf	V3 tonf	T tonf-m	M2 tonf-m	M3 tonf-m
UWT	L18-P1	USD ENV Min	Top	-670.14	-76.66	-20.43	-6.87	-0.43	-103.70
UWT	L18-P1	USD ENV Min	Bottom	-671.01	-76.66	-20.43	-6.87	-6.98	-138.70
UWT	L18-P5	USD ENV Min	Top	-532.96	-51.92	-10.59	-3.58	-3.53	-104.74
UWT	L18-P5	USD ENV Min	Bottom	-533.61	-51.92	-10.59	-3.58	-4.36	-127.39
UWT	L18-P6	USD ENV Min	Top	-1092.96	-113.37	-26.07	-27.00	0.73	-816.22
UWT	L18-P6	USD ENV Min	Bottom	-1094.38	-113.37	-26.07	-27.00	-10.95	-873.15
UWT	L18-P7	USD ENV Min	Top	-630.31	-114.55	-5.51	-21.95	-4.48	-738.62
UWT	L18-P7	USD ENV Min	Bottom	-631.73	-114.55	-5.51	-21.95	-6.86	-794.33

Page 5 of 5

K3-139

Pier Forces : Strength Load Enw.

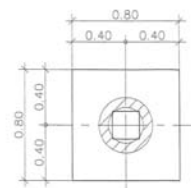
Story	Pier	Load Case	Location	P tonf	V2 tonf	V3 tonf	T tonf-m	M2 tonf-m	M3 tonf-m
Story3	L18-P2	USD ENV Min	Bottom	-179.36	-0.46	-1.94	-0.21	-3.09	0.02
Story3	L18-P3	USD ENV Min	Top	-150.31	-3.61	-3.24	-0.18	1.61	-8.66
Story3	L18-P3	USD ENV Min	Bottom	-152.24	-3.61	-3.24	-0.18	-4.80	-4.21
Story3	L18-P4	USD ENV Min	Top	-105.89	-2.64	-1.48	-0.10	-0.09	-2.31
Story3	L18-P4	USD ENV Min	Bottom	-107.13	-2.64	-1.48	-0.10	-2.62	-3.34
Story3	L18-P5	USD ENV Min	Top	-353.60	-56.33	-0.42	-0.45	-0.41	-57.09
Story3	L18-P5	USD ENV Min	Bottom	-357.42	-56.33	-0.42	-0.46	-0.99	-140.83
Story3	L18-P6	USD ENV Min	Top	-682.89	-252.15	-0.80	-1.27	-1.57	-159.39
Story3	L18-P6	USD ENV Min	Bottom	-690.97	-252.15	-0.80	-1.28	-2.89	-834.75
Story2	ST1-P1	USD ENV Min	Top	-609.34	-86.51	-15.33	-1.05	2.36	-478.42
Story2	ST1-P1	USD ENV Min	Bottom	-618.01	-86.51	-15.33	-1.06	-23.85	-705.69
Story2	ST1-P2	USD ENV Min	Top	-572.61	-78.83	-0.82	-1.66	-18.88	-458.86
Story2	ST1-P2	USD ENV Min	Bottom	-581.29	-78.83	-0.82	-1.66	-4.36	-475.69
Story2	ST2-P1	USD ENV Min	Top	-710.18	-74.89	2.46	-1.73	-18.02	-413.94
Story2	ST2-P1	USD ENV Min	Bottom	-719.05	-74.89	2.46	-1.74	1.35	-625.21
Story2	ST2-P2	USD ENV Min	Top	-615.45	-70.96	-14.43	-1.50	6.41	-386.27
Story2	ST2-P2	USD ENV Min	Bottom	-624.32	-70.96	-14.43	-1.52	-21.90	-586.09
Story2	L18-P1	USD ENV Min	Top	-584.16	-114.26	-0.26	-0.49	-0.40	-58.33
Story2	L18-P1	USD ENV Min	Bottom	-588.05	-114.26	-0.26	-0.50	-1.07	-268.43
Story2	L18-P2	USD ENV Min	Top	-237.24	-15.70	-1.23	-0.13	-0.11	-37.95
Story2	L18-P2	USD ENV Min	Bottom	-238.49	-15.70	-1.23	-0.14	-1.89	-20.81
Story2	L18-P3	USD ENV Min	Top	-172.54	-21.99	-2.27	-0.14	1.31	-14.65
Story2	L18-P3	USD ENV Min	Bottom	-174.51	-21.99	-2.27	-0.14	-3.47	-49.61
Story2	L18-P4	USD ENV Min	Top	-154.81	-23.40	-1.08	-0.07	0.00	-22.04
Story2	L18-P4	USD ENV Min	Bottom	-156.06	-23.40	-1.08	-0.07	-1.61	-37.79
Story2	L18-P5	USD ENV Min	Top	-445.34	-66.83	-0.66	-0.23	-0.37	-45.80
Story2	L18-P5	USD ENV Min	Bottom	-449.22	-66.83	-0.66	-0.23	-1.73	-183.84
Story2	L18-P6	USD ENV Min	Top	-878.36	-232.74	-0.99	-0.91	-1.46	-326.57
Story2	L18-P6	USD ENV Min	Bottom	-886.58	-232.74	-0.99	-0.91	-3.63	-969.76
Story1	ST1-P1	USD ENV Min	Top	-696.02	-49.01	-10.14	-0.51	-1.24	-670.29
Story1	ST1-P1	USD ENV Min	Bottom	-702.06	-49.01	-10.14	-0.51	-6.62	-798.20
Story1	ST1-P2	USD ENV Min	Top	-662.85	-41.25	-2.53	-1.05	-14.12	-643.63
Story1	ST1-P2	USD ENV Min	Bottom	-668.83	-41.25	-2.53	-1.04	-4.68	-753.32
Story1	ST2-P1	USD ENV Min	Top	-789.87	-62.52	0.08	-1.09	-12.47	-583.83
Story1	ST2-P1	USD ENV Min	Bottom	-795.99	-62.52	0.08	-1.09	-1.92	-708.14
Story1	ST2-P2	USD ENV Min	Top	-702.64	-60.34	-9.55	-0.76	2.68	-547.40
Story1	ST2-P2	USD ENV Min	Bottom	-708.76	-60.34	-9.55	-0.76	-5.19	-665.20
Story1	L18-P1	USD ENV Min	Top	-646.64	-76.33	-0.23	-0.77	-1.87	-48.22
Story1	L18-P1	USD ENV Min	Bottom	-649.32	-76.33	-0.23	-0.77	-0.11	-186.13
Story1	L18-P5	USD ENV Min	Top	-499.37	-52.95	-1.03	-0.37	-0.70	-64.15
Story1	L18-P5	USD ENV Min	Bottom	-502.05	-52.95	-1.03	-0.37	-1.04	-167.17
Story1	L18-P6	USD ENV Min	Top	-1040.08	-127.39	-0.72	-1.91	-1.75	-673.67
Story1	L18-P6	USD ENV Min	Bottom	-1045.75	-127.39	-0.72	-1.91	-2.59	-934.83
Story1	L18-P7	USD ENV Min	Top	-741.51	-130.55	-4.85	-0.47	0.06	-534.68
Story1	L18-P7	USD ENV Min	Bottom	-747.18	-130.55	-4.85	-0.47	-4.75	-789.49
UWT	ST1-P1	USD ENV Min	Top	-702.06	-49.01	-10.14	-0.51	-6.62	-798.20
UWT	ST1-P1	USD ENV Min	Bottom	-701.59	-49.01	-10.14	-0.51	-11.75	-830.54
UWT	ST1-P2	USD ENV Min	Top	-668.83	-41.25	-2.53	-1.05	-4.90	-753.32
UWT	ST1-P2	USD ENV Min	Bottom	-670.32	-41.25	-2.53	-1.04	-5.37	-790.75
UWT	ST2-P1	USD ENV Min	Top	-795.99	-62.52	0.08	-1.09	-1.92	-708.14
UWT	ST2-P1	USD ENV Min	Bottom	-797.52	-62.52	0.08	-1.09	-1.89	-738.77
UWT	ST2-P2	USD ENV Min	Top	-708.76	-60.34	-9.55	-0.76	-5.19	-665.20
UWT	ST2-P2	USD ENV Min	Bottom	-710.29	-60.34	-9.55	-0.76	-10.01	-694.70

Page 4 of 5

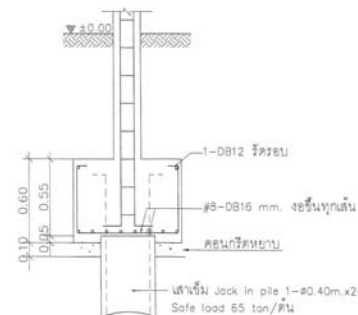
K3-138

F1

LOAD = 85000 kg



F1-PLAN



F1-SECTION

K3-140

F3

$$\text{LOAD} = 189000 \text{ kg}$$

$$SW = 2000 \text{ kg}$$

$$EW = 195000 \text{ kg}$$

$$\text{load/pile} = 25000 \text{ kg}$$

$$M = (0.54)(25000) = 35100 \text{ kg-m}$$

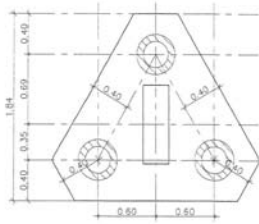
$$V = 0 ; P' = \frac{1}{30} (15 \cdot 1)(25000) = 13000 \text{ kg}$$

$$P = \frac{(3)(13000)}{(4.5)(80)} = 0.97 \text{ ksc} < 0.86 \text{ ksc}$$

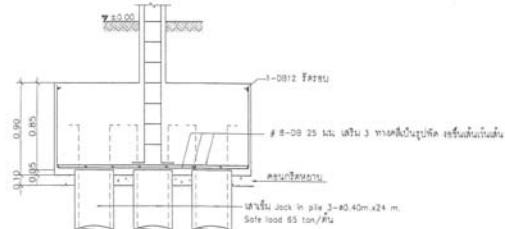
$$\xi_0 = \frac{25000}{(21.42)(0.88)(80)} = 42.71 \text{ cm}$$

$$A_s = 24.93 \text{ cm}^2$$

$$\text{Use } 8\text{DB25 } (A_s = 39.26 \text{ cm}^2 ; \xi_0 = 42.83 \text{ cm})$$



F3-PLAN



F3-SECTION

H3-141

F4

$$\text{LOAD} = 251360 \text{ kg}$$

$$SW = 8640 \text{ kg}$$

$$EW = 260000 \text{ kg}$$

$$\text{load/pile} = 65000 \text{ kg}$$

$$M = (2)(65000)(0.47) = 21100 \text{ kg-m}$$

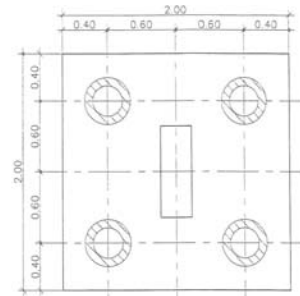
$$V = 0 ; P' = \frac{1}{30} (15 \cdot 2)(65000) = 32834 \text{ kg}$$

$$P = \frac{(2)(32834)}{(52.8)(80)} = 1.73 \text{ ksc} < 0.86 \text{ ksc}$$

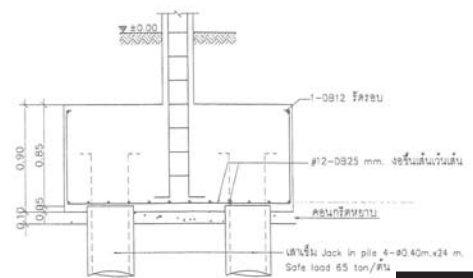
$$\xi_0 = \frac{(2)(65000)}{(21.42)(0.88)(80)} = 85.42 \text{ cm}$$

$$A_s = 43.40 \text{ cm}^2$$

$$\text{Use } 12\text{DB25 } (A_s = 58.72 \text{ cm}^2 ; \xi_0 = 74.26 \text{ cm})$$



F4-PLAN



F4-SECTION

H3-142

F5

$$\text{LOAD} = 311500 \text{ kg}$$

$$SW = 13304 \text{ kg}$$

$$EW = 329000 \text{ kg}$$

$$\text{load/pile} = 65000 \text{ kg}$$

$$M = (2)(65000)(0.77) = 22300 \text{ kg-m}$$

$$V = \frac{(2)(65000)}{30} \left[\frac{1}{15} (15 \cdot 0.5) \right] = 28127 \text{ kg}$$

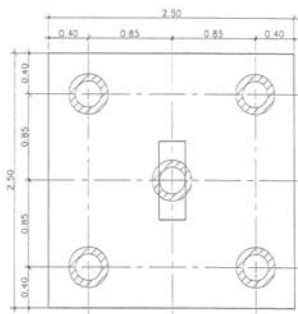
$$V = \frac{28127}{(250)(80)} = 1.41 \text{ ksc} < 4.84 \text{ ksc}$$

$$P = \frac{(4)(65000)}{(57.8)(80)} = 4.16 \text{ ksc} < 8.82 \text{ ksc}$$

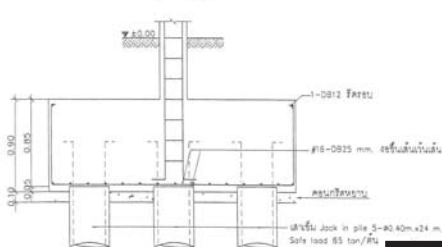
$$\xi_0 = \frac{(2)(65000)}{(21.42)(0.88)(80)} = 85.42 \text{ cm}$$

$$A_s = 43.32 \text{ cm}^2$$

$$\text{Use } 12\text{DB25 } (A_s = 58.72 \text{ cm}^2 ; \xi_0 = 74.26 \text{ cm})$$



F5-PLAN



F5-SECTION

H3-143

F6

$$\text{LOAD} = 371526 \text{ kg}$$

$$SW = 16432 \text{ kg}$$

$$EW = 390000 \text{ kg}$$

$$\text{load/pile} = 65000 \text{ kg}$$

• 65000 kg

$$V = 0 ; P' = \frac{1}{30} (25000)(15 \cdot 2) = 15167 \text{ kg}$$

$$P = \frac{(4)(15167) + (2)(15167)}{(148)(110)} = 4.08 \text{ ksc} < 8.82 \text{ ksc}$$

$$M = (3)(65000)(0.47) = 11250 \text{ kg-m}$$

$$\xi_0 = \frac{(3)(65000)}{(21.42)(0.88)(110)} = 73.18 \text{ cm}$$

$$A_s = 47.34 \text{ cm}^2$$

$$\text{Use } 12\text{DB25 } (A_s = 58.72 \text{ cm}^2 ; \xi_0 = 74.26 \text{ cm})$$

$$V = \frac{1}{30} (15 \cdot 3)(65000) = 25000 \text{ kg}$$

$$V = \frac{(2)(25000)}{(200)(110)} = 2.37 \text{ ksc} < 4.84 \text{ ksc}$$

$$P = \frac{(4)(65000)}{(148)(110)} = 3.13 \text{ ksc} < 8.82 \text{ ksc}$$

$$M = (2)(65000)(1.06) = 137000 \text{ kg-m}$$

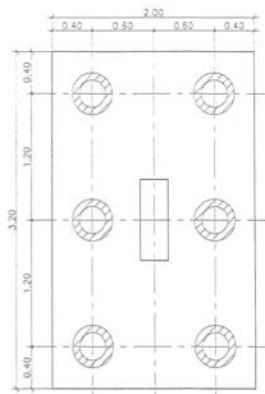
$$\xi_0 = \frac{(3)(65000)}{(21.42)(0.88)(110)} = 73.18 \text{ cm}$$

$$A_s = 76.18 \text{ cm}^2$$

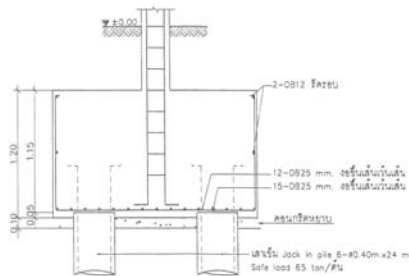
$$\text{Use } 19 \text{ DB25 } (A_s = 73.45 \text{ cm}^2 ; \xi_0 = 117.81 \text{ cm})$$

• 65000 kg

H3-144



F6-PLAN



F6-SECTION

K3-145

F3A1

$$\text{LOAD} = 51248.20 \text{ kg}$$

$$\text{SN} = 24192.00 \text{ kg}$$

$$\text{EN} = 536610.20 \text{ kg}$$

$$\text{Pmax} = 62157.35 \text{ kg}$$

$$\text{M} = 5 \times 62157.35 \times 0.50 = 155393.38 / 5.10 = 27748.82 \text{ kg/m/m}$$

$$A_s = 19.64 \text{ cm}^2/\text{m}$$

$$Z_0 = 29.15 \text{ cm/m}$$

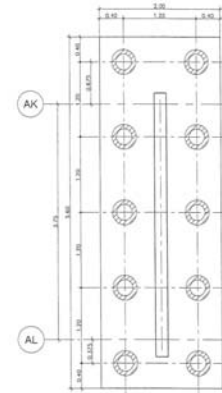
$$\text{USE DB20 @ 0.15 m } (A_s = 20.93 \text{ cm}^2/\text{m}, Z_0 = 41.88 \text{ cm/m})$$

$$\text{M} = 2 \times 62157.35 \times 0.50 = 62157.35 / 2.00 = 31078.68 \text{ kg/m/m}$$

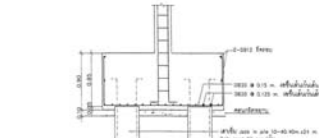
$$A_s = 22.05 \text{ cm}^2/\text{m}$$

$$Z_0 = 32.64 \text{ cm/m}$$

$$\text{USE DB20 @ 0.125 m } (A_s = 25.12 \text{ cm}^2/\text{m}, Z_0 = 50.26 \text{ cm/m})$$



F10A1-PLAN



F10A1-SECTION

K3-146

F10A2

$$\text{LOAD} = 558528.20 \text{ kg}$$

$$\text{SN} = 25056.00 \text{ kg}$$

$$\text{EN} = 583584.20 \text{ kg}$$

$$\text{Pmax} = 61626.49 \text{ kg}$$

$$\text{M} = 5 \times 61626.49 \times 0.50 = 154066.23 / 5.80 = 26563.15 \text{ kg/m/m}$$

$$A_s = 18.85 \text{ cm}^2/\text{m}$$

$$Z_0 = 27.90 \text{ cm/m}$$

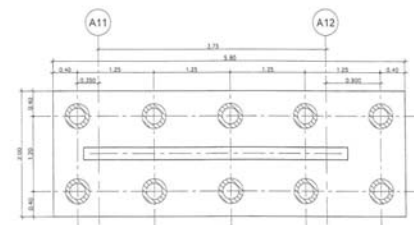
$$\text{USE DB20 @ 0.15 m } (A_s = 20.93 \text{ cm}^2/\text{m}, Z_0 = 41.88 \text{ cm/m})$$

$$\text{M} = 2 \times 61626.49 \times 0.55 = 67789.14 / 2.00 = 33894.57 \text{ kg/m/m}$$

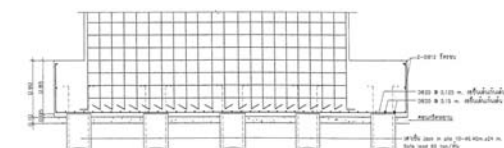
$$A_s = 24.05 \text{ cm}^2/\text{m}$$

$$Z_0 = 32.36 \text{ cm/m}$$

$$\text{USE DB20 @ 0.125 m } (A_s = 25.12 \text{ cm}^2/\text{m}, Z_0 = 50.26 \text{ cm/m})$$



F10A2-PLAN



F10A2-SECTION

K3-147

F1B1

$$\text{LOAD} = 906269.70 \text{ kg}$$

$$\text{SN} = 52876.80 \text{ kg}$$

$$\text{EN} = 959146.50 \text{ kg}$$

$$\text{Pmax} = 61449.11 \text{ kg}, \text{LOADmax} = 39180.83 \text{ kg/m}^2$$

$$S = 2.13 \text{ m}, L = 4.73 \text{ m}; m = 0.45$$

$$\text{M} = 6 \times 61449.11 \times 0.38 = 140149.58 / 6.80$$

$$\text{M} = 20610.24 \text{ kg/m/m}$$

$$A_s = 14.43 \text{ cm}^2/\text{m}$$

$$Z_0 = 28.48 \text{ cm/m}$$

$$\text{USE DB20 @ 0.15 m } (A_s = 20.93 \text{ cm}^2/\text{m}, Z_0 = 41.88 \text{ cm/m})$$

$$\text{M} = \frac{1}{8} \times 39180.83 \times (2.13)^2 = 22249.94 \text{ kg/m}$$

$$A_s = 15.72 \text{ cm}^2$$

$$\text{USE DB20 @ 0.15 m } (A_s = 20.93 \text{ cm}^2)$$

$$\text{M} = 3 \times 61449.11 \times 0.78 = 143837.72 / 3.60$$

$$\text{M} = 39954.93 \text{ kg/m/m}$$

$$A_s = 28.35 \text{ cm}^2/\text{m}$$

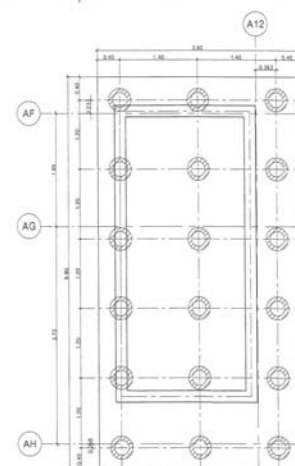
$$Z_0 = 26.90 \text{ cm/m}$$

$$\text{USE DB20 @ 0.10 m } (A_s = 39.40 \text{ cm}^2/\text{m}, Z_0 = 62.83 \text{ cm/m})$$

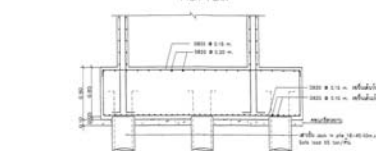
$$\text{M} = 0.050 \times 39180.83 \times (2.13)^2 = 8887.98 \text{ kg/m}$$

$$A_s = 6.31 \text{ cm}^2$$

$$\text{USE DB20 @ 0.20 m } (A_s = 15.70 \text{ cm}^2)$$



F1B1-PLAN



F1B1-SECTION

K3-148

[illegible]

W3-153

Story	Label	Design Section	Design Check	Status	PMN Combo	As _{lim} m ³	As ₁ m ³
Story4	C37	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story4	C38	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story4	C39	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story4	C40	C-97-26	Design	No Message	UEQ-1	0.001948	0.001948
Story3	C1	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C2	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C3	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C4	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C5	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C6	C-27-77	Design	No Message	USD1	0.002079	0.002216
Story3	C7	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C8	C-27-77	Design	No Message	USD1	0.002079	0.002746
Story3	C9	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C10	C-27-77	Design	No Message	USD1	0.002079	0.003639
Story3	C11	C-27-77	Design	No Message	USD1	0.002079	0.003528
Story3	C12	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C13	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story4	C14	C-27-77	Design	No Message	USD1	0.002079	0.003668
Story3	C15	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C16	C-27-77	Design	No Message	USD1	0.002079	0.003667
Story3	C17	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C18	C-27-77	Design	No Message	USD1	0.002079	0.004683
Story3	C19	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C20	C-27-77	Design	No Message	USD1	0.002079	0.002340
Story3	C21	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C22	C-27-77	Design	No Message	USD1	0.002079	0.002620
Story3	C23	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C24	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C25	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C26	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C27	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C28	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C29	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C30	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C31	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C32	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C33	C-77-27	Design	No Message	USD1	0.002079	0.003116
Story3	C34	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C35	C-77-27	Design	No Message	USD1	0.002079	0.002225
Story3	C36	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C37	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C38	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C39	C-77-27	Design	No Message	UEQ-1	0.002079	0.002079
Story3	C40	C-97-26	Design	No Message	UEQ-1	0.001948	0.001948
Story2	C1	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story2	C2	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story2	C3	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079
Story2	C4	C-27-77	Design	No Message	UEQ-1	0.002079	0.002079

W3-155

[illegible]

W3-154

Story	Label	Design Section	Design/Check	Status	PMI Combo	As _{min} m ²	As ₁ m ²
Story 2	C5	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C6	C-27x77	Design	No Message	USD1	0.002079	0.002528
Story 2	C7	C-27x77	Design	No Message	USD1	0.002079	0.002079
Story 2	C8	C-27x77	Design	No Message	USD1	0.002079	0.006090
Story 2	C9	C-27x77	Design	No Message	USD1	0.002079	0.002079
Story 2	C10	C-27x77	Design	No Message	USD1	0.002079	0.006704
Story 2	C11	C-27x77	Design	No Message	USD1	0.002079	0.006704
Story 2	C12	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C13	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C14	C-27x77	Design	No Message	USD1	0.002079	0.006401
Story 2	C15	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C16	C-27x77	Design	No Message	USD1	0.002079	0.006490
Story 2	C17	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C18	C-27x77	Design	No Message	USD1	0.002079	0.006926
Story 2	C19	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C20	C-27x77	Design	No Message	USD1	0.002079	0.005947
Story 2	C21	C-27x77	Design	No Message	USD1	0.002079	0.002079
Story 2	C22	C-27x77	Design	No Message	USD1	0.002079	0.005440
Story 2	C23	C-27x77	Design	No Message	USD1	0.002079	0.002079
Story 2	C24	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C25	C-27x77	Design	No Message	USD1	0.002079	0.002079
Story 2	C26	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C27	C-77x27	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C28	C-77x27	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C29	C-77x27	Design	No Message	USD1	0.002079	0.003646
Story 2	C30	C-77x27	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C31	C-77x27	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C32	C-77x27	Design	No Message	USD1	0.002079	0.003935
Story 2	C33	C-77x27	Design	No Message	USD1	0.002079	0.006018
Story 2	C34	C-77x27	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C35	C-77x27	Design	No Message	USD1	0.002079	0.005137
Story 2	C36	C-77x27	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C37	C-77x27	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C38	C-77x27	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C40	C-49x20	Design	No Message	UEQ-41	0.001940	0.001940
Story 2	C41	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C42	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C43	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C44	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079
Story 2	C5	C-30x80	Design	No Message	USD1	0.002400	0.002400
Story 2	C6	C-30x80	Design	No Message	USD1	0.002400	0.002400
Story 2	C7	C-30x80	Design	No Message	UEQ-41	0.002400	0.004278
Story 2	C8	C-30x80	Design	No Message	USD1	0.002400	0.002400
Story 2	C9	C-30x80	Design	No Message	UEQ-41	0.002400	0.002400
Story 2	C10	C-30x80	Design	No Message	USD1	0.002400	0.003912
Story 2	C11	C-30x80	Design	No Message	USD1	0.002400	0.006699
Story 2	C12	C-27x77	Design	No Message	UEQ-41	0.002079	0.002079

43-156

Concrete Column Design Summary

Story	Label	Design Section	Design/Check	Status	PMM Combo	As _{min} m²	As m²
Story1	C13	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
Story1	C14	C-27x77	Design	No Message	USD1	0.002079	0.010175
Story1	C15	C-27x77	Design	No Message	USD1	0.002079	0.002698
Story1	C16	C-27x77	Design	No Message	USD1	0.002079	0.010774
Story1	C17	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
Story1	C18	C-32x82	Design	No Message	USD1	0.002624	0.009909
Story1	C19	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
Story1	C20	C-27x77	Design	No Message	USD1	0.002079	0.008724
Story1	C21	C-30x30	Design	No Message	UEQ4-1	0.002400	0.002400
Story1	C22	C-32x82	Design	No Message	USD1	0.002624	0.004284
Story1	C23	C-30x30	Design	No Message	USD1	0.002400	0.002874
Story1	C24	C-30x30	Design	No Message	UEQ4-1	0.002400	0.002400
Story1	C25	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
Story1	C26	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
Story1	C27	C-80x30	Design	No Message	UEQ4-1	0.002400	0.002400
Story1	C28	C-77x27	Design	No Message	UEQ4-1	0.002079	0.002079
Story1	C29	C-80x30	Design	No Message	USD1	0.002400	0.004184
Story1	C30	C-80x30	Design	No Message	UEQ4-1	0.002400	0.002400
Story1	C31	C-77x27	Design	No Message	UEQ4-1	0.002079	0.002079
Story1	C32	C-80x30	Design	No Message	USD1	0.002400	0.004244
Story1	C33	C-77x27	Design	No Message	USD1	0.002079	0.010046
Story1	C34	C-80x30	Design	No Message	UEQ4-1	0.002400	0.002400
Story1	C35	C-80x30	Design	No Message	USD1	0.002400	0.005887
Story1	C36	C-80x30	Design	No Message	UEQ4-1	0.002400	0.002400
Story1	C37	C-77x27	Design	No Message	UEQ4-1	0.002079	0.002079
Story1	C38	C-77x27	Design	No Message	UEQ4-1	0.002079	0.002079
Story1	C39	C-77x27	Design	No Message	UEQ4-1	0.002079	0.002079
Story1	C40	C-97x20	Design	No Message	UEQ4-1	0.001940	0.001940
UWT	C1	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C2	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C3	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C4	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C5	C-30x30	Design	No Message	UEQ4-1	0.002400	0.002400
UWT	C6	C-30x30	Design	No Message	USD1	0.002400	0.006604
UWT	C7	C-30x30	Design	No Message	UEQ4-1	0.002400	0.002400
UWT	C8	C-30x30	Design	No Message	USD1	0.002400	0.007093
UWT	C9	C-30x30	Design	No Message	UEQ4-1	0.002400	0.002400
UWT	C10	C-30x30	Design	No Message	USD1	0.002400	0.007655
UWT	C11	C-32x82	Design	No Message	USD1	0.002624	0.006618
UWT	C12	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C13	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C14	C-27x77	Design	No Message	USD1	0.002079	0.010217
UWT	C15	C-27x77	Design	No Message	USD1	0.002079	0.002719
UWT	C16	C-27x77	Design	No Message	USD1	0.002079	0.010875
UWT	C17	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C18	C-32x82	Design	No Message	USD1	0.002624	0.006617
UWT	C19	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C20	C-27x77	Design	No Message	USD1	0.002079	0.008811

Page 8 of 9

K3-157

Concrete Column Design Summary

Story	Label	Design Section	Design/Check	Status	PMM Combo	As _{min} m²	As m²
UWT	C21	C-30x30	Design	No Message	UEQ4-1	0.002400	0.002400
UWT	C22	C-32x82	Design	No Message	USD1	0.002624	0.004381
UWT	C23	C-30x30	Design	No Message	USD1	0.002400	0.002928
UWT	C24	C-30x30	Design	No Message	UEQ4-1	0.002400	0.002400
UWT	C25	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C26	C-27x77	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C27	C-80x30	Design	No Message	UEQ4-1	0.002400	0.002400
UWT	C28	C-77x27	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C29	C-80x30	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C30	C-80x30	Design	No Message	USD1	0.002400	0.004192
UWT	C31	C-77x27	Design	No Message	USD1	0.002079	0.010148
UWT	C32	C-80x30	Design	No Message	UEQ4-1	0.002400	0.002400
UWT	C33	C-77x27	Design	No Message	USD1	0.002079	0.002079
UWT	C34	C-80x30	Design	No Message	UEQ4-1	0.002400	0.002400
UWT	C35	C-80x30	Design	No Message	USD1	0.002400	0.005938
UWT	C36	C-80x30	Design	No Message	UEQ4-1	0.002400	0.002400
UWT	C37	C-77x27	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C38	C-77x27	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C39	C-77x27	Design	No Message	UEQ4-1	0.002079	0.002079
UWT	C40	C-97x20	Design	No Message	UEQ4-1	0.001940	0.001940
UWT	C41	C-27x27	Design	No Message	UEQ4-1	0.000729	0.000729
UWT	C42	C-27x27	Design	No Message	UEQ4-1	0.000729	0.000729
UWT	C43	C-27x27	Design	No Message	UEQ4-1	0.000729	0.000729
UWT	C44	C-27x27	Design	No Message	UEQ4-1	0.000729	0.000729
UWT	C45	C-27x27	Design	No Message	UEQ4-1	0.000729	0.000729
UWT	C46	C-27x27	Design	No Message	UEQ4-1	0.000729	0.000729

Page 9 of 9

K3-158

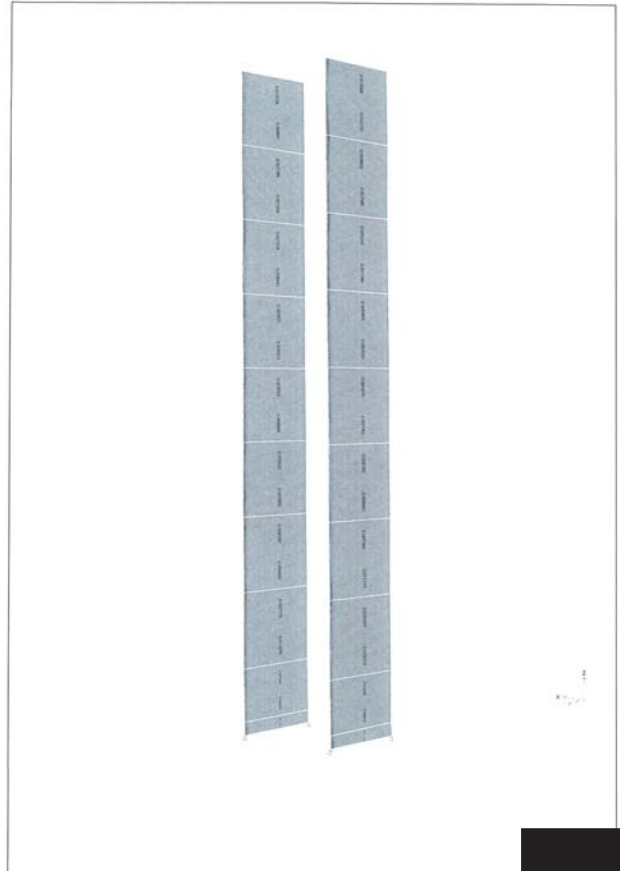
ETABS 2016 16.2.0



docondo holiday buildingA EDD View Pier Longitudinal Reinforcing Areas (m²) (ACI 318-08)

K3-159

ETABS 2016 16.2.0



docondo holiday buildingA EDD View Pier Longitudinal Reinforcing Areas (m²) (ACI 318-08)

K3-160



condo holiday buildingA EDD View Pier Longitudinal Reinforcing Areas (m²) (ACI 318-08)

K3-161

Concrete Shear Wall Design Summary

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Shear Rebar m/m
Story7	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.23	0.0003
Story6	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.23	0.0003
Story6	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.23	0.0003
Story5	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.23	0.0003
Story5	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.23	0.0003
Story4	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.33	0.0003
Story4	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.34	0.0003
Story3	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.23	0.0003
Story3	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.54	0.0003
Story2	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.41	0.0003
Story2	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.77	0.0003
Story1	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.52	0.0003
Story1	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.72	0.0003
UWT	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.72	0.0003
UWT	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.79	0.0003
Top Roof	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.23	0.0003
Top Roof	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.32	0.0003
Lib Room	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.32	0.0003
Lib Room	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.45	0.0003
RWT1	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.43	0.0003
RWT1	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.52	0.0003
Roof	ST2-P2	Top	Uniform	DB12	DB20	0.2	1.05	0.0003
Roof	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.46	0.0003
Story8	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.73	0.0003
Story8	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.65	0.0003
Story7	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.59	0.0003
Story7	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.5	0.0003
Story6	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.42	0.0003
Story6	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.42	0.0003
Story5	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.28	0.0003
Story5	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.39	0.0003
Story4	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.33	0.0003
Story4	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.5	0.0003
Story3	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.41	0.0003
Story3	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.74	0.0003
Story2	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.52	0.0003
Story2	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.91	0.0003
Story1	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.59	0.0003
Story1	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.73	0.0003
UWT	ST2-P2	Top	Uniform	DB12	DB20	0.2	0.73	0.0003
UWT	ST2-P2	Bottom	Uniform	DB12	DB20	0.2	0.8	0.0003
Lib Room	Lib-P1	Top	Uniform	DB12	DB20	0.2	0.57	0.0003
Lib Room	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0003
RWT1	Lib-P1	Top	Uniform	DB12	DB20	0.2	0.25	0.0003
RWT1	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0003
Roof	Lib-P1	Top	Uniform	DB12	DB20	0.2	0.28	0.0003
Roof	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	0.33	0.0003
Story8	Lib-P1	Top	Uniform	DB12	DB20	0.2	0.44	0.0003
Story8	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	0.35	0.0003
Story7	Lib-P1	Top	Uniform	DB12	DB20	0.2	0.37	0.0003
Story7	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0003

Page 2 of 5

K3-163

Concrete Shear Wall Design Summary

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Shear Rebar m/m
Roof	ST1-P1	Top	Uniform	DB12	DB20	0.2	1.47	0.0003
Roof	ST1-P1	Bottom	Uniform	DB12	DB20	0.2	1.21	0.0003
Story8	ST1-P1	Top	Uniform	DB12	DB20	0.2	1	0.0003
Story8	ST1-P1	Bottom	Uniform	DB12	DB20	0.2	0.9	0.0003
Story7	ST1-P1	Top	Uniform	DB12	DB20	0.2	0.93	0.0003
Story7	ST1-P1	Bottom	Uniform	DB12	DB20	0.2	0.81	0.0003
Story6	ST1-P1	Top	Uniform	DB12	DB20	0.2	0.73	0.0003
Story6	ST1-P1	Bottom	Uniform	DB12	DB20	0.2	0.79	0.0003
Story5	ST1-P1	Top	Uniform	DB12	DB20	0.2	0.66	0.0003
Story5	ST1-P1	Bottom	Uniform	DB12	DB20	0.2	0.87	0.0003
Story4	ST1-P1	Top	Uniform	DB12	DB20	0.2	0.72	0.0003
Story4	ST1-P1	Bottom	Uniform	DB12	DB20	0.2	1.09	0.0003
Story3	ST1-P1	Top	Uniform	DB12	DB20	0.2	0.87	0.0003
Story3	ST1-P1	Bottom	Uniform	DB12	DB20	0.2	1.32	0.0003
Story2	ST1-P1	Top	Uniform	DB12	DB20	0.2	0.99	0.0003
Story2	ST1-P1	Bottom	Uniform	DB12	DB20	0.2	1.73	0.0003
Story1	ST1-P1	Top	Uniform	DB12	DB20	0.2	1.1	0.0003
Story1	ST1-P1	Bottom	Uniform	DB12	DB20	0.2	1.08	0.0003
UWT	ST1-P1	Top	Uniform	DB12	DB20	0.2	1.08	0.0003
UWT	ST1-P1	Bottom	Uniform	DB12	DB20	0.2	1.31	0.0003
Roof	ST1-P2	Top	Uniform	DB12	DB20	0.2	1.31	0.0003
Roof	ST1-P2	Bottom	Uniform	DB12	DB20	0.2	1.11	0.0003
Story8	ST1-P2	Top	Uniform	DB12	DB20	0.2	0.87	0.0003
Story8	ST1-P2	Bottom	Uniform	DB12	DB20	0.2	0.81	0.0003
Story7	ST1-P2	Top	Uniform	DB12	DB20	0.2	0.84	0.0003
Story7	ST1-P2	Bottom	Uniform	DB12	DB20	0.2	0.72	0.0003
Story6	ST1-P2	Top	Uniform	DB12	DB20	0.2	0.67	0.0003
Story6	ST1-P2	Bottom	Uniform	DB12	DB20	0.2	0.7	0.0003
Story5	ST1-P2	Top	Uniform	DB12	DB20	0.2	0.57	0.0003
Story5	ST1-P2	Bottom	Uniform	DB12	DB20	0.2	0.77	0.0003
Story4	ST1-P2	Top	Uniform	DB12	DB20	0.2	0.62	0.0003
Story4	ST1-P2	Bottom	Uniform	DB12	DB20	0.2	0.88	0.0003
Story3	ST1-P2	Top	Uniform	DB12	DB20	0.2	0.71	0.0003
Story3	ST1-P2	Bottom	Uniform	DB12	DB20	0.2	1.12	0.0003
Story2	ST1-P2	Top	Uniform	DB12	DB20	0.2	0.81	0.0003
Story2	ST1-P2	Bottom	Uniform	DB12	DB20	0.2	1.31	0.0003
Story1	ST1-P2	Top	Uniform	DB12	DB20	0.2	0.84	0.0003
Story1	ST1-P2	Bottom	Uniform	DB12	DB20	0.2	0.94	0.0003
UWT	ST1-P2	Top	Uniform	DB12	DB20	0.2	0.94	0.0003
UWT	ST1-P2	Bottom	Uniform	DB12	DB20	0.2	1.1	0.0003
Top Roof	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.23	0.0003
Top Roof	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.23	0.0003
Lib Room	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.42	0.0003
Lib Room	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.23	0.0003
RWT1	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.23	0.0003
RWT1	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.45	0.0003
Roof	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.67	0.0003
Roof	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.5	0.0003
Story8	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.43	0.0003
Story8	ST2-P1	Bottom	Uniform	DB12	DB20	0.2	0.33	0.0003
Story7	ST2-P1	Top	Uniform	DB12	DB20	0.2	0.3	0.0003

Page 1 of 5

K3-162

Concrete Shear Wall Design Summary

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Shear Rebar m/m
Story6	Lib-P1	Top	Uniform	DB12	DB20	0.2	0.4	0.0003
Story6	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	0.38	0.0003
Story5	Lib-P1	Top	Uniform	DB12	DB20	0.2	0.62	0.0003
Story5	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	0.72	0.0003
Story4	Lib-P1	Top	Uniform	DB12	DB20	0.2	0.86	0.0003
Story4	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	1.18	0.0003
Story3	Lib-P1	Top	Uniform	DB12	DB20	0.2	1.36	0.00109
Story3	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	1.81	0.0012
Story2	Lib-P1	Top	Uniform	DB12	DB20	0.2	1.81	0.00138
Story2	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	2.45	0.00164
Story1	Lib-P1	Top	Uniform	DB12	DB20	0.2	1.83	0.00082
Story1	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	2.15	0.0011
UWT	Lib-P1	Top	Uniform	DB12	DB20	0.2	2.15	0.00116
UWT	Lib-P1	Bottom	Uniform	DB12	DB20	0.2	2.34	0.00116
Roof	Lib-P2	Top	Uniform	DB12	DB20	0.2	2.15	0.00064
Roof	Lib-P2	Bottom	Uniform	DB12	DB20	0.2	1.91	0.00062
Story8	Lib-P2	Top	Uniform	DB12	DB20	0.2	1.08	0.0003
Story8	Lib-P2	Bottom	Uniform	DB12	DB20	0.2	0.98	0.0003
Story7	Lib-P2	Top	Uniform	DB12	DB20	0.2	1.09	0.0003
Story7	Lib-P2	Bottom	Uniform	DB12	DB20	0.2	1.04	0.0003
Story6	Lib-P2	Top	Uniform	DB12	DB20	0.2	0.86	0.0003
Story6	Lib-P2	Bottom	Uniform	DB12	DB20	0.2	0.87	0.0003
Story5	Lib-P2	Top	Uniform	DB12	DB20	0.2	1.13	0.0003
Story5	Lib-P2	Bottom	Uniform	DB12	DB20	0.2	1.11	0.0003
Story4	Lib-P2	Top	Uniform	DB12	DB20	0.2	1.98	0.00054
Story4	Lib-P2	Bottom	Uniform	DB12	DB20	0.2	2.03	0.00054
Story3	Lib-P2	Top	Uniform	DB12	DB20	0.2	2.27	0.0003
Story3	Lib-P2	Bottom	Uniform	DB12	DB20	0.2	2.27	0.0003
Story2	Lib-P2	Top	Uniform	DB12	DB20	0.2	4.41	0.00136
Story2	Lib-P2	Bottom	Uniform	DB12	DB20	0.2	4.54	0.00136
Roof	Lib-P3	Top	Uniform	DB12	DB20	0.2	0.97	0.0003
Roof	Lib-P3	Bottom	Uniform	DB12	DB20	0.2	0.9	0.0003
Story8	Lib-P3	Top	Uniform	DB12	DB20	0.2	0.94	0.0003
Story8	Lib-P3	Bottom	Uniform	DB12	DB20	0.2	0.79	0.0003
Story7	Lib-P3	Top	Uniform	DB12	DB20	0.2	0.83	0.0003
Story7	Lib-P3	Bottom	Uniform	DB12	DB20	0.2	0.78	0.0003
Story6	Lib-P3	Top	Uniform	DB12	DB20	0.2	0.76	0.0003
Story6	Lib-P3	Bottom	Uniform	DB12	DB20	0.2	0.74	0.0003
Story5	Lib-P3	Top	Uniform	DB12	DB20	0.2	0.78	0.0003
Story5	Lib-P3	Bottom	Uniform	DB12	DB20	0.2	0.77	0.0003
Story4	Lib-P3	Top	Uniform	DB12	DB20	0.2	0.8	0.0003
Story4	Lib-P3	Bottom	Uniform	DB12	DB20	0.2	0.83	0.0003
Story3	Lib-P3	Top	Uniform	DB12	DB20	0.2	0.83	0.0003
Story3	Lib-P3	Bottom	Uniform	DB12	DB20	0.2	0.86	0.0003
Story2	Lib-P3	Top	Uniform	DB12	DB20	0.2	0.81	0.0003
Story2	Lib-P3	Bottom	Uniform	DB12	DB20	0.2	1.18	0.0003
Roof	Lib-P4	Top	Uniform	DB12	DB20	0.2	1	0.0003
Roof	Lib-P4	Bottom	Uniform	DB12	DB20	0.2	0.87	0.0003
Story8	Lib-P4	Top	Uniform	DB12	DB20	0.2	0.79	0.0003
Story8	Lib-P4	Bottom	Uniform	DB12	DB20	0.2	0.75	0.0003
Story7	Lib-P4	Top	Uniform	DB12	DB20	0.2	0.71	0.0003

Concrete Shear Wall Design Summary

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Shear Rebar m/m
Story7	L18-P4	Bottom	Uniform	DB12	DB20	0.2	0.66	0.0005
Story6	L18-P4	Top	Uniform	DB12	DB20	0.2	0.63	0.0005
Story6	L18-P4	Bottom	Uniform	DB12	DB20	0.2	0.61	0.0005
Story5	L18-P4	Top	Uniform	DB12	DB20	0.2	0.78	0.0005
Story5	L18-P4	Bottom	Uniform	DB12	DB20	0.2	0.77	0.0005
Story4	L18-P4	Top	Uniform	DB12	DB20	0.2	1.26	0.0006
Story4	L18-P4	Bottom	Uniform	DB12	DB20	0.2	1.33	0.0005
Story3	L18-P4	Top	Uniform	DB12	DB20	0.2	1.45	0.0005
Story3	L18-P4	Bottom	Uniform	DB12	DB20	0.2	1.5	0.0005
Story2	L18-P4	Top	Uniform	DB12	DB20	0.2	3.43	0.00115
Story2	L18-P4	Bottom	Uniform	DB12	DB20	0.2	3.82	0.00113
Lift Room	L18-P5	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
Lift Room	L18-P5	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
RWT1	L18-P5	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
RWT1	L18-P5	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
Roof	L18-P5	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
Roof	L18-P5	Bottom	Uniform	DB12	DB20	0.2	0.26	0.0005
Story8	L18-P5	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
Story8	L18-P5	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
Story7	L18-P5	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
Story7	L18-P5	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
Story6	L18-P5	Top	Uniform	DB12	DB20	0.2	0.37	0.0005
Story6	L18-P5	Bottom	Uniform	DB12	DB20	0.2	0.41	0.0005
Story5	L18-P5	Top	Uniform	DB12	DB20	0.2	0.66	0.0005
Story5	L18-P5	Bottom	Uniform	DB12	DB20	0.2	0.74	0.0005
Story4	L18-P5	Top	Uniform	DB12	DB20	0.2	1.02	0.0005
Story4	L18-P5	Bottom	Uniform	DB12	DB20	0.2	1.16	0.0005
Story3	L18-P5	Top	Uniform	DB12	DB20	0.2	1.37	0.00079
Story3	L18-P5	Bottom	Uniform	DB12	DB20	0.2	1.56	0.00079
Story2	L18-P5	Top	Uniform	DB12	DB20	0.2	1.82	0.00069
Story2	L18-P5	Bottom	Uniform	DB12	DB20	0.2	2	0.0008
Story1	L18-P5	Top	Uniform	DB12	DB20	0.2	2.13	0.00084
Story1	L18-P5	Bottom	Uniform	DB12	DB20	0.2	2.26	0.00078
UWT	L18-P5	Top	Uniform	DB12	DB20	0.2	2.41	0.00079
UWT	L18-P5	Bottom	Uniform	DB12	DB20	0.2	2.59	0.00076
Lift Room	L18-P6	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
Lift Room	L18-P6	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
RWT1	L18-P6	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
RWT1	L18-P6	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
Roof	L18-P6	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
Roof	L18-P6	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
Story8	L18-P6	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
Story8	L18-P6	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
Story7	L18-P6	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
Story7	L18-P6	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
Story6	L18-P6	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
Story6	L18-P6	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
Story5	L18-P6	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
Story5	L18-P6	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
Story4	L18-P6	Top	Uniform	DB12	DB20	0.2	0.25	0.00068
Story4	L18-P6	Bottom	Uniform	DB12	DB20	0.2	0.51	0.00067

Page 4 of 5

KS-165

Concrete Shear Wall Design Summary

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Shear Rebar m/m
Story3	L18-P6	Top	Uniform	DB12	DB20	0.2	0.43	0.00093
Story3	L18-P6	Bottom	Uniform	DB12	DB20	0.2	0.59	0.00093
Story2	L18-P6	Top	Uniform	DB12	DB20	0.2	0.85	0.00092
Story2	L18-P6	Bottom	Uniform	DB12	DB20	0.2	1.5	0.00092
Story1	L18-P6	Top	Uniform	DB12	DB20	0.2	1.39	0.00087
Story1	L18-P6	Bottom	Uniform	DB12	DB20	0.2	1.66	0.00086
UWT	L18-P6	Top	Uniform	DB12	DB20	0.2	1.68	0.00061
UWT	L18-P6	Bottom	Uniform	DB12	DB20	0.2	1.77	0.00066
Story1	L18-P7	Top	Uniform	DB12	DB20	0.2	1.54	0.00061
Story1	L18-P7	Bottom	Uniform	DB12	DB20	0.2	1.71	0.00052
UWT	L18-P7	Top	Uniform	DB12	DB20	0.2	1.86	0.00054
UWT	L18-P7	Bottom	Uniform	DB12	DB20	0.2	1.83	0.00052
Lift Room	L18-P8	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
Lift Room	L18-P8	Bottom	Uniform	DB12	DB20	0.2	0.25	0.0005
RWT1	L18-P8	Top	Uniform	DB12	DB20	0.2	0.25	0.0005
RWT1	L18-P8	Bottom	Uniform	DB12	DB20	0.2	0.51	0.0005

Page 5 of 5

KS-166

ผลการคำนวณโครงสร้างรับดิน

Story	Load Case/Combo	Direction	Label	X m	Y m	Z m	Drift	Cut	Story Drift m	Story Height m	Allowable Story drift = 0.01% (m)	Status
Top Roof	SPECX Max	X	43.00	-42.88	28.78	26.15	0.000759	4.50	0.00103	2.00	0.02000	OK
Top Roof	SPECY Max	X	43.00	-42.88	28.78	26.15	0.000308	4.50	0.00150	2.00	0.02000	OK
Top Roof	SPECY Min	Y	43.00	-42.88	28.78	26.15	0.000004	4.50	0.00011	2.00	0.02000	OK
Lift Room	SPECX Max	X	38.00	-44.56	10.51	24.13	0.001042	4.50	0.00469	0.60	0.00600	OK
Lift Room	SPECY Max	Y	40.00	-44.56	9.76	24.15	0.000299	4.50	0.00133	0.60	0.00600	OK
Lift Room	SPECY Min	X	40.00	-47.43	28.78	24.13	0.000311	4.50	0.00140	0.60	0.00600	OK
Lift Room	SPECY Max	Y	40.00	-44.56	9.76	24.13	0.000711	4.50	0.00338	0.60	0.00600	OK
RWT1	SPECX Max	X	40.00	-44.56	9.76	23.53	0.000995	4.50	0.00440	0.60	0.00600	OK
RWT1	SPECY Max	Y	38.00	-44.56	10.51	23.53	0.000299	4.50	0.00133	0.60	0.00600	OK
RWT1	SPECY Min	X	43.00	-42.88	28.78	23.53	0.000311	4.50	0.00141	0.60	0.00600	OK
RWT1	SPECY Max	Y	23.00	-44.56	11.44	23.53	0.000750	4.50	0.00338	0.60	0.00600	OK
Roof	SPECX Max	X	82.00	-6.15	-1.40	23.55	0.001794	4.50	0.00422	2.85	0.02830	OK
Roof	SPECX Min	Y	82.00	-6.15	-1.40	23.55	0.001034	4.50	0.00467	2.85	0.02830	OK
Roof	SPECY Max	X	86.00	-37.75	38.00	23.55	0.000469	4.50	0.00208	2.85	0.02830	OK
Roof	SPECY Min	Y	82.00	-6.15	-1.40	23.55	0.001177	4.50	0.00230	2.85	0.02830	OK
Story8	SPECX Max	X	82.00	-6.15	-1.40	28.10	0.001797	4.50	0.00629	2.85	0.02830	OK
Story8	SPECX Min	Y	82.00	-6.15	-1.40	28.10	0.001096	4.50	0.00453	2.85	0.02830	OK
Story8	SPECY Max	X	86.00	-37.75	38.00	28.10	0.000474	4.50	0.00213	2.85	0.02830	OK
Story8	SPECY Min	Y	82.00	-6.15	-1.40	28.10	0.001213	4.50	0.00548	2.85	0.02830	OK
Story7	SPECX Max	X	82.00	-6.15	-1.40	17.23	0.001484	4.50	0.00668	2.85	0.02830	OK
Story7	SPECX Min	Y	82.00	-6.15	-1.40	17.23	0.001140	4.50	0.00219	2.85	0.02830	OK
Story7	SPECY Max	X	86.00	-37.75	38.00	17.23	0.000484	4.50	0.00219	2.85	0.02830	OK
Story7	SPECY Min	Y	82.00	-6.15	-1.40	17.23	0.001223	4.50	0.00335	2.85	0.02830	OK
Story6	SPECX Max	X	82.00	-6.15	-1.40	14.40	0.001333	4.50	0.00689	2.85	0.02830	OK
Story6	SPECX Min	Y	82.00	-6.15	-1.40	14.40	0.001180	4.50	0.00232	2.85	0.02830	OK
Story6	SPECY Max	X	86.00	-37.75	38.00	14.40	0.000480	4.50	0.00219	2.85	0.02830	OK
Story6	SPECY Min	Y	82.00	-6.15	-1.40	14.40	0.001222	4.50	0.00330	2.85	0.02830	OK
Story5	SPECX Max	X	82.00	-6.15	-1.40	11.55	0.001311	4.50	0.00680	2.85	0.02830	OK
Story5	SPECX Min	Y	82.00	-6.15	-1.40	11.55	0.001180	4.50	0.00208	2.85	0.02830	OK
Story5	SPECY Max	X	86.00	-37.75	38.00	11.55	0.000477	4.50	0.00208	2.85	0.02830	OK
Story5	SPECY Min	Y	82.00	-6.15	-1.40	11.55	0.001183	4.50	0.00232	2.85	0.02830	OK
Story4	SPECX Max	X	82.00	-6.15	-1.40	8.70	0.001402	4.50	0.00631	2.85	0.02830	OK
Story4	SPECX Min	Y	82.00	-6.15	-1.40	8.70	0.001036	4.50	0.00468	2.85	0.02830	OK
Story4	SPECY Max	X	86.00	-37.75	38.00	8.70	0.000488	4.50	0.00219	2.85	0.02830	OK
Story4	SPECY Min	Y	82.00	-6.15	-1.40	8.70	0.001039	4.50	0.00468	2.85	0.02830	OK
Story3	SPECX Max	X	82.00	-6.15	-1.40	5.83	0.001180	4.50	0.00331	2.85	0.02830	OK
Story3	SPECX Min	Y	82.00	-6.15	-1.40	5.83	0.000862	4.50	0.00338	2.85	0.02830	OK
Story3	SPECY Max	X	86.00	-37.75	38.00	5.83	0.000333	4.50	0.00149	2.85	0.02830	OK
Story3	SPECY Min	Y	82.00	-6.15	-1.40	5.83	0.000864	4.50	0.00378	2.85	0.02830	OK
Story2	SPECX Max	X	43.00	-11.35	-0.33	3.00	0.000794	4.50	0.00337	2.90	0.02900	OK
Story2	SPECX Min	Y	2.00	0.00	0.40	3.00	0.000093	4.50	0.00261	2.90	0.02900	OK
Story2	SPECY Max	X	40.00	-16.33	17.90	3.00	0.000232	4.50	0.00099	2.90	0.02900	OK
Story2	SPECY Min	Y	4.00	0.00	0.00	3.00	0.000071	4.50	0.00204	2.90	0.02900	OK
Story1	SPECX Max	X	25.00	-37.00	0.00	0.10	0.000175	4.50	0.00169	2.40	0.02400	OK
Story1	SPECX Min	Y	4.00	0.00	0.00	0.10	0.000072	4.50	0.00122	2.40	0.02400	OK
Story1	SPECY Max	X	40.00	-16.33	17.90	0.10	0.000105	4.50	0.00067	2.40	0.02400	OK
Story1	SPECY Min	Y	4.00	0.00	0.00	0.10	0.000036	4.50	0.00111	2.40	0.02400	OK

KS-167

รายการคำนวณโครงสร้างรองรับแผ่นดินไหว

โครงการ

ตึกคอนโด จรัญฯ-บ้านเกล้า (PHASE 2)

อาคาร B

ที่ตั้งโครงการ

กรุงเทพมหานคร

KS-168

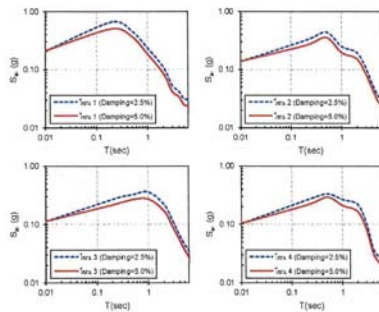
SEISMIC DESIGN CRITERIA

ข้อกำหนดในการออกแบบ

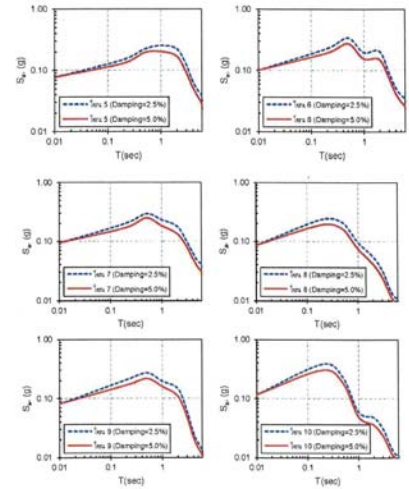
- การออกแบบใช้วิธีพลศาสตร์ตามกฎกระทรวงเรื่อง กำหนดการรับน้ำหนัก ความดันพื้น ความคงทนของอาคาร และพื้นดินรองรับอาคารในการต้านทานแรงสั่นสะเทือนของแผ่นดินไหว พ.ศ. 2564
- มาตรฐานการออกแบบต้านทานการสั่นสะเทือนของแผ่นดินไหว มยผ. 1301/1302-61 ของกรมโยธาธิการและผังเมือง กระทรวงมหาดไทย
- มาตรฐาน ACTS18-1999

แผ่นดินไหวสำหรับการออกแบบ

Spectrum สำหรับการออกแบบของพื้นที่ในแอ่งกุ่มเทพา โซน 5 โดยที่ อาคารคอนกรีตเสริมเหล็กที่มีความสูงไม่เกิน 60 เมตร ใช้อัตราส่วนความหน่วงไม่เกินร้อยละ 5 และอาคารคอนกรีตเสริมเหล็กที่มีความสูงเกินกว่า 60 เมตร ให้ใช้อัตราส่วนความหน่วงไม่เกินร้อยละ 2.5



MS-169



รูปแสดงสเปกตรัมผลตอบสนองสำหรับการออกแบบด้วยวิธีเชิงพลศาสตร์สำหรับโซนต่างๆของพื้นที่ในแอ่งกุ่มเทพา

MS-170

ตารางที่ 1.4-4 ค่าความเร่งตอบสนองเชิงพลศาสตร์สำหรับการออกแบบ ด้วยวิธีเชิงพลศาสตร์สำหรับพื้นที่ในแอ่งกุ่มเทพา (อัตราส่วนความหน่วง 2.5%) ของพื้นที่ในแอ่งกุ่มเทพา

$\frac{S_a}{g}$ [Hz]	S_a (0.01 s)	S_{a1} (0.2 s)	S_{a2} (0.5 s)	S_{a3} (1.0 s)	S_{a4} (2.0 s)	S_{a5} (3.0 s)	S_{a6} (4.0 s)	S_{a7} (5.0 s)	S_{a8} (6.0 s)
1	0.451	0.451	0.451	0.233	0.110	0.053	0.042	0.031	0.029
2	0.439	0.439	0.439	0.249	0.196	0.100	0.050	0.030	0.030
3	0.320	0.320	0.320	0.353	0.217	0.109	0.064	0.044	0.034
4	0.330	0.330	0.330	0.264	0.218	0.100	0.059	0.029	0.027
5	0.220	0.220	0.220	0.250	0.223	0.126	0.067	0.047	0.030
6	0.340	0.340	0.340	0.190	0.207	0.093	0.053	0.040	0.035
7	0.291	0.291	0.291	0.231	0.177	0.103	0.064	0.046	0.040
8	0.210	0.210	0.210	0.097	0.055	0.033	0.010	0.012	0.011
9	0.269	0.269	0.269	0.194	0.144	0.061	0.026	0.017	0.013
10	0.225	0.225	0.225	0.059	0.047	0.031	0.017	0.012	0.010

ตารางที่ 1.4-5 ค่าความเร่งตอบสนองเชิงพลศาสตร์สำหรับการออกแบบ ด้วยวิธีเชิงพลศาสตร์สำหรับพื้นที่ในแอ่งกุ่มเทพา (อัตราส่วนความหน่วง 5.0%) ของพื้นที่ในแอ่งกุ่มเทพา

$\frac{S_a}{g}$ [Hz]	S_a (0.01 s)	S_{a1} (0.2 s)	S_{a2} (0.5 s)	S_{a3} (1.0 s)	S_{a4} (2.0 s)	S_{a5} (3.0 s)	S_{a6} (4.0 s)	S_{a7} (5.0 s)	S_{a8} (6.0 s)
1	0.360	0.360	0.360	0.181	0.065	0.041	0.034	0.024	0.022
2	0.352	0.352	0.352	0.193	0.151	0.094	0.047	0.030	0.024
3	0.262	0.262	0.262	0.265	0.166	0.065	0.032	0.035	0.026
4	0.287	0.287	0.287	0.207	0.163	0.079	0.032	0.023	0.020
5	0.191	0.191	0.191	0.199	0.168	0.094	0.053	0.037	0.028
6	0.272	0.272	0.272	0.134	0.150	0.077	0.042	0.031	0.026
7	0.246	0.246	0.246	0.101	0.132	0.094	0.051	0.036	0.030
8	0.162	0.162	0.162	0.075	0.041	0.025	0.015	0.010	0.009
9	0.214	0.214	0.214	0.156	0.107	0.040	0.022	0.014	0.011
10	0.179	0.179	0.179	0.049	0.035	0.023	0.014	0.010	0.008

MS-171

ตารางที่ 1.4-6 ค่าความเร่งตอบสนองเชิงพลศาสตร์สำหรับการออกแบบ ด้วยวิธีเชิงพลศาสตร์สำหรับพื้นที่ในแอ่งกุ่มเทพา (อัตราส่วนความหน่วง 2.5%) ของพื้นที่ในแอ่งกุ่มเทพา

$\frac{S_a}{g}$ [Hz]	S_a (0.01 s)	S_{a1} (0.2 s)	S_{a2} (0.5 s)	S_{a3} (1.0 s)	S_{a4} (2.0 s)	S_{a5} (3.0 s)	S_{a6} (4.0 s)	S_{a7} (5.0 s)	S_{a8} (6.0 s)
1	0.396	0.454	0.451	0.213	0.110	0.035	0.042	0.031	0.029
2	0.126	0.313	0.439	0.249	0.196	0.105	0.059	0.036	0.030
3	0.111	0.266	0.320	0.353	0.217	0.109	0.064	0.044	0.034
4	0.102	0.260	0.330	0.264	0.218	0.100	0.039	0.029	0.027
5	0.073	0.148	0.220	0.230	0.223	0.126	0.067	0.047	0.038
6	0.099	0.225	0.343	0.198	0.207	0.093	0.053	0.040	0.033
7	0.283	0.300	0.291	0.231	0.177	0.103	0.064	0.046	0.040
8	0.065	0.036	0.013	0.037	0.055	0.033	0.018	0.012	0.011
9	0.080	0.205	0.269	0.124	0.144	0.061	0.026	0.017	0.013
10	0.115	0.303	0.225	0.039	0.047	0.031	0.017	0.012	0.010

ตารางที่ 1.4-7 ค่าความเร่งตอบสนองเชิงพลศาสตร์สำหรับการออกแบบ ด้วยวิธีเชิงพลศาสตร์สำหรับพื้นที่ในแอ่งกุ่มเทพา (อัตราส่วนความหน่วง 5.0%) ของพื้นที่ในแอ่งกุ่มเทพา

$\frac{S_a}{g}$ [Hz]	S_a (0.01 s)	S_{a1} (0.2 s)	S_{a2} (0.5 s)	S_{a3} (1.0 s)	S_{a4} (2.0 s)	S_{a5} (3.0 s)	S_{a6} (4.0 s)	S_{a7} (5.0 s)	S_{a8} (6.0 s)
1	0.208	0.495	0.360	0.181	0.085	0.041	0.034	0.024	0.022
2	0.126	0.257	0.352	0.193	0.151	0.094	0.047	0.030	0.024
3	0.111	0.212	0.262	0.245	0.166	0.085	0.032	0.035	0.026
4	0.102	0.211	0.287	0.207	0.163	0.079	0.032	0.023	0.020
5	0.073	0.128	0.191	0.199	0.156	0.094	0.033	0.037	0.028
6	0.099	0.189	0.272	0.134	0.130	0.077	0.042	0.031	0.026
7	0.281	0.167	0.246	0.181	0.132	0.084	0.031	0.036	0.030
8	0.065	0.036	0.012	0.037	0.041	0.025	0.013	0.010	0.008
9	0.080	0.165	0.214	0.156	0.107	0.049	0.022	0.014	0.011
10	0.115	0.301	0.179	0.049	0.035	0.023	0.014	0.010	0.008

MS-172

แรงเฉือนที่ฐานอาคาร (Seismic Base Shear, V) คำนวณจาก

$$V = (C_s)(W)$$

โดยที่ C_s คือสัมประสิทธิ์ผลตอบสนองแรงแผ่นดินไหว

W คือน้ำหนักโครงสร้างประติมากรรมของอาคาร ตามที่กำหนดในหัวข้อที่ 2.8.2

สัมประสิทธิ์ผลตอบสนองแรงแผ่นดินไหว (C_s) คำนวณจาก

$$C_s = S_a (I/R)$$

โดยที่ S_a คือค่าความเร่งตอบสนองของโครงสร้างสำหรับการออกแบบ ตามตารางที่ 1.4-4

R คือ ตัวประกอบปรับผลตอบสนอง ตามที่กำหนด ในหัวข้อที่ 2.3.1

I คือ ตัวประกอบความสำคัญของอาคาร ตามที่กำหนดในหัวข้อที่ 1.5

และ C_s จะต้องมีค่าไม่น้อยกว่า 0.01

$$I = 1.00$$

$$R = 5$$

$$f_2 = 2.5$$

$$C_d = 4.5$$

Model Combination: CQC method

Directional Combination: SRSS

น้ำหนักบรรทุก

DL = 0.19 m Post-tensioned Slab 456 kg/sq.m

= 0.25 m R.C. Flat Slab 600 kg/sq.m

SDL = 325 kg/sq.m

LL = 200 kg/sq.m

43-173

Design Load Combinations

การรวมผลของแรงสำหรับการออกแบบ

$$U = 1.2D + 1.0L + 1.0E$$

$$U = 0.9D + 1.0E$$

E = Earthquake Load วิเคราะห์ด้วยวิธี Elastic Response Spectrum Analysis (ใช้ Scale ให้ค่าแรงเฉือนที่ฐานนี้เท่ากับค่าจากวิธี Equivalent Static Force Procedure

Structural Stiffness

Items	I_{eff}
Beam	$0.35 I_g$
Column	$0.7 I_g$
Wall non crack	$0.7 I_g$
Wall crack	$0.35 I_g$
Flat Slab	$0.25 I_g$

43-174

Structural Model

Method of Analysis: Finite Element Method (Frame & Shell Element)

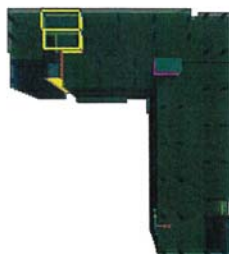
Modeling Detail : Column & Beam > 2-nodes frame element

Walls > 4 - nodes shell element

Slabs > 4 - nodes shell element

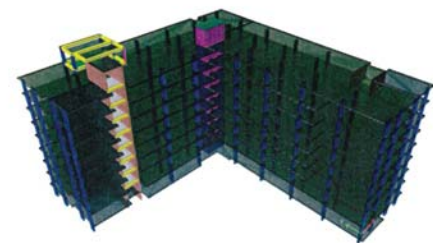


Typical Plan



Top View

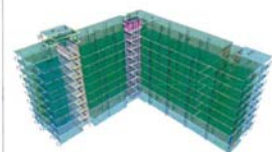
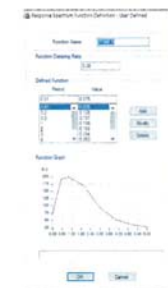
43-175



3D-Model

Mathematical Model

การวิเคราะห์โครงสร้าง ใช้แบบจำลอง Finite Element แบบสามมิติ



Response Spectrum Function Definition

43-176

ผลการวิเคราะห์โดยวิธีทฤษฎีและตัวคูณปรับค่า

จำนวนโมดที่พิจารณาจะขึ้นอยู่กับเงื่อนไขที่กำหนดไว้โดยโปรแกรมที่จะใช้หาค่าปัจจัยการมีส่วนร่วมโมด (Effective Modal Weight, or Modal Weight Participation) นี้ค่าไม่น้อยกว่าร้อยละ 99 ของน้ำหนักปัจจัยการมีส่วนร่วมของ ๑111

Model Participating Mass Ratios

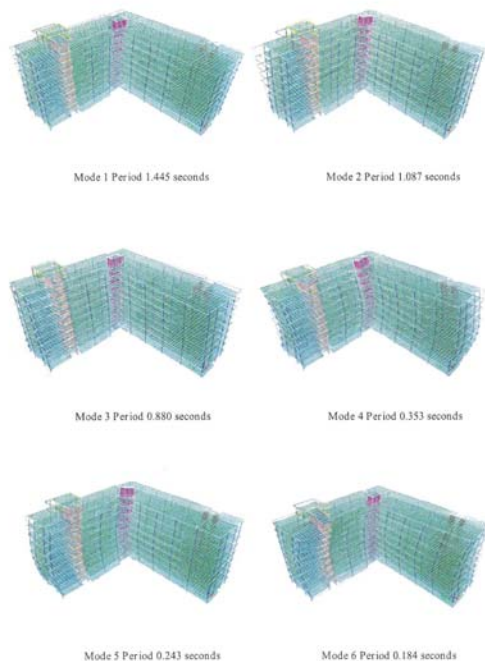
Mode	Periods (sec.)	Model Participating Mass Ratios				
		Sum U X	SUM U Y	SUM R X	SUM R Y	SUM R Z
1	1.445	0.0072	0.4252	0.2107	0.0044	0.2420
2	1.087	0.6604	0.4385	0.2188	0.3634	0.2431
3	0.88	0.6674	0.6702	0.3647	0.3664	0.6689
4	0.353	0.6725	0.7727	0.5399	0.3775	0.7305
5	0.243	0.8439	0.7829	0.5553	0.6444	0.7308
6	0.184	0.8511	0.8521	0.6560	0.6537	0.8413
7	0.172	0.8567	0.8524	0.6571	0.6607	0.8577
8	0.156	0.8569	0.8881	0.7242	0.6619	0.8728
9	0.105	0.9136	0.8923	0.7319	0.7752	0.8730
10	0.097	0.9140	0.9106	0.7763	0.7766	0.8836
11	0.078	0.9173	0.9334	0.8209	0.7831	0.9245
12	0.07	0.9198	0.9389	0.8351	0.7895	0.9326
13	0.068	0.9199	0.9428	0.8450	0.7898	0.9326
14	0.064	0.9442	0.9476	0.8569	0.8484	0.9327
15	0.055	0.9462	0.9533	0.8725	0.8539	0.9369
16	0.046	0.9506	0.9575	0.8826	0.8646	0.9587
17	0.046	0.9507	0.9699	0.9156	0.8647	0.9588
18	0.046	0.9636	0.9712	0.9187	0.8984	0.9608
19	0.041	0.9649	0.9752	0.9301	0.9020	0.9638
20	0.038	0.9661	0.9801	0.9443	0.9052	0.9671
21	0.036	0.9770	0.9815	0.9481	0.9353	0.9671
22	0.033	0.9778	0.9870	0.9627	0.9372	0.9787
23	0.03	0.9856	0.9884	0.9667	0.9589	0.9788
24	0.028	0.9862	0.9885	0.9670	0.9605	0.9788
25	0.027	0.9915	0.9910	0.9740	0.9759	0.9790
26	0.026	0.9935	0.9931	0.9800	0.9814	0.9861
27	0.025	0.9978	0.9949	0.9851	0.9936	0.9862

K3-177

Mode	Periods (sec.)	Model Participating Mass Ratios				
		Sum U X	SUM U Y	SUM R X	SUM R Y	SUM R Z
28	0.022	0.9984	0.9964	0.9886	0.9955	0.9904
29	0.021	0.9984	0.9965	0.9897	0.9955	0.9904
30	0.02	0.9990	0.9977	0.9913	0.9970	0.9937
31	0.019	0.9990	0.9978	0.9936	0.9971	0.9940
32	0.019	0.9997	0.9993	0.9979	0.9990	0.9980
33	0.018	1	1	1	1	1
34	0.018	1	1	1	1	1
35	0.017	1	1	1	1	1
36	0.016	1	1	1	1	1
37	0.015	1	1	1	1	1
38	0.013	1	1	1	1	1
39	0.012	1	1	1	1	1

K3-178

Analysis Model Period



K3-179

แรงเฉือนที่กระทำกับโครงสร้าง

แรงเฉือนที่ฐาน

Story	Load Case/Combo	Location	P	V X	V Y	T	M X	M Y
			tonf	tonf	tonf	ton-m	ton-m	ton-m
Rooflop2	SPECC Max	Top	0.000000	3.8167	0.8532	181.8114	0.0000	0.0000
Rooflop2	SPECC Max	Bottom	0.000000	3.8167	0.8532	181.8114	1.7064	7.6934
Rooflop2	SPECC Max	Top	0.000000	2.629	3.8925	130.2159	0.0000	0.0000
Rooflop2	SPECC Max	Bottom	0.000000	2.629	3.8925	130.2159	6.1849	4.0179
Rooflop1	SPECC Max	Top	0.000000	4.9986	1.0773	228.3103	1.7064	7.6934
Rooflop1	SPECC Max	Bottom	0.000000	4.9986	1.0773	228.3103	2.3511	10.4838
Rooflop1	SPECC Max	Top	0.000000	2.3474	3.8806	150.2338	6.1849	4.0179
Rooflop1	SPECC Max	Bottom	0.000000	2.3474	3.8806	150.2338	8.5045	5.4600
RWT	SPECC Max	Top	0.000000	8.1854	1.7289	381.0211	2.3511	10.4838
RWT	SPECC Max	Bottom	0.000000	8.1854	1.7289	381.0211	3.3820	15.5317
RWT	SPECC Max	Top	0.000000	3.6968	6.4893	245.2981	8.5045	5.4600
RWT	SPECC Max	Bottom	0.000000	3.6968	6.4893	245.2981	12.3858	7.5881
Roof	SPECC Max	Top	0.000001	69.3483	12.7421	2478.1150	3.3819	15.5318
Roof	SPECC Max	Bottom	0.000001	69.3483	12.7421	2478.1150	38.2962	212.1078
Roof	SPECC Max	Top	0.000003	12.6834	49.2176	1162.5740	12.3857	7.5882
Roof	SPECC Max	Bottom	0.000003	12.6834	49.2176	1162.5740	149.8787	40.3904
Story8	SPECC Max	Top	0.000004	121.3477	20.7897	4268.9845	38.2962	212.1078
Story8	SPECC Max	Bottom	0.000004	121.3477	20.7897	4268.9845	97.6485	557.4385
Story8	SPECC Max	Top	0.000011	20.4521	86.7217	1933.3376	149.8786	40.3904
Story8	SPECC Max	Bottom	0.000012	20.4521	86.7217	1933.3376	396.2190	97.3369
Story7	SPECC Max	Top	0.000006	163.5558	27.1079	5725.1126	97.6485	557.4385
Story7	SPECC Max	Bottom	0.000006	163.5558	27.1079	5725.1126	172.9310	1021.5833
Story7	SPECC Max	Top	0.000015	26.6387	117.2707	2554.3190	396.2189	97.3369
Story7	SPECC Max	Bottom	0.000015	26.6387	117.2707	2554.3190	728.7254	171.1017
Story6	SPECC Max	Top	0.000008	197.2405	32.0072	6888.7901	172.9310	1021.5834
Story6	SPECC Max	Bottom	0.000008	197.2405	32.0072	6888.7901	261.3672	1578.2759
Story6	SPECC Max	Top	0.000018	31.4957	141.7078	3056.3975	728.7253	171.1017
Story6	SPECC Max	Bottom	0.000018	31.4957	141.7078	3056.3975	1129.1253	258.0091
Story5	SPECC Max	Top	0.000009	223.294	35.9424	7793.7979	261.3672	1578.2760
Story5	SPECC Max	Bottom	0.000009	223.294	35.9424	7793.7979	359.7933	2108.5727
Story5	SPECC Max	Top	0.000021	35.4679	160.7751	3455.0693	1129.1254	258.0091
Story5	SPECC Max	Bottom	0.000021	35.4679	160.7751	3455.0693	1511.4113	355.0228

K3-180

Story	Load Case/Combo	Location	P tonf	VX tonf	VY tonf	T tonf-m	MX tonf-m	MY tonf-m
Story4	SPECX Max	Top	0.000010	242.2864	39.1428	8455.4294	359.7933	2208.5728
Story4	SPECX Max	Bottom	0.000010	242.2864	39.1428	8455.4294	466.0231	2839.4952
Story4	SPECTY Max	Top	0.000025	38.7741	174.9831	3756.6284	1581.4113	355.0228
Story4	SPECTY Max	Bottom	0.000025	38.7741	174.9831	3756.6284	2071.6069	468.1267
Story3	SPECX Max	Top	0.000012	254.7366	41.5624	8889.8754	466.0231	2839.4953
Story3	SPECX Max	Bottom	0.000012	254.7366	41.5624	8889.8754	578.3153	3684.3291
Story3	SPECTY Max	Top	0.000029	41.3477	184.6078	3961.3817	2071.6069	468.1266
Story3	SPECTY Max	Bottom	0.000029	41.3477	184.6078	3961.3817	2587.3870	571.6552
Story2	SPECX Max	Top	0.000012	261.2069	42.9655	9118.4829	578.3153	3684.3291
Story2	SPECX Max	Bottom	0.000012	261.2069	42.9655	9118.4829	696.8851	4350.5446
Story2	SPECTY Max	Top	0.000030	42.9219	189.8292	4070.6021	2587.3870	571.6552
Story2	SPECTY Max	Bottom	0.000030	42.9219	189.8292	4070.6021	3127.1093	689.8357
Story1	SPECX Max	Top	0.000012	262.6795	43.3273	9170.9162	696.8851	4350.5446
Story1	SPECX Max	Bottom	0.000012	262.6795	43.3273	9170.9162	780.0907	4869.2940
Story1	SPECTY Max	Top	0.000030	43.3273	191.1406	4093.3630	3127.1093	689.8357
Story1	SPECTY Max	Bottom	0.000030	43.3273	191.1406	4093.3630	3502.9438	772.8903

MS-181

การรวมผลของแรง

สำหรับการออกแบบด้วยวิธีหน่วยแรงที่ซ้อนกัน

WSD1	=	1.0D + 1.0L
WSD2	=	1.0D + 0.7EQX
WSD2-1	=	1.0D - 0.7EQX
WSD3	=	1.0D + 0.7EQY
WSD3-1	=	1.0D - 0.7EQY
WSD4	=	1.0D + 0.75L + 0.525EQX
WSD4-1	=	1.0D + 0.75L - 0.525EQX
WSD5	=	1.0D + 0.75L + 0.525EQY
WSD5-1	=	1.0D + 0.75L - 0.525EQY
WSD6	=	0.6D + 0.7EQX
WSD6-1	=	0.6D - 0.7EQX
WSD7	=	0.6D + 0.7EQY
WSD7-1	=	0.6D - 0.7EQY
WSD8	=	1.0D + 0.75L + 0.75W
WSD9	=	1.0D + 0.75L - 0.75W
WSD10	=	1.0D + 1.0W
WSD11	=	1.0D - 1.0W

MS-183

ผลการวิเคราะห์โดยวิธีทางพลศาสตร์ แรงเฉือนที่ฐานมีค่า ดังนี้

สำหรับแผ่นดินไหวในทิศทาง X: VX = 262.68 Tons

สำหรับแผ่นดินไหวในทิศทาง Y: VY = 191.15 Tons

การคำนวณโดยวิธีสถิตย์เทียบเท่า

H = 26.15 m

T ทิศทาง X = 1.087 sec ให้อ่านไม่เกิน 0.02H (1.5) = 0.785 sec, ใช้ T = 0.785 sec

T ทิศทาง Y = 1.445 sec ให้อ่านไม่เกิน 0.02H (1.5) = 0.785 sec, ใช้ T = 0.785 sec

I = 1.00 , R = 5

Sx ทิศทาง X = 0.196 (จากตารางที่ 1.4-5, T = 0.762)

Sy ทิศทาง Y = 0.196 (จากตารางที่ 1.4-5, T = 0.762)

Cx ทิศทาง X = Sa(I,R) = 0.039 > 0.01

Cy ทิศทาง Y = Sa(I,R) = 0.039 > 0.01

W = 10056.58 Tons

ค่าแรงเฉือนที่ฐานในทิศทาง X เท่ากับ V = 0.039(10056.58) = 392.21 Tons

ค่าแรงเฉือนที่ฐานในทิศทาง Y เท่ากับ V = 0.039(10056.58) = 392.21 Tons

ปรับค่าแรงเฉือนในที่ใช้ในการออกแบบด้วยวิธีเชิงพลศาสตร์โดยคูณด้วยค่า 0.85V/Vr

ทิศทาง X : Scale Factor = 0.85x392.21/262.68 = 1.27

ทิศทาง Y : Scale Factor = 0.85x392.21/191.15 = 1.74

ดังนั้น แผ่นดินไหวใช้คำนวณปรับค่าการตอบสนอง ในการออกแบบ ดังต่อไปนี้

EQXX = 1.27(SPECX) + 0.52(SPECTY)

EQYY = 0.38(SPECX) + 1.74(SPECTY)

MS-182

สำหรับการออกแบบด้วยวิธีค่าจริง

USD1	=	1.4D + 1.4SD
USD2	=	1.4D + 1.4SD + 1.7L
UEQ1	=	1.20D + 1.20SD + 1.00L + 1.00EQX
UEQ1-1	=	1.20D + 1.20SD + 1.00L - 1.00EQX
UEQ2	=	1.20D + 1.20SD + 1.00L + 1.00EQY
UEQ2-1	=	1.20D + 1.20SD + 1.00L - 1.00EQY
UEQ3	=	0.9D + 0.9SD + 1.00EQX
UEQ3-1	=	0.9D + 0.9SD - 1.00EQX
UEQ4	=	0.9D + 0.9SD + 1.00EQY
UEQ4-1	=	0.9D + 0.9SD - 1.00EQY
UWL1	=	1.05D + 1.05SD + 1.275L + 1.275W
UWL2	=	1.05D + 1.05SD + 1.275L - 1.275W
UWL3	=	0.9D + 0.9SD + 1.30W
UWL4	=	0.9D + 0.9SD - 1.30W

MS-184

Column Force : Service Load Enr.

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			inf	inf	inf	inf	inf	inf
Roof	C81	WSD Evt Min	-27.8161	-1.6208	-1.4161	-0.2611	-1.4884	-3.1886
Roof	C81	WSD Evt Min	-14.1184	-5.4721	-2.2609	-0.2631	-2.7516	-5.9819
Roof	C86	WSD Evt Min	-10.8118	-5.9671	-1.0172	-0.2631	-1.2036	-1.4816
Roof	C87	WSD Evt Min	-12.8166	-5.5651	-1.4208	-0.2631	-1.726	-3.1947
Roof	C88	WSD Evt Min	-18.2974	-5.8441	-1.659	-0.2631	-1.8836	-1.7971
Story6	C37	WSD Evt Min	-27.6434	-1.4844	-2.8787	-0.0975	-1.3175	-1.8233
Story6	C2	WSD Evt Min	-29.219	-1.4778	-0.6321	-0.2718	-0.6054	-5.0334
Story6	C3	WSD Evt Min	-18.6121	-1.7651	-1.4226	-0.2718	-1.7289	-5.6119
Story6	C6	WSD Evt Min	-15.5161	-2.2564	-0.1017	-0.2718	-0.0876	-6.1109
Story6	C8	WSD Evt Min	-10.1295	-1.9664	-0.411	-0.2718	-0.3875	-5.8474
Story6	C9	WSD Evt Min	-92.7168	-0.8173	-0.1177	-0.2718	-0.4532	-1.1726
Story6	C12	WSD Evt Min	-40.1621	-0.2216	-1.1748	-0.2718	-1.5427	-0.101
Story6	C13	WSD Evt Min	-92.2833	-0.9192	-0.1954	-0.2718	-0.5092	-1.3718
Story6	C16	WSD Evt Min	-100.1683	-1.4999	-0.2967	-0.2718	-0.1649	-2.1982
Story6	C18	WSD Evt Min	-16.1277	-0.9283	-0.7178	-0.2718	-0.63	-1.2915
Story6	C19	WSD Evt Min	-73.4783	-0.8749	-0.1821	-0.2718	-0.0461	-1.1159
Story6	C21	WSD Evt Min	-56.4267	-1.0131	-1.1191	-0.2718	-1.1975	-1.4121
Story6	C24	WSD Evt Min	-41.7817	-0.7862	-2.1208	-0.2718	-2.1993	-1.1026
Story6	C26	WSD Evt Min	-40.442	-0.1011	-1.2108	-0.2718	-1.0401	-0.796
Story6	C27	WSD Evt Min	-57.6691	-0.6617	-2.1185	-0.2718	-2.1567	-0.8284
Story6	C30	WSD Evt Min	-72.7058	-0.7867	-1.841	-0.2718	-1.887	-1.1168
Story6	C31	WSD Evt Min	-55.4247	-0.9142	-1.1611	-0.2718	-1.1764	-1.3174
Story6	C34	WSD Evt Min	-56.2641	-0.223	-1.1313	-0.2718	-1.2702	-0.7911
Story6	C36	WSD Evt Min	-43.9186	-0.2812	-1.0749	-0.2718	-1.0776	-0.3883
Story6	C38	WSD Evt Min	-24.3968	-0.976	-0.1535	-0.2718	-0.1275	-1.8258
Story6	C39	WSD Evt Min	-28.9182	-0.7507	-0.4617	-0.2718	-0.8152	-0.4486
Story6	C40	WSD Evt Min	-41.7599	-1.1109	-1.3779	-0.2718	-1.9476	-1.5934
Story6	C49	WSD Evt Min	-57.8022	-0.9795	-2.0708	-0.2718	-2.0942	-1.1129
Story6	C70	WSD Evt Min	-78.8649	-0.7895	-1.5924	-0.2718	-2.2479	-0.9177
Story6	C71	WSD Evt Min	-55.8881	-0.7134	-1.924	-0.2718	-2.7091	-0.8443
Story6	C72	WSD Evt Min	-53.3726	-0.3889	-1.5466	-0.2718	-2.1955	-0.1983
Story6	C73	WSD Evt Min	-54.043	-0.7404	-1.8427	-0.2718	-2.6307	-0.9939
Story6	C76	WSD Evt Min	-72.4645	-0.66	-1.7408	-0.2718	-2.4047	-0.8265
Story6	C77	WSD Evt Min	-54.0928	-0.9258	-1.2725	-0.2718	-1.0745	-1.2654
Story6	C79	WSD Evt Min	-29.1032	-1.656	-1.6424	-0.2718	-5.4768	-2.2296
Story6	C80	WSD Evt Min	-49.2596	-1.469	-0.9119	-0.2718	-1.1875	-2.0184
Story6	C81	WSD Evt Min	-48.1717	-1.3616	-1.4979	-0.2718	-2.1296	-1.2121
Story6	C82	WSD Evt Min	-51.6495	-1.841	-1.0118	-0.2718	-1.5514	-2.1817
Story6	C83	WSD Evt Min	-72.184	-1.1089	-1.5294	-0.2718	-2.1092	-1.4654
Story6	C84	WSD Evt Min	-55.8612	-2.1108	-1.0493	-0.2718	-1.4897	-3.0114
Story6	C85	WSD Evt Min	-48.4425	-1.3588	-1.7048	-0.2718	-2.431	-5.024
Story6	C86	WSD Evt Min	-59.9414	-2.6741	-0.7982	-0.2718	-1.0904	-3.1256
Story6	C87	WSD Evt Min	-64.9221	-1.8163	-1.1409	-0.2718	-1.5893	-5.4211
Story6	C88	WSD Evt Min	-17.7883	-2.443	-0.5116	-0.2718	-6.7896	-1.4024
Story6	C37	WSD Evt Min	-41.1116	-1.6312	-1.114	-0.0989	-4.0025	-2.5923
Story7	C2	WSD Evt Min	-51.1524	-1.6572	-0.6991	-0.2753	-0.8185	-5.1874
Story7	C3	WSD Evt Min	-57.7568	-2.2773	-1.462	-0.2753	-2.0404	-5.5914
Story7	C6	WSD Evt Min	-52.967	-4.7124	-0.3169	-0.2753	-0.1916	-6.4528
Story7	C8	WSD Evt Min	-44.7614	-4.0685	-0.4791	-0.2753	-0.2513	-6.1578
Story7	C9	WSD Evt Min	-120.9147	-0.9899	-0.658	-0.2753	-0.7918	-1.363
Story7	C12	WSD Evt Min	-106.7093	-0.4021	-1.3817	-0.2753	-1.8238	-0.5324

Page 2 of 8

K3-189

Column Force : Service Load Enr.

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			inf	inf	inf	inf	inf	inf
Story7	C11	WSD Evt Min	-179.5028	-1.1711	-0.7717	-0.2753	-0.6754	-1.5893
Story7	C16	WSD Evt Min	-111.4929	-1.698	-0.6472	-0.2753	-0.7426	-2.3765
Story7	C18	WSD Evt Min	-83.514	-1.0157	-0.851	-0.2753	-0.8095	-1.4335
Story7	C19	WSD Evt Min	-110.297	-0.9159	-0.326	-0.2753	-0.2501	-1.3429
Story7	C21	WSD Evt Min	-84.0221	-1.1501	-1.5277	-0.2753	-1.877	-1.5947
Story7	C24	WSD Evt Min	-91.0007	-0.8947	-2.4211	-0.2753	-1.1193	-1.2428
Story7	C26	WSD Evt Min	-41.1086	-1.1101	-1.1847	-0.2753	-1.6478	-0.1451
Story7	C27	WSD Evt Min	-86.9179	-0.7103	-2.427	-0.2753	-1.0499	-1.0207
Story7	C30	WSD Evt Min	-109.6094	-0.8818	-1.2116	-0.2753	-1.2866	-1.2299
Story7	C31	WSD Evt Min	-82.5155	-0.9959	-2.2274	-0.2753	-1.5904	-1.0412
Story7	C34	WSD Evt Min	-84.8421	-0.2688	-3.6192	-0.2753	-4.8027	-0.38
Story7	C36	WSD Evt Min	-65.8279	-0.3242	-1.1884	-0.2753	-1.4473	-0.4624
Story7	C38	WSD Evt Min	-56.4411	-1.1206	-0.1157	-0.2753	-0.2197	-1.191
Story7	C39	WSD Evt Min	-42.8436	-0.8543	-0.1115	-0.2753	-0.7579	-0.9699
Story7	C40	WSD Evt Min	-93.119	-1.4114	-1.5515	-0.2753	-2.1193	-1.9183
Story7	C49	WSD Evt Min	-86.9948	-1.0909	-2.1476	-0.2753	-1.268	-1.4411
Story7	C70	WSD Evt Min	-106.7566	-0.8464	-1.7747	-0.2753	-2.4791	-1.1767
Story7	C71	WSD Evt Min	-82.8616	-0.8101	-2.1112	-0.2753	-2.9827	-1.1656
Story7	C72	WSD Evt Min	-110.1941	-0.9912	-1.7287	-0.2753	-2.4098	-0.4777
Story7	C73	WSD Evt Min	-88.5553	-0.857	-2.0391	-0.2753	-2.8783	-1.2291
Story7	C76	WSD Evt Min	-108.823	-0.7242	-1.8952	-0.2753	-2.6489	-1.1335
Story7	C77	WSD Evt Min	-80.6543	-1.0774	-2.1425	-0.2753	-1.2867	-1.612
Story7	C79	WSD Evt Min	-61.5773	-2.0605	-5.4789	-0.2753	-7.7048	-2.6815
Story7	C79	WSD Evt Min	-61.3801	-1.9937	-2.4461	-0.2753	-5.9478	-2.9312
Story7	C80	WSD Evt Min	-73.6471	-1.5459	-1.1306	-0.2753	-1.5729	-2.2129
Story7	C81	WSD Evt Min	-102.4733	-1.2069	-1.6816	-0.2753	-2.1582	-4.5193
Story7	C82	WSD Evt Min	-82.3748	-1.9482	-1.7618	-0.2753	-1.6182	-2.9217
Story7	C83	WSD Evt Min	-108.8154	-1.4949	-1.6017	-0.2753	-2.1651	-5.0291
Story7	C84	WSD Evt Min	-82.182	-2.2915	-1.1991	-0.2753	-1.6817	-1.0404
Story7	C85	WSD Evt Min	-102.8947	-1.8225	-1.8792	-0.2753	-2.6259	-5.549
Story7	C86	WSD Evt Min	-89.3746	-2.7839	-0.8867	-0.2753	-1.2256	-4.8006
Story7	C87	WSD Evt Min	-97.524	-0.0924	-1.262	-0.2753	-1.7594	-5.8925
Story7	C88	WSD Evt Min	-56.2183	-1.8103	-1.2104	-0.2753	-1.7999	-4.671
Story6	C17	WSD Evt Min	-54.564	-1.7361	-0.9615	-0.0977	-3.5864	-1.3468
Story6	C2	WSD Evt Min	-57.9751	-1.6442	-0.741	-0.2721	-1.1251	-5.2161
Story6	C3	WSD Evt Min	-76.9109	-1.1744	-1.6817	-0.2721	-2.0004	-5.9893
Story6	C6	WSD Evt Min	-78.8711	-0.6218	-0.1048	-0.2721	-0.6052	-6.9114
Story6	C8	WSD Evt Min	-59.31	-2.2812	-0.5155	-0.2721	-0.8191	-0.081
Story6	C9	WSD Evt Min	-149.1248	-0.9946	-0.6391	-0.2721	-0.8627	-1.1116
Story6	C12	WSD Evt Min	-113.5082	-0.4089	-1.1446	-0.2721	-1.9972	-0.5817
Story6	C13	WSD Evt Min	-146.5675	-1.1563	-0.77	-0.2721	-1.1963	-1.6101
Story6	C16	WSD Evt Min	-162.8081	-1.6583	-0.624	-0.2721	-0.9767	-2.1847
Story6	C18	WSD Evt Min	-110.7542	-1.0389	-0.9388	-0.2721	-1.6379	-1.5884
Story6	C19	WSD Evt Min	-147.2179	-0.8594	-0.4458	-0.2721	-0.6893	-1.5829
Story6	C21	WSD Evt Min	-113.1189	-1.1687	-1.6271	-0.2721	-2.4225	-1.6639
Story6	C24	WSD Evt Min	-124.4771	-0.8218	-2.4752	-0.2721	-3.0400	-1.1201
Story6	C26	WSD Evt Min	-81.5866	-0.1454	-1.5419	-0.2721	-1.9191	-0.2241
Story6	C27	WSD Evt Min	-116.1181	-0.726	-2.5384	-0.2721	-2.7908	-1.0485
Story6	C30	WSD Evt Min	-146.7804	-0.8125	-1.1783	-0.2721	-1.5189	-1.2275
Story6	C31	WSD Evt Min	-109.6219	-0.5592	-1.2664	-0.2721	-1.7971	-1.3884
Story6	C34	WSD Evt Min	-111.8893	-0.2941	-0.6163	-0.2721	-1.1855	-0.4418

Page 1 of 8

K3-190

Column Force : Service Load Enr.

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			inf	inf	inf	inf	inf	inf
Story6	C36	WSD Evt Min	-47.4732	-0.1377	-1.2878	-0.2721	-1.924	-0.5979
Story6	C38	WSD Evt Min	-48.4155	-1.1932	-0.0691	-0.2721	-0.072	-1.7867
Story6	C39	WSD Evt Min	-56.8181	-0.9109	-0.4495	-0.2721	-0.6154	-1.3551
Story6	C40	WSD Evt Min	-124.4115	-1.4486	-1.5653	-0.2721	-2.1522	-2.1444
Story6	C49	WSD Evt Min	-114.1174	-1.1162	-2.3589	-0.2721	-1.1847	-1.8016
Story6	C70	WSD Evt Min	-142.5208	-0.8601	-1.7958	-0.2721	-2.5879	-1.4474
Story6	C71	WSD Evt Min	-108.508	-0.8806	-2.1201	-0.2721	-1.0662	-1.5082
Story6	C72	WSD Evt Min	-117.0752	-0.4143	-1.711	-0.2721	-2.4938	-0.9322
Story6	C73	WSD Evt Min	-106.9617	-1.9021	-1.0578	-0.2721	-2.8634	-1.481
Story6	C76	WSD Evt Min	-116.5177	-0.7608	-1.8888	-0.2721	-2.7106	-1.4998
Story6	C77	WSD Evt Min	-107.1652	-1.122	-2.1307	-0.2721	-3.1431	-2.0295
Story6	C78	WSD Evt Min	-81.8484	-2.121	-5.3783	-0.2721	-7.7026	-3.5737
Story6	C79	WSD Evt Min	-57.511	-2.0493	-1.1444	-0.2721	-5.931	-5.6716
Story6	C80	WSD Evt Min	-97.9709	-1.5022	-1.1593	-0.2721	-1.6671	-2.4248
Story6	C81	WSD Evt Min	-116.9109	-0.8831	-1.7154	-0.2721	-2.4612	-4.6777
Story6	C82	WSD Evt Min	-110.1118	-1.9217	-1.171	-0.2721	-1.6794	-1.1444
Story6	C83	WSD Evt Min	-115.1051	-1.3751	-1.7627	-0.2721	-2.4413	-3.171
Story6	C84	WSD Evt Min	-108.9164	-2.2112	-1.2101	-0.2721	-1.7575	-1.6447
Story6	C85	WSD Evt Min	-117.1161	-1.7085	-1.8729	-0.2721	-2.6499	-5.421

Column Force : Service Load Ens.

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			inf	inf	inf	inf	inf	inf
Story1	C1	WSD Env Min	-87.7702	-2.4394	-2.596	-0.0672	-3.7115	-4.3747
Story1	C2	WSD Env Min	-101.1601	-3.5881	-4.607	-0.1875	-5.9941	-5.2181
Story1	C3	WSD Env Min	-134.5749	-4.2192	-5.5588	-0.1875	-5.0642	-6.1004
Story1	C4	WSD Env Min	-121.8621	-4.4781	-6.2924	-0.1875	-5.1711	-6.4842
Story1	C5	WSD Env Min	-102.0084	-4.0471	-5.501	-0.1875	-5.1856	-5.8169
Story1	C6	WSD Env Min	-231.1081	-6.6564	-6.5107	-0.1875	-5.1755	-5.0799
Story1	C7	WSD Env Min	-217.4365	-6.1267	-6.9039	-0.1875	-2.2128	-6.2928
Story1	C8	WSD Env Min	-226.5172	-6.9186	-6.7072	-0.1875	-2.135	-5.4748
Story1	C9	WSD Env Min	-219.4441	-6.3957	-6.1161	-0.1875	-5.099	-2.8008
Story1	C10	WSD Env Min	-190.7831	-5.8171	-6.9514	-0.1875	-2.0161	-5.1274
Story1	C11	WSD Env Min	-219.883	-6.7199	-6.2219	-0.1875	-1.8144	-5.1676
Story1	C12	WSD Env Min	-193.1372	-6.0492	-5.4442	-0.1875	-2.4257	-5.1018
Story1	C13	WSD Env Min	-221.3291	-6.767	-5.7837	-0.1875	-4.6852	-5.2311
Story1	C14	WSD Env Min	-142.1353	0.040	-1.4227	-0.1875	-4.961	-6.0781
Story1	C15	WSD Env Min	-206.2688	-6.3823	-1.9323	-0.1875	-5.5363	-6.6319
Story1	C16	WSD Env Min	-258.9905	-6.6813	-2.9214	-0.1875	-5.5681	-6.9969
Story1	C17	WSD Env Min	-190.5449	-6.0192	-4.3087	-0.1875	-1.1114	-5.0029
Story1	C18	WSD Env Min	-262.8981	-6.1176	-3.2342	-0.1875	-6.0189	-6.3963
Story1	C19	WSD Env Min	-151.1097	0.0243	-0.8864	-0.1875	-5.749	-6.0879
Story1	C20	WSD Env Min	-45.2046	-1.1563	0.2518	-0.1875	0.0087	-3.1964
Story1	C21	WSD Env Min	-98.5871	-0.9134	0.7149	-0.1875	0.8111	-3.1131
Story1	C22	WSD Env Min	-219.5478	-6.8604	-1.2118	-0.1875	-2.0721	-2.5203
Story1	C23	WSD Env Min	-198.4153	-6.8327	-1.8453	-0.1875	-3.8239	-2.5829
Story1	C24	WSD Env Min	-252.8144	-6.4448	-1.4883	-0.1875	-2.4331	-1.9391
Story1	C25	WSD Env Min	-187.9325	-6.7834	-1.5481	-0.1875	-2.5521	-2.4775
Story1	C26	WSD Env Min	-258.647	-6.1707	-1.3688	-0.1875	-2.5866	-1.718
Story1	C27	WSD Env Min	-185.0136	-6.7103	-1.5075	-0.1875	-2.5168	-2.5168
Story1	C28	WSD Env Min	-216.2769	-6.4019	-1.4109	-0.1875	-2.5201	-2.4271
Story1	C29	WSD Env Min	-185.9014	-6.9211	-1.579	-0.1875	-2.5855	-3.2221
Story1	C30	WSD Env Min	-144.5416	-5.5211	-1.9317	-0.1875	-5.1244	-5.8884
Story1	C31	WSD Env Min	-99.6665	-1.8193	-0.9204	-0.1875	-5.9124	-6.5019
Story1	C32	WSD Env Min	-170.0434	-6.0336	-6.8111	-0.1875	-1.3757	-2.831
Story1	C33	WSD Env Min	-242.0179	-5.5583	-1.2474	-0.1875	-2.0168	-6.461
Story1	C34	WSD Env Min	-190.5624	-5.2901	-6.8978	-0.1875	-5.5334	-5.5168
Story1	C35	WSD Env Min	-255.4943	-5.7627	-2.2814	-0.1875	-2.1036	-5.569
Story1	C36	WSD Env Min	-188.1069	-5.5163	-6.8361	-0.1875	-1.5907	-4.1583
Story1	C37	WSD Env Min	-244.1221	-5.289	-1.3569	-0.1875	-2.5365	-6.7741
Story1	C38	WSD Env Min	-205.15	-2.871	-6.887	-0.1875	-1.2526	-5.9072
Story1	C39	WSD Env Min	-211.8931	-5.1936	-6.8948	-0.1875	-1.5479	-5.4279
Story1	C40	WSD Env Min	-134.8631	-4.4178	-6.6711	-0.1875	-6.8177	-8.4839
Story1	C41	WSD Env Min	-113.6697	-3.277	-2.6818	-0.1875	-3.9701	-7.8641
Story2	C2	WSD Env Min	-115.4104	-3.3933	-6.4578	-0.1222	-2.3808	-5.4783
Story2	C3	WSD Env Min	-153.9266	-5.6718	-1.3738	-0.1222	-2.2901	-5.5634
Story2	C4	WSD Env Min	-141.7144	-4.237	-6.2323	-0.1222	-6.0275	-6.2991
Story2	C5	WSD Env Min	-166.809	-5.7793	-6.4451	-0.1222	-2.3248	-5.6714
Story2	C6	WSD Env Min	-246.2168	-6.4934	-5.5165	-0.1222	-2.2169	-1.8791
Story2	C7	WSD Env Min	-246.1158	-6.494	-6.7753	-0.1222	-2.6881	-6.9521
Story2	C8	WSD Env Min	-252.5255	-6.7136	-6.7547	-0.1222	-2.8232	-1.485
Story2	C9	WSD Env Min	-292.6481	-6.9992	-6.1364	-0.1222	-2.299	-1.6478
Story2	C10	WSD Env Min	-216.7581	-6.6322	-1.0606	-0.1222	-4.1026	-1.2896
Story2	C11	WSD Env Min	-296.8982	-6.5828	-6.4142	-0.1222	-3.2534	-1.1357

Page 6 of 8

KS-193

Column Force : Service Load Ens.

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			inf	inf	inf	inf	inf	inf
Story2	C21	WSD Env Min	-228.2637	-6.7577	-5.1221	-0.1222	-5.7018	-1.4149
Story2	C22	WSD Env Min	-254.9237	-6.6219	-5.8703	-0.1222	-6.0231	-1.1804
Story2	C23	WSD Env Min	-161.6256	-6.0091	-1.4003	-0.1222	-6.6416	-6.4679
Story2	C24	WSD Env Min	-237.4229	-6.3172	-5.04	-0.1222	-5.7796	-8.8237
Story2	C25	WSD Env Min	-294.4996	-6.4511	-2.8112	-0.1222	-5.8218	-8.8993
Story2	C26	WSD Env Min	-228.1222	-6.4319	0.5586	-0.1222	-1.8754	-6.891
Story2	C27	WSD Env Min	-211.9389	-6.128	-2.8891	-0.1222	-7.1158	-6.5179
Story2	C28	WSD Env Min	-179.7553	0.1177	-6.4291	-0.1222	-3.6163	-6.1793
Story2	C29	WSD Env Min	-64.2016	-1.2447	0.2256	-0.1222	-6.389	-5.8127
Story2	C30	WSD Env Min	-112.5206	-0.9962	0.5709	-0.1222	0.9777	-4.474
Story2	C31	WSD Env Min	-252.0649	-6.7713	-2.2127	-0.1222	-2.156	-5.8918
Story2	C32	WSD Env Min	-225.9921	-1.0386	-1.9425	-0.1222	-3.6903	-6.0879
Story2	C33	WSD Env Min	-290.4891	-6.4541	-1.207	-0.1222	-2.3648	-2.8921
Story2	C34	WSD Env Min	-213.6279	-1.1955	-2.794	-0.1222	-2.5926	-4.8083
Story2	C35	WSD Env Min	-296.2149	-6.179	-0.0167	-0.1222	-2.1145	-5.5175
Story2	C36	WSD Env Min	-210.5897	-1.2061	-1.2081	-0.1222	-2.4488	-4.4179
Story2	C37	WSD Env Min	-261.9388	-6.3677	-1.0289	-0.1222	-2.0883	-3.1273
Story2	C38	WSD Env Min	-217.1031	-1.3467	-1.2099	-0.1222	-2.418	-5.1923
Story2	C39	WSD Env Min	-155.9189	-1.1798	-4.4161	-0.1222	-6.7841	-8.8194
Story2	C40	WSD Env Min	-113.4612	-1.4924	-6.7759	-0.1222	-6.0575	-7.584
Story2	C41	WSD Env Min	-193.6677	-6.8163	-6.779	-0.1222	-2.1708	-1.1949
Story2	C42	WSD Env Min	-277.7918	-2.2719	-0.9173	-0.1222	-1.8645	-5.1885
Story2	C43	WSD Env Min	-216.5445	-1.1284	-6.6731	-0.1222	-1.4841	-4.2273
Story2	C44	WSD Env Min	-292.6765	-2.1996	-0.9179	-0.1222	-1.8155	-8.8913
Story2	C45	WSD Env Min	-213.8128	-1.0923	-2.1943	-0.1222	-2.4617	-6.618
Story2	C46	WSD Env Min	-279.534	-2.5844	-1.3722	-0.1222	-2.6704	-6.8725
Story2	C47	WSD Env Min	-231.27	-1.534	-0.1722	-0.1222	-6.921	-6.1417
Story2	C48	WSD Env Min	-264.6424	-2.6875	-0.3876	-0.1222	-0.922	-4.1801
Story2	C49	WSD Env Min	-158.1852	-2.9683	-5.517	-0.1222	-7.8571	-8.8601
Story2	C50	WSD Env Min	-118.7289	-1.9682	-2.9439	-0.1222	-2.1163	-11.5586
Story1	C2	WSD Env Min	-129.7817	-1.9474	-1.3356	-0.0456	-4.092	-2.9184
Story1	C3	WSD Env Min	-173.7824	-3.3596	-2.7165	-0.0456	-4.132	-2.5171
Story1	C4	WSD Env Min	-161.8122	-4.4013	-1.2165	-0.0456	-4.6818	-3.2866
Story1	C5	WSD Env Min	-110.5717	-1.3967	-1.4889	-0.0456	-4.172	-3.666
Story1	C6	WSD Env Min	-292.2811	-1.2747	-1.9421	-0.0783	-5.018	-2.1145
Story1	C7	WSD Env Min	-278.4983	-6.885	-2.2408	-0.0783	-5.1714	-5.476
Story1	C8	WSD Env Min	-291.2666	-1.4182	-2.2973	-0.0783	-2.2377	-2.2377
Story1	C9	WSD Env Min	-110.8018	-1.7875	-1.8312	-0.0783	-5.1168	-2.218
Story1	C10	WSD Env Min	-245.2441	-1.493	-1.9737	-0.0783	-7.754	-2.2347
Story1	C11	WSD Env Min	-119.0299	-1.3184	-2.2862	-0.0783	-7.4883	-1.9352
Story1	C12	WSD Env Min	-249.9771	-1.6199	-1.8741	-0.0783	-8.7009	-3.103
Story1	C13	WSD Env Min	-292.7817	-1.3429	-4.0885	-0.0783	-8.8139	-1.9721
Story1	C14	WSD Env Min	-181.7127	-4.4111	-1.9311	-0.0456	-8.7504	-1.0107
Story1	C15	WSD Env Min	-274.0878	-1.084	-5.2144	-0.0783	-14.1669	-1.7803
Story1	C16	WSD Env Min	-134.3749	-0.9822	-2.4648	-0.0783	-7.6618	-5.5846
Story1	C17	WSD Env Min	-273.2526	-6.8544	-1.4717	-0.0783	-5.8675	-1.4973
Story1	C18	WSD Env Min	-264.6554	-6.8798	-5.0211	-0.0783	-1.7919	-1.7919
Story1	C19	WSD Env Min	-267.5887	-1.9144	-1.6442	-0.0456	-6.0191	-6.2421
Story1	C20	WSD Env Min	-105.102	-1.4071	-0.2041	-0.0456	-2.1375	-7.4788
Story1	C21	WSD Env Min	-127.8179	-1.5382	0.2018	-0.0456	-1.8913	-7.2668
Story1	C22	WSD Env Min	-280.9831	-2.7283	-3.3486	-0.0783	-4.1883	-7.879

Page 7 of 8

KS-194

Column Force : Service Load Ens.

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			inf	inf	inf	inf	inf	inf
Story1	C49	WSD Env Min	-251.0804	-2.1559	-6.0783	-5.1492	-4.1372	
Story1	C50	WSD Env Min	-232.1119	-1.9182	-2.5583	-6.0783	-3.4122	-6.597
Story1	C51	WSD Env Min	-210.7623	-2.2853	-1.6519	-6.0456	-2.3191	-5.0813
Story1	C52	WSD Env Min	-124.9666	-1.3152	-2.2461	-6.0783	-3.4124	-5.8101
Story1	C53	WSD Env Min	-226.788	-2.3887	-1.5188	-6.0456	-2.2118	-4.9196
Story1	C54	WSD Env Min	-123.8418	-1.6477	-2.1442	-6.0783	-3.1665	-6.9518
Story1	C55	WSD Env Min	-227.9728	-2.5464	-1.581	-6.0456	-2.2227	-5.746
Story1	C56	WSD Env Min	-186.9109	-2.4887	-4.4852	-6.0456	-5.7617	-8.8316
Story1	C57	WSD Env Min	-177.8628	-2.6014	-1.7777	-6.0456	-3.6895	-18.1988
Story1	C58	WSD Env Min	-218.1952	-1.4149	-6.9763	-6.0456	-1.4677	-4.1827
Story1	C59	WSD Env Min	-138.2899	-1.5729	-2.087	-6.0783	-2.9104	-7.0016
Story1	C60	WSD Env Min	-246.2004	-2.4189	-1.4718	-6.0783	-2.5878	-6.9657
Story1	C61	WSD Env Min	-135.1171	-1.7104	-1.8602	-6.0783	-2.8375	-7.6185
Story1	C62	WSD Env Min	-236.8319	-1.6308	-2.2173	-6.0456	-2.1794	-5.6881
Story1	C63	WSD Env Min	-114.4886	-4.1895	-1.4853	-6.0783	-3.849	-8.0406
Story1	C64	WSD Env Min	-261.8226	-1.1856	0.0824	-6.0783	-1.1892	-11.8816
Story1	C65	WSD Env Min	-296.5743	-4.707	-6.5341	-6.0783	-1.9858	-11.9291
Story1	C66	WSD Env Min	-181.4881	-4.2604	-0.9909	-6.0456	-5.5513	-16.9779
Story1	C67	WSD Env Min	-8.5143	-1.1184	-0.8295	-0.0626	-0.8028	-0.7174
Story1	C68	WSD Env Min	-15.8175	-0.3678	-0.1	-0.0626	-0.611	-0.113
Story1	C10	WSD Env Min	-22.7272	-1.123	-0.266	-0.0626	-0.5172	-0.1299
Story1	C11	WSD Env Min	-24.1938	-0.812	-0.273	-0.0626	-0.7077	-0.1085
Story1	C12	WSD Env Min	-18.1774	-1.027	-0.179	-0.0626	-0.826	-0.171
Story1	C15	WSD Env Min	-24.6746	-0.781	-0.414	-0.0626	-0.612	-0.119

Column Force - Strength Load Env.

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			inf	inf	inf	inf-m	inf-m	inf-m
Roof	C84	USD ENV Min	-40.9911	-4.3901	-2.013	-0.3414	-2.3636	-4.486
Roof	C85	USD ENV Min	-49.7952	-7.9322	-2.9473	-0.3414	-3.5806	-8.5704
Roof	C86	USD ENV Min	-44.5103	-4.1498	-1.4219	-0.3414	-1.6844	-5.0337
Roof	C87	USD ENV Min	-47.6048	-6.292	-1.9835	-0.3414	-2.4145	-7.5779
Roof	C88	USD ENV Min	-27.9738	-5.1225	-1.0027	-0.3414	-1.16614	-5.2997
Story6	C37	USD ENV Min	-18.8093	-1.9711	-1.7133	-0.1274	-5.5216	-2.5812
Story6	C2	USD ENV Min	-40.5115	-4.6581	-0.9187	-0.355	-0.8295	-6.7193
Story6	C3	USD ENV Min	-56.2103	-4.9952	-1.8657	-0.355	-2.1627	-7.426
Story6	C6	USD ENV Min	-51.486	-5.7514	-0.3995	-0.355	-0.0575	-8.5745
Story6	C8	USD ENV Min	-43.8494	-5.2218	-0.5705	-0.355	-0.3776	-7.3263
Story6	C9	USD ENV Min	-138.9017	-1.1192	-0.3779	-0.355	-0.561	-1.434
Story6	C12	USD ENV Min	-120.9198	-0.2373	-1.6748	-0.355	-2.1875	-0.4013
Story6	C13	USD ENV Min	-138.3071	-1.3318	-0.5353	-0.355	-0.6045	-1.9464
Story6	C16	USD ENV Min	-149.6891	-0.2048	-0.3472	-0.355	-0.3981	-3.0567
Story6	C18	USD ENV Min	-81.8992	-1.3147	-0.9991	-0.355	-0.8563	-1.8267
Story6	C19	USD ENV Min	-107.2154	-1.217	-0.3499	-0.355	-0.1968	-1.7439
Story6	C21	USD ENV Min	-82.2802	-1.4418	-1.8707	-0.355	-1.9745	-2.0369
Story6	C24	USD ENV Min	-90.9981	-1.1105	-0.0123	-0.355	-3.6806	-1.5561
Story6	C26	USD ENV Min	-57.6179	-0.0754	-1.7952	-0.355	-1.448	-0.01
Story6	C27	USD ENV Min	-84.1849	-0.9125	-0.0824	-0.355	-3.473	-1.2775
Story6	C30	USD ENV Min	-106.1076	-1.11	-2.2682	-0.355	-4.4358	-1.6056
Story6	C31	USD ENV Min	-60.7685	-1.3383	-1.5438	-0.355	-1.7485	-1.9146
Story6	C34	USD ENV Min	-79.7955	-0.2626	-0.6764	-0.355	-4.913	-0.3363
Story6	C36	USD ENV Min	-61.7771	-0.3381	-1.8281	-0.355	-1.5227	-0.4575
Story6	C38	USD ENV Min	-34.839	-1.3904	0.2953	-0.355	0.5821	-1.4535
Story6	C39	USD ENV Min	-82.1476	-1.0695	0.7619	-0.355	1.1196	-0.9162
Story6	C68	USD ENV Min	-90.3773	-1.8395	-1.9564	-0.355	-2.765	-2.2211
Story6	C69	USD ENV Min	-84.2917	-1.3841	-2.8241	-0.355	-4.0478	-1.3639
Story6	C70	USD ENV Min	-103.1764	-1.6646	-2.2144	-0.355	-3.1411	-2.1231
Story6	C71	USD ENV Min	-80.3128	-1.0276	-2.6303	-0.355	-3.739	-1.1993
Story6	C72	USD ENV Min	-107.0348	-0.4728	-2.1431	-0.355	-3.0391	-0.6064
Story6	C73	USD ENV Min	-78.7919	-1.0392	-2.5392	-0.355	-3.6145	-1.38
Story6	C76	USD ENV Min	-105.7118	-0.8806	-2.3562	-0.355	-3.3222	-1.0886
Story6	C77	USD ENV Min	-78.7955	-1.3134	-2.954	-0.355	-4.1836	-1.7992
Story6	C79	USD ENV Min	-40.7124	-2.1927	-4.2929	-0.355	-6.6059	-2.9952
Story6	C80	USD ENV Min	-71.827	-2.1231	-1.3761	-0.355	-1.9418	-2.8999
Story6	C81	USD ENV Min	-99.4559	-4.1227	-2.1188	-0.355	-3.0111	-6.0257
Story6	C82	USD ENV Min	-81.2038	-2.6709	-1.4031	-0.355	-2.5045	-3.8202
Story6	C83	USD ENV Min	-105.7611	-4.5013	-2.1389	-0.355	-3.1023	-6.8003
Story6	C84	USD ENV Min	-80.2895	-3.0339	-1.4775	-0.355	-2.0932	-4.4291
Story6	C85	USD ENV Min	-99.8322	-4.8603	-2.2489	-0.355	-3.1959	-7.2888
Story6	C86	USD ENV Min	-87.4263	-3.6098	-1.1241	-0.355	-1.5406	-5.1372
Story6	C87	USD ENV Min	-94.0646	-5.0989	-1.6042	-0.355	-2.231	-7.3443
Story6	C88	USD ENV Min	-55.0207	-3.0683	-5.7968	-0.355	-8.8144	-4.6528
Story7	C37	USD ENV Min	-57.5206	-2.1954	-0.4835	-0.1301	-5.7237	-3.3513
Story7	C2	USD ENV Min	-60.7102	-4.8818	-0.9796	-0.1564	-6.9271	-2.5812
Story7	C3	USD ENV Min	-44.0717	-5.6198	-2.1707	-0.3626	-2.8241	-7.9195
Story7	C6	USD ENV Min	-77.1722	-4.7966	-0.4106	-0.3626	-0.5399	-0.9099
Story7	C8	USD ENV Min	-65.2079	-5.8861	-0.6638	-0.3626	-0.7141	-8.2388
Story7	C9	USD ENV Min	-180.0584	-1.3899	-0.9262	-0.3626	-1.0995	-1.9663
Story7	C12	USD ENV Min	-158.7981	-0.5164	-1.9682	-0.3626	-2.5837	-0.6772

Column Force(USD) - Page 2 of 8

K3-197

Column Force - Strength Load Env.

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			inf	inf	inf	inf-m	inf-m	inf-m
Story7	C13	USD ENV Min	-177.9936	-1.6378	-1.0861	-0.3626	-2.3841	-2.2584
Story7	C16	USD ENV Min	-195.0165	-2.4235	-0.8665	-0.3626	-0.964	-3.2776
Story7	C18	USD ENV Min	-121.8928	-1.4641	-1.1889	-0.3626	-1.3708	-2.0294
Story7	C19	USD ENV Min	-160.9382	-1.3522	-0.372	-0.3626	-0.2208	-1.8991
Story7	C21	USD ENV Min	-132.5186	-1.6377	-2.1694	-0.3626	-2.661	-2.3999
Story7	C24	USD ENV Min	-135.6262	-1.2635	-1.4407	-0.3626	-4.4241	-1.7371
Story7	C26	USD ENV Min	-46.6651	-0.0813	-1.9377	-0.3626	-2.2991	-0.0996
Story7	C27	USD ENV Min	-36.7428	-1.0087	-0.4399	-0.3626	-4.3899	-1.4082
Story7	C30	USD ENV Min	-160.5598	-1.2486	-3.6914	-0.3626	-4.9577	-1.7404
Story7	C31	USD ENV Min	-120.2775	-1.4218	-1.6598	-0.3626	-2.1096	-2.0804
Story7	C34	USD ENV Min	-119.9794	-0.3246	-4.1811	-0.3626	-5.5236	-0.457
Story7	C36	USD ENV Min	-92.1365	-0.3949	-1.6869	-0.3626	-2.0487	-0.5642
Story7	C38	USD ENV Min	-51.9566	-1.5948	0.2733	-0.3626	0.4331	-1.974
Story7	C39	USD ENV Min	-62.4109	-1.2171	0.8482	-0.3626	1.2473	-1.3732
Story7	C68	USD ENV Min	-135.8327	-2.0056	-2.2036	-0.3626	-0.067	-2.6814
Story7	C69	USD ENV Min	-125.5475	-1.5427	-3.1795	-0.3626	-4.4463	-2.0352
Story7	C70	USD ENV Min	-355.4636	-1.1334	-2.4827	-0.3626	-3.4631	-1.5767
Story7	C71	USD ENV Min	-119.8547	-1.1621	-2.9239	-0.3626	-4.0845	-1.8308
Story7	C72	USD ENV Min	-160.7501	-0.4763	-2.3993	-0.3626	-3.341	-0.798
Story7	C73	USD ENV Min	-117.4436	-1.2056	-2.8401	-0.3626	-3.9837	-1.8254
Story7	C76	USD ENV Min	-158.7822	-0.9632	-2.5771	-0.3626	-3.9866	-1.5256
Story7	C77	USD ENV Min	-117.2304	-1.5311	-3.2184	-0.3626	-4.5079	-2.326
Story7	C78	USD ENV Min	-84.7177	-2.9285	-4.6487	-0.3626	-0.1218	-1.1136
Story7	C79	USD ENV Min	-60.1615	-2.6357	-5.0564	-0.3626	-7.1211	-3.821
Story7	C80	USD ENV Min	-107.1673	-2.2359	-1.5862	-0.3626	-2.2603	-3.3139
Story7	C81	USD ENV Min	-49.6463	-4.6132	-2.3829	-0.3626	-3.3377	-6.5444
Story7	C82	USD ENV Min	-120.9883	-2.8697	-1.631	-0.3626	-2.2618	-4.2327
Story7	C83	USD ENV Min	-158.7808	-5.0551	-2.3643	-0.3626	-3.3044	-7.2798
Story7	C84	USD ENV Min	-119.7185	-3.3122	-1.8794	-0.3626	-2.329	-4.0335
Story7	C85	USD ENV Min	-150.0854	-5.3313	-2.4827	-0.3626	-3.4675	-8.0416
Story7	C86	USD ENV Min	-130.35	-3.7315	-1.2466	-0.3626	-1.7225	-3.6462
Story7	C87	USD ENV Min	-142.2458	-5.4333	-1.7725	-0.3626	-2.4709	-8.055
Story7	C88	USD ENV Min	-81.8293	-3.5503	-6.6885	-0.3626	-8.4021	-5.4383
Story6	C37	USD ENV Min	-76.1444	-2.3591	-1.9578	-0.1294	-5.6318	-4.4582
Story6	C2	USD ENV Min	-79.925	-4.864	-1.042	-0.3606	-1.5645	-6.9723
Story6	C3	USD ENV Min	-111.955	-5.5236	-2.1799	-0.3606	-3.1997	-7.9099
Story6	C6	USD ENV Min	-102.914	-6.2344	-0.4884	-0.3606	-0.7876	-8.8572
Story6	C8	USD ENV Min	-66.3963	-1.6847	-0.7217	-0.3606	-1.1311	-6.0313
Story6	C9	USD ENV Min	-221.1355	-1.3929	-0.9007	-0.3606	-1.4063	-1.9783
Story6	C12	USD ENV Min	-197.7866	-0.5265	-1.9156	-0.3606	-2.8302	-0.748
Story6	C13	USD ENV Min	-217.4553	-1.6488	-1.0815	-0.3606	-1.6728	-2.348
Story6	C16	USD ENV Min	-240.7799	-2.3487	-0.8328	-0.3606	-1.3017	-3.334
Story6	C18	USD ENV Min	-161.6001	-1.5017	-1.3465	-0.3606	-2.0156	-2.1381
Story6	C19	USD ENV Min	-214.8056	-1.3587	-0.5438	-0.3606	-0.8331	-1.9381
Story6	C21	USD ENV Min	-162.6413	-1.6654	-2.3134	-0.3606	-3.4371	-2.3731
Story6	C24	USD ENV Min	-181.5213	-1.3086	-3.5115	-0.3606	-5.1192	-1.8693
Story6	C26	USD ENV Min	-215.3997	-0.1344	-2.1687	-0.3606	-3.5672	-0.2348
Story6	C27	USD ENV Min	-169.4146	-1.9934	-1.6893	-0.3606	-5.3809	-1.4489
Story6	C30	USD ENV Min	-214.1108	-1.209	-0.8724	-0.3606	-5.3262	-1.7401
Story6	C31	USD ENV Min	-119.7595	-1.3733	-1.7203	-0.3606	-2.5495	-1.9533
Story6	C34	USD ENV Min	-160.3072	-0.363	-4.2166	-0.3606	-0.1112	-0.5526

Column Force(USD) - Page 3 of 8

K3-198

Column Force - Strength Load Env.

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			inf	inf	inf	inf-m	inf-m	inf-m
Story6	C36	USD ENV Min	-122.5975	-0.4179	-1.8293	-0.3606	-2.7298	-0.634
Story6	C38	USD ENV Min	-64.9459	-1.7019	0.1805	-0.3606	0.2182	-2.5389
Story6	C39	USD ENV Min	-82.6871	-1.3113	0.7556	-0.3606	1.0403	-1.9221
Story6	C68	USD ENV Min	-181.4697	-2.032	-2.2232	-0.3606	-3.1995	-3.133
Story6	C69	USD ENV Min	-166.7099	-1.6091	-1.1911	-0.3606	-4.5864	-2.5313
Story6	C70	USD ENV Min	-207.8981	-1.1582	-2.5105	-0.3606	-6.611	-1.9634
Story6	C71	USD ENV Min	-138.7037	-1.2569	-2.9308	-0.3606	-4.2105	-2.1125
Story6	C72	USD ENV Min	-214.5443	-3.342	-2.4112	-0.3606	-3.4676	-1.2319
Story6	C73	USD ENV Min	-155.8407	-1.2726	-2.8467	-0.3606	-4.0923	-2.3133
Story6	C76	USD ENV Min	-215.9912	-1.0714	-2.5916	-0.3606	-3.7035	-2.081
Story6	C77	USD ENV Min	-135.5986	-1.5861	-3.217	-0.3606	-4.8114	-2.8976
Story6	C78	USD ENV Min	-112.5398	-3.014	-4.3211	-0.3606	-6.9513	-5.1001
Story6	C79	USD ENV Min	-79.6625	-2.7512	-4.8887	-0.3606	-7.0212	-4.7682
Story6	C80	USD ENV Min	-142.4442	-2.163	-1.6293	-0.3606	-2.3435	-3.4866
Story6	C81	USD ENV Min	-199.7235	-4.4547	-2.4301	-0.3606	-3.4871	-6.7523
Story6	C82	USD ENV Min	-160.5853	-2.7721	-1.6438	-0.3606	-2.339	-4.5384
Story6	C83	USD ENV Min	-211.9196	-4.8778	-2.3822	-0.3606	-3.4146	-7.5436
Story6	C84	USD ENV Min	-158.926	-1.1984	-1.0942	-0.3606	-2.4331	-3.5297
Story6	C85	USD ENV Min	-200.6149	-3.3627	-2.4861	-0.3606	-3.5599	-4.8298
Story6	C86	USD ENV Min	-173.0767	-3.6646	-1.271	-0.3606	-1.8245	-6.1807
Story6	C87	USD ENV Min	-190.1138	-5.3747	-1.8044	-0.3606	-2.5883	-8.6221
Story6	C88	USD ENV Min	-108.8726	-3.5417	-4.8533	-0.3606	-0.2125	-6.2134
Story7	C37	USD ENV Min	-94.631	-2.2735	-0.9395	-0.1216	-0.6459	-6.6732
Story7	C37	USD ENV Min	-99.8039	-4.8609	-1.0404	-0.3444	-1.98	-7.0009
Story7	C31	USD ENV Min	-139.8705	-5.535	-2.1743	-0.3444	-3.6042	-9.7506
Story7	C67	USD ENV Min	-128.6857	-0.2489	-4.8014	-0.3444	-1.2419	-8.8384
Story7	C9	USD ENV Min	-252.1992	-1.9479	-0.7528	-0.3444	-0.166	-7.978
Story7	C9	USD ENV Min	-252.1992	-1.9479	-0.7528	-0.3444	-0.166	-7.978
Story7	C12	USD ENV Min	-237.3373	-1.4898	-1.8273	-0.3444	-3.0501	-3.7585
Story7	C13	USD ENV Min	-256.633	-1.8383	-1.1132	-0.3444	-2.1395	-3.2017
Story7	C16	USD ENV Min	-287.0569	-2.2794	-0.8111	-0.3444	-1.657	-2.3979
Story7	C18	USD ENV Min	-209.9555	-1.8311	-1.4343	-0.3444	-2.7136	-2.1769
Story7	C19	USD ENV Min	-268.9011	-1.1383	-0.3771	-0.3444	-1.4698	-1.9548
Story7	C21	USD ENV Min	-202.6092	-1.6517	-2.3672	-0.3444	-3.4244	-4.2147
Story7	C24	USD ENV Min	-227.9167	-1.312	-1.4423	-0.3444	-1.781	-1.9295
Story7	C26	USD ENV Min	-444.0052	-0.5513	-2.2049	-0.3444	-4.5438	-0.2657
Story7	C27	USD ENV Min	-212.259	-1.393	-0.6225	-0.3444	-0.6093	-1.025
Story7	C31	USD ENV Min	-334.3813	-1.197	-1.6222	-0.3444	-3.444	-4.7611
Story7	C31	USD ENV Min	-199.9191	-1.281	-1.6447	-0.3444	-2.8456	-5.858
Story7	C34	USD ENV Min	-201.5624	-0.352	-4.3038	-0.3444	-6.7454	-5.879
Story7	C36	USD ENV Min	-153.1794	-0.3756	-1.8343	-0.3444	-3.3829	-0.6122
Story7	C38	USD ENV Min	-85.6885	-1.7084	0.1809	-0.3444	0.0666	-2.221
Story7	C39	USD ENV Min	-102.9548	-1.1396	0.7741	-0.3444	0.9708	-0.6315
Story7	C68	USD ENV Min	-222.7366	-1.9462	-2.132	-0.3444	-3.2067	-3.513
Story7	C69	USD ENV Min	-207.7508	-1.6064	-1.1308	-0.3444	-4.6203	-2.6031
Story7	C70	USD ENV Min	-260.7901	-1.0655	-2.4501	-0.3444	-3.6304	-2.2927
Story7	C71	USD ENV Min	-138.7037	-1.2569	-2.9307	-0.3444	-4.2223	-2.6115
Story7	C72	USD ENV Min	-214.5442	-3.3419	-2.4108	-0.3444	-3.4674	-1.2318
Story7	C73	USD ENV Min	-154.2077	-1.2945	-2.7788	-0.3444	-4.1132	-2.327
Story7	C76	USD ENV Min	-265.3387	-0.9562	-2.4809	-0.3444	-3.6655	-2.5401
Story7	C77	USD ENV Min	-119.8955	-1.6133	-3.1064	-0.3444	-4.5681	-3.3583

Column Force - Strength Load Env

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			tonf	tonf	tonf	tonf-m	tonf-m	tonf-m
Story3	C37	USD ENV Min	-115.7601	-0.3063	-1.4111	-0.0967	-4.8374	-11.149
Story3	C2	USD ENV Min	-140.008	-4.7888	-0.8547	-0.2527	-2.8004	-6.4874
Story3	C3	USD ENV Min	-193.8929	-5.744	-1.0643	-0.2527	-2.8444	-8.2226
Story3	C6	USD ENV Min	-180.3788	-6.1966	-0.3883	-0.2527	-2.1726	-8.7497
Story3	C8	USD ENV Min	-148.6914	-5.4969	-0.7106	-0.2527	-2.6361	-7.7013
Story3	C9	USD ENV Min	-343.9611	-0.9104	-0.7236	-0.2527	-2.4227	-1.5013
Story3	C12	USD ENV Min	-118.5017	-0.1242	-1.2836	-0.2527	-3.1296	-0.3147
Story3	C13	USD ENV Min	-334.0196	-3.1116	-1.0046	-0.2527	-3.0284	-2.1046
Story3	C16	USD ENV Min	-381.4093	-1.8655	-0.3905	-0.2527	-2.0661	-2.8443
Story3	C18	USD ENV Min	-278.3171	-1.1611	-1.331	-0.2527	-4.1486	-1.859
Story3	C19	USD ENV Min	-278.0096	-0.0219	-0.2537	-0.2527	-2.8025	-1.6575
Story3	C21	USD ENV Min	-281.9086	-1.3374	-0.0997	-0.2527	-0.6613	-2.1194
Story3	C24	USD ENV Min	-322.7797	-1.092	-5.5189	-0.2527	-6.5348	-1.7099
Story3	C26	USD ENV Min	-200.645	0.1345	-2.0058	-0.2527	-7.0573	-0.0174
Story3	C27	USD ENV Min	-300.7819	-0.513	-2.7608	-0.2527	-7.943	-0.8837
Story3	C30	USD ENV Min	-377.9628	-0.8584	-1.4088	-0.2527	-6.446	-1.4134
Story3	C31	USD ENV Min	-277.707	-0.8908	-0.3963	-0.2527	-1.476	-1.4387
Story3	C34	USD ENV Min	-285.8243	-0.1218	-3.6986	-0.2527	-7.8798	-0.3718
Story3	C36	USD ENV Min	-214.7261	0.0966	1.12	-0.2527	-3.8532	0.0624
Story3	C38	USD ENV Min	-118.1274	-1.6149	0.4428	-0.2527	0.1271	-4.8301
Story3	C39	USD ENV Min	-143.4618	-1.3038	1.1354	-0.2527	1.0641	-4.4281
Story3	C68	USD ENV Min	-320.1896	-1.2035	-1.7089	-0.2527	-2.9256	-3.5384
Story3	C69	USD ENV Min	-289.3209	-1.2124	-2.5073	-0.2527	-4.1352	-3.6732
Story3	C70	USD ENV Min	-368.5756	-0.5713	-2.0557	-0.2527	-3.361	-2.8753
Story3	C71	USD ENV Min	-274.0349	-1.11	-1.1406	-0.2527	-3.5489	-3.5185
Story3	C72	USD ENV Min	-377.3161	-0.1783	-1.9118	-0.2527	-3.1796	-2.3955
Story3	C73	USD ENV Min	-269.7299	-1.0628	-2.0931	-0.2527	-3.4909	-3.6449
Story3	C76	USD ENV Min	-373.8615	-0.3138	-1.9764	-0.2527	-3.2562	-3.3953
Story3	C77	USD ENV Min	-270.8895	-1.315	-2.2406	-0.2527	-3.6089	-4.5033
Story3	C78	USD ENV Min	-199.7415	-2.138	-0.0623	-0.2527	-6.6118	-1.1223
Story3	C79	USD ENV Min	-133.4483	-2.4802	-4.8422	-0.2527	-9.9676	-8.6909
Story3	C80	USD ENV Min	-247.5171	-1.4927	-1.1375	-0.2527	-1.9327	-4.0729
Story3	C81	USD ENV Min	-353.0639	-0.6429	-1.7656	-0.2527	-2.861	-7.0612
Story3	C82	USD ENV Min	-277.5628	-1.8636	-1.2467	-0.2527	-2.1319	-5.1331
Story3	C83	USD ENV Min	-372.6921	-0.8816	-1.7882	-0.2527	-2.9343	-7.9746
Story3	C84	USD ENV Min	-274.276	-2.1909	-1.194	-0.2527	-1.9338	-6.2868
Story3	C85	USD ENV Min	-354.9216	-4.2495	-1.819	-0.2527	-2.9318	-9.1339
Story3	C86	USD ENV Min	-299.1085	-2.707	-0.9679	-0.2527	-1.7728	-7.7874
Story3	C87	USD ENV Min	-337.018	-4.1145	-1.2903	-0.2527	-2.1711	-8.9355
Story3	C88	USD ENV Min	-196.4257	-4.2724	-5.8907	-0.2527	-8.4609	-10.9129
Story3	C27	USD ENV Min	-158.198	-1.787	-3.691	-0.0596	-5.5785	-11.1994
Story2	C2	USD ENV Min	-160.4526	-5.2087	-0.6428	-0.166	-3.2071	-7.4299
Story2	C3	USD ENV Min	-224.0584	-5.3213	-1.641	-0.166	-6.4744	-7.7406
Story2	C6	USD ENV Min	-206.3796	-6.1655	-0.3055	-0.166	-2.8227	-8.9444
Story2	C8	USD ENV Min	-168.9367	-5.3947	-0.4323	-0.166	-3.2805	-7.7605
Story2	C9	USD ENV Min	-384.5924	-0.6832	-0.7288	-0.166	-1.5585	-1.5088
Story2	C12	USD ENV Min	-360.2187	-0.0891	-1.0986	-0.166	-1.8846	-6.6416
Story2	C13	USD ENV Min	-372.3836	-1.8547	-1.0438	-0.166	-4.0091	-2.0043
Story2	C16	USD ENV Min	-429.8843	-1.4644	-0.4341	-0.166	-3.2034	-2.4304
Story2	C18	USD ENV Min	-316.1885	-0.9272	-1.5104	-0.166	-5.8432	-1.8335
Story2	C19	USD ENV Min	-433.1757	-0.828	-0.8274	-0.166	-4.5322	-1.6141

Column Force(USD) - Page 6 of 8

43-201

Column Force - Strength Load Env

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			tonf	tonf	tonf	tonf-m	tonf-m	tonf-m
Story3	C69	USD ENV Min	-367.1905	-4.7426	-5.565	-0.1074	-6.5652	-11.6089
Story3	C70	USD ENV Min	-469.9902	-2.6734	-5.5367	-0.1074	-5.0722	-9.3843
Story3	C71	USD ENV Min	-337.3155	-1.4477	-2.2974	-0.0626	-2.3408	-7.3322
Story3	C72	USD ENV Min	-475.5666	-1.7974	-1.1703	-0.1074	-4.8379	-8.3233
Story3	C73	USD ENV Min	-331.4701	-1.6679	-2.1408	-0.0626	-3.1391	-7.1671
Story3	C76	USD ENV Min	-473.9103	-2.2746	-3.0504	-0.1074	-4.7602	-9.0181
Story3	C77	USD ENV Min	-333.1392	-3.902	-2.1377	-0.0626	-3.1369	-8.3964
Story3	C78	USD ENV Min	-252.2634	-3.4161	-4.0642	-0.0626	-4.4079	-13.7309
Story3	C79	USD ENV Min	-179.4271	-1.6542	-3.7346	-0.0626	-4.2843	-13.8979
Story3	C80	USD ENV Min	-320.6977	-2.0453	-1.3799	-0.0626	-2.0587	-4.2586
Story3	C81	USD ENV Min	-466.1938	-5.5257	-2.8549	-0.1074	-4.18	-10.2034
Story3	C82	USD ENV Min	-360.3076	-4.4234	-2.0957	-0.1074	-3.4073	-9.955
Story3	C83	USD ENV Min	-490.8532	-5.7335	-2.6335	-0.1074	-4.0528	-11.1325
Story3	C84	USD ENV Min	-246.4182	-2.3249	-2.618	-0.0626	-2.7418	-8.1203
Story3	C85	USD ENV Min	-460.4369	-4.4209	-1.0824	-0.1074	-4.97	-13.213
Story3	C86	USD ENV Min	-383.2094	-4.3547	0.2451	-0.1074	-1.9035	-15.408
Story3	C87	USD ENV Min	-424.1346	-4.7399	-0.6335	-0.1074	-2.7695	-16.3003
Story3	C88	USD ENV Min	-265.7867	-1.5207	-0.8449	-0.0626	-4.6685	-14.9448
Story3	C5	USD ENV Min	-127.7444	-0.713	-0.4338	-0.0036	-0.4091	-0.2412
Story3	C7	USD ENV Min	-22.5077	-0.5231	-0.4867	-0.0036	-0.4997	-0.4448
Story3	C10	USD ENV Min	-33.2993	-0.1572	-0.4633	-0.0036	-0.4801	-0.1831
Story3	C11	USD ENV Min	-36.1949	-0.1312	-0.5272	-0.0036	-0.5221	-0.1536
Story3	C14	USD ENV Min	-36.5015	-0.1449	-0.5315	-0.0036	-0.5249	-0.168
Story3	C15	USD ENV Min	-37.0588	-0.1103	-0.5974	-0.0036	-0.5682	-0.1594

Column Force(USD) - Page 4 of 8

43-203

Column Force - Strength Load Env

Story	Column	Load Case/Combo	P	V2	V3	T	M2	M3
			tonf	tonf	tonf	tonf-m	tonf-m	tonf-m
Story2	C21	USD ENV Min	-321.1643	-1.0675	-2.1796	-0.166	-4.2763	-2.0187
Story2	C24	USD ENV Min	-371.7727	-0.8857	-2.3408	-0.166	-8.5714	-1.6794
Story2	C26	USD ENV Min	-228.6939	0.0383	-1.978	-0.166	-9.469	-5.5974
Story2	C27	USD ENV Min	-346.2081	-0.4295	-2.8889	-0.166	-11.0907	-1.1488
Story2	C30	USD ENV Min	-459.7625	-0.6424	-3.3233	-0.166	-7.1317	-1.2784
Story2	C31	USD ENV Min	-333.0997	-0.6438	0.0452	-0.166	-2.5363	-1.2731
Story2	C34	USD ENV Min	-327.6672	-0.1499	-3.4715	-0.166	-9.2102	-0.6958
Story2	C36	USD ENV Min	-253.1226	0.2335	-0.5596	-0.166	-5.1177	-0.1805
Story2	C38	USD ENV Min	-334.1226	-1.7085	0.3917	-0.166	-6.0341	-6.8604
Story2	C39	USD ENV Min	-163.7343	-1.4185	1.06	-0.166	-6.0213	-4.404
Story2	C68	USD ENV Min	-367.6112	-1.88	-2.7283	-0.166	-3.542	-5.2286
Story2	C69	USD ENV Min	-329.5307	-1.5154	-2.4428	-0.166	-4.6375	-5.8662
Story2	C70	USD ENV Min	-423.6304	-0.5907	-1.6537	-0.166	-3.2383	-4.0466
Story2	C71	USD ENV Min	-311.4658	-1.6591	-1.7774	-0.166	-3.5814	-5.9225
Story2	C72	USD ENV Min	-432.15	-0.1916	-1.4771	-0.166	-2.9885	-3.5648
Story2	C73	USD ENV Min	-306.8933	-1.8366	-1.6863	-0.166	-3.418	-6.6186
Story2	C76	USD ENV Min	-428.874	-0.4646	-1.4613	-0.166	-2.9384	-4.6777
Story2	C77	USD ENV Min	-300.0708	-2.0409	-1.7236	-0.166	-3.4576	-7.7326
Story2	C78	USD ENV Min	-229.2901	-1.6545	-5.8916	-0.166	-8.4422	-9.7584
Story2	C79	USD ENV Min	-158.2672	-2.066	-5.1172	-0.166	-7.7624	-10.1755
Story2	C80	USD ENV Min	-282.27	-1.1581	-0.951	-0.166	-2.0777	-4.5629
Story2	C81	USD ENV Min	-805.1878	-3.2326	-1.3417	-0.166	-2.65	-7.7637
Story2	C82	USD ENV Min	-315.7321	-1.6048	-0.9617	-0.166	-2.0041	-6.0269
Story2	C83	USD ENV Min	-426.9292	-1.5111	-1.331	-0.166	-2.5873	-8.7936
Story2	C84	USD ENV Min	-311.7537	-1.5438	-1.4633	-0.166	-3.0765	-6.5766
Story2	C85	USD ENV Min	-407.7433	-3.863	-1.707	-0.166	-3.3414	-10.2046
Story2	C86	USD ENV Min	-340.1895	-2.1472	-4.2062	-0.166	-6.0299	-8.7645
Story2	C87	USD ENV Min	-387.51	-1.408	-6.5109	-0.166	-1.2472	-10.9746
Story2	C88	USD ENV Min	-236.2998	-3.6675	-4.2738	-0.166	-9.3345	-12.8664
Story1	C37	USD ENV Min	-197.4024	-2.7312	-4.3155	-0.0223	-2.8526	-10.3139
Story1	C2	USD ENV Min	-182.9922	-5.9383	-1.9272	-0.0626	-5.8019	-4.6012
Story1	C3	USD ENV Min	-253.9198	-1.0428	-2.8334	-0.0626	-6.2774	-3.6262
Story1	C6	USD ENV Min	-233.3929	-6.4987	-1.7437	-0.0626	-5.7798	-4.5834
Story1	C8	USD ENV Min	-190.7907	-5.6753	-2.0088	-0.0626	-5.5191	-4.2478
Story1	C9	USD ENV Min	-431.3522	-1.7888	-2.764	-0.1074	-7.1212	-2.9949
Story1	C12	USD ENV Min	-410.5844	-0.9191	-1.192	-0.1074	-7.338	-2.1683
Story1	C13	USD ENV Min	-411.6663	-2.2669	-3.1465	-0.1074	-8.0055	-3.3274
Story1	C16	USD ENV Min	-466.1934	-2.6834	-5.5807	-0.1074	-5.7134	-3.1802
Story1	C18	USD ENV Min	-359.0164	-2.1256	-4.1343	-0.1074	-11.0601	-2.2112
Story1	C19	USD ENV Min	-496.6447	-1.8737	-5.2803	-0.1074	-10.9336	-2.7843
Story1	C21	USD ENV Min	-365.8524	-2.3132	-5.5335	-0.1074	-15.3579	-3.3117
Story1	C24	USD ENV Min	-428.8182	-1.9108	-5.8056	-0.1074	-15.0442	-2.8082
Story1	C26	USD ENV Min	-259.7017	-0.5752	-4.1717	-0.0626	-15.0442	-1.4146
Story1	C27	USD ENV Min	-401.2968	-1.5321	-7.4549	-0.1074	-20.1984	-2.5393
Story1	C30	USD ENV Min	-489.8385	-1.3975	-5.2847	-0.1074	-9.9673	-2.6214
Story1	C31	USD ENV Min	-397.4451	-1.3596	-6.027	-0.1074	-8.3227	-2.135
Story1	C34	USD ENV Min	-376.4239	-0.9395	-4.4613	-0.1074	-13.0098	0.0616
Story1	C36	USD ENV Min	-296.372	-2.3239	-2.3084	-0.0626	-4.5302	-0.8625
Story1	C38	USD ENV Min	-510.8944	-1.6723	-4.2324	-0.0626	-7.7313	-10.9658
Story1	C39	USD ENV Min	-166.7343	-3.3611	-0.7399	-0.0626	-1.502	-10.4423
Story1	C68	USD ENV Min	-401.2203	-3.6028	-0.2907	-0.0626	-5.5591	-11.3919

Pier Force - Strength Load Ex.

Story	Pier	Load Case/Combo	Location	P inf	V2 inf	V3 inf	T inf	M2 inf	M3 inf
Story8	CORE ST-0b	USD ENV Min	Bottom	-156.9001	-12.8012	-14.1182	-4.017	-20.6711	-70.9211
Story8	CORE ST-0a	USD ENV Min	Bottom	-234.2405	-38.0354	1.9131	-7.126	-24.3469	-25.487
Story8	CORE ST-2a	USD ENV Min	Bottom	-246.1147	-38.0354	1.9131	-7.126	2.1627	14.4008
Story8	CORE ST-2b	USD ENV Min	Bottom	-18.6256	-31.8539	-21.09	-3.6136	4.6197	-5.8441
Story8	CORE ST-2b	USD ENV Min	Bottom	-208.9002	-31.8539	-21.09	-3.6136	-11.2453	32.9285
Story8	CORE ST-2b	USD ENV Min	Top	-48.8461	-58.1617	9.231	-7.0499	-21.1952	-71.5124
Story8	CORE LIFT-1	USD ENV Min	Bottom	-1384.2899	-58.1286	-9.3738	-26.925	-6.0589	-68.0613
Story8	CORE LIFT-2	USD ENV Min	Bottom	-126.301	-97.0676	-9.0835	-2.0853	1.8929	-17.0218
Story8	CORE LIFT-2	USD ENV Min	Bottom	-131.9912	-97.0676	-9.0835	-2.0853	-13.5399	-114.5399
Story8	CORE LIFT-2	USD ENV Min	Top	-47.3409	-26.146	-4.2123	-2.7364	-3.9223	-31.5177
Story8	CORE LIFT-3	USD ENV Min	Bottom	-49.1176	-23.6051	-14.4619	-2.1339	-20.899	-54.6713
Story8	CORE LIFT-4	USD ENV Min	Bottom	-12.6706	-34.6827	0.6188	-6.4046	-2.3546	-13.9399
Story8	CORE LIFT-4	USD ENV Min	Bottom	-33.0564	-41.0833	0.3604	-6.3373	0.5336	-44.4136
Story8	CORE LIFT-5	USD ENV Min	Top	-18.2141	-56.1728	0.2617	-6.0971	-2.2994	-14.0296
Story8	CORE LIFT-5	USD ENV Min	Bottom	-46.5468	-56.1728	0.2617	-6.0971	1.7634	-33.335
Story8	CORE LIFT-6	USD ENV Min	Top	-23.8171	-58.9091	0.1346	-6.264	3.8955	-14.8662
Story8	CORE LIFT-6	USD ENV Min	Bottom	-22.2607	-58.9091	0.1346	-6.3064	-2.0913	-17.4613
Story7	CORE ST-1a	USD ENV Min	Bottom	-257.7884	-12.8632	-2.1065	-3.0715	-25.2951	-141.1323
Story7	CORE ST-1a	USD ENV Min	Bottom	-241.5683	-12.8632	-2.1065	-3.0715	-2.8811	-132.7999
Story7	CORE ST-1b	USD ENV Min	Top	-211.6386	-24.0431	-13.4268	-4.343	-2.1666	-116.9813
Story7	CORE ST-1b	USD ENV Min	Bottom	-220.4689	-24.0431	-13.4268	-4.343	-21.7629	-115.7487
Story7	CORE ST-2a	USD ENV Min	Top	-313.6477	-50.1109	1.1797	-7.4611	-25.9901	36.2051
Story7	CORE ST-2a	USD ENV Min	Bottom	-327.5219	-50.1109	1.1797	-7.4611	1.6397	-43.5779
Story7	CORE ST-2b	USD ENV Min	Top	-274.5906	-47.1746	-22.7678	-3.3128	4.7304	51.9526
Story7	CORE ST-2b	USD ENV Min	Bottom	-286.4469	-47.1746	-22.7678	-3.3128	-22.6997	-47.8979
Story7	CORE LIFT-1	USD ENV Min	Top	-141.1136	-74.2079	2.8574	-11.8913	-20.0996	-49.4933
Story7	CORE LIFT-1	USD ENV Min	Bottom	-183.0212	-74.1903	-12.7636	-31.026	-11.9063	-46.3762
Story7	CORE LIFT-2	USD ENV Min	Top	-180.5706	-330.0653	4.4609	-2.1882	1.7991	-192.9418
Story7	CORE LIFT-2	USD ENV Min	Bottom	-190.0013	-330.0653	4.4609	-2.1882	-13.5568	-186.4373
Story7	CORE LIFT-3	USD ENV Min	Top	-78.26	-21.4676	-4.7662	-2.2059	0.1324	-32.4981
Story7	CORE LIFT-3	USD ENV Min	Bottom	-127.3739	-21.4676	-4.7662	-2.2059	-18.8964	-31.662
Story7	CORE LIFT-4	USD ENV Min	Top	-18.8339	-22.6033	0.8477	-6.3346	-2.1172	-7.1929
Story7	CORE LIFT-4	USD ENV Min	Bottom	-49.8272	-40.8652	0.3105	-6.344	6.4234	-44.5304
Story7	CORE LIFT-5	USD ENV Min	Top	-24.0381	-43.5087	0.2275	-6.1133	-3.1289	-11.9566
Story7	CORE LIFT-5	USD ENV Min	Bottom	-34.8438	-43.5087	0.2275	-6.1133	1.6679	-12.2647
Story7	CORE LIFT-6	USD ENV Min	Top	-24.4249	-58.1997	0.0879	-6.3249	3.7519	-15.1924
Story7	CORE LIFT-6	USD ENV Min	Bottom	-30.9423	-58.1997	0.0879	-6.3249	-1.9914	-17.4482
Story6	CORE ST-1a	USD ENV Min	Top	-312.5886	-48.3706	-2.2917	-3.0332	-24.8337	-119.7178
Story6	CORE ST-1a	USD ENV Min	Bottom	-321.3905	-48.3706	-2.2917	-3.0332	-3.3423	-240.6323
Story6	CORE ST-1b	USD ENV Min	Top	-284.9797	-50.7747	-13.1133	-4.21	-2.267	-146.6054
Story6	CORE ST-1b	USD ENV Min	Bottom	-295.7696	-50.7747	-13.1133	-4.21	-21.4248	-141.6139
Story6	CORE ST-2a	USD ENV Min	Top	-286.7614	-62.725	1.1338	-7.3485	-25.336	-30.8875
Story6	CORE ST-2a	USD ENV Min	Bottom	-408.6314	-62.725	1.1338	-7.3485	1.6305	-171.7113
Story6	CORE ST-2b	USD ENV Min	Top	-360.2901	-68.3932	-22.4231	-3.3722	4.7181	-22.719
Story6	CORE ST-2b	USD ENV Min	Bottom	-372.1448	-68.3932	-22.4231	-3.3722	-22.1491	-148.4208
Story6	CORE ST-2b	USD ENV Min	Top	-222.7378	-49.4252	2.0413	-3.3114	1.9384	47.6318
Story6	CORE LIFT-1	USD ENV Min	Bottom	-248.7003	-49.4603	-14.6184	-33.432	-17.9179	-141.0794
Story6	CORE LIFT-2	USD ENV Min	Top	-231.6611	-158.0803	-6.2628	-2.1982	1.7844	-176.3731
Story6	CORE LIFT-2	USD ENV Min	Bottom	-243.0915	-158.0803	-6.2628	-2.1982	-13.1643	-309.0939
Story6	CORE LIFT-3	USD ENV Min	Top	-184.9802	-21.2888	-6.3392	-2.6031	3.6037	17.8348
Story6	CORE LIFT-3	USD ENV Min	Bottom	-195.5609	-21.2888	-6.3392	-2.6031	-13.2723	-45.6249
Story6	CORE LIFT-4	USD ENV Min	Top	-25.4044	-33.1015	0.09	-6.2833	-2.3129	-9.981
Story6	CORE LIFT-4	USD ENV Min	Bottom	-49.8053	-40.244	0.2628	-6.3443	0.319	-45.6321
Story6	CORE LIFT-5	USD ENV Min	Top	-34.4503	-43.3391	0.1919	-6.1224	-3.1131	-9.8358
Story6	CORE LIFT-5	USD ENV Min	Bottom	-36.8036	-43.3391	0.1919	-6.1224	1.6618	-12.4257
Story6	CORE LIFT-6	USD ENV Min	Top	-26.1616	-42.2528	0.06	-6.3124	3.7575	-16.6139
Story6	CORE LIFT-6	USD ENV Min	Bottom	-46.4892	-42.2528	0.06	-6.3124	-1.9002	-18.142
Story5	CORE ST-1a	USD ENV Min	Top	-392.3228	-62.1113	-2.8133	-3.8888	-24.4866	-260.6142
Story5	CORE ST-1a	USD ENV Min	Bottom	-401.1328	-62.1113	-2.8133	-3.8888	-2.2126	-335.6148

Pier Force - Page 2 of 4

K3-205

Pier Force - Strength Load Ex.

Story	Pier	Load Case/Combo	Location	P inf	V2 inf	V3 inf	T inf	M2 inf	M3 inf
Story2	CORE ST-1a	USD ENV Min	Bottom	-638.8478	-64.0172	-6.1338	-5.0256	-3.7871	-1084.9076
Story2	CORE ST-1b	USD ENV Min	Bottom	-374.277	-78.0084	-6.5038	-5.9342	1.1599	-731.4241
Story2	CORE ST-1b	USD ENV Min	Bottom	-583.2414	-78.0084	-6.5038	-5.9342	-14.9236	-403.8102
Story2	CORE ST-2a	USD ENV Min	Top	-719.3489	-66.3719	2.237	-6.7664	-26.7128	-73.6486
Story2	CORE ST-2a	USD ENV Min	Bottom	-771.4223	-66.3719	2.237	-6.7664	1.029	-479.8113
Story2	CORE ST-2b	USD ENV Min	Top	-580.2163	-66.3707	-17.3389	-9.9768	7.9936	-486.0762
Story2	CORE ST-2b	USD ENV Min	Bottom	-712.299	-66.3707	-17.3389	-9.9768	-23.7114	-493.0993
Story2	CORE LIFT-1	USD ENV Min	Top	-723.4114	-121.3189	-6.0177	-29.8971	-19.6312	-72.3189
Story2	CORE LIFT-1	USD ENV Min	Bottom	-818.5347	-121.3217	-14.8886	-33.9333	-15.4461	-401.399
Story2	CORE LIFT-2	USD ENV Min	Top	-771.0369	-193.0999	-6.466	-12.148	3.7867	-122.3244
Story2	CORE LIFT-2	USD ENV Min	Bottom	-778.1993	-193.0999	-6.466	-12.148	-9.3304	-462.8356
Story2	CORE LIFT-3	USD ENV Min	Top	-553.2183	-57.6601	-18.4849	-13.3739	-9.8714	-123.6887
Story2	CORE LIFT-3	USD ENV Min	Bottom	-622.6889	-57.6796	-19.1901	-24.9999	-79.7483	-297.9934
Story2	CORE LIFT-4	USD ENV Min	Top	-96.8726	-4.6323	0.8737	-6.3561	-4.7527	-31.9554
Story2	CORE LIFT-4	USD ENV Min	Bottom	-279.366	-44.6464	0.3767	-6.1423	-6.2953	-22.1097
Story2	CORE LIFT-5	USD ENV Min	Top	-136.5402	-47.9491	0.1709	-6.1224	-2.8437	-15.7583
Story2	CORE LIFT-5	USD ENV Min	Bottom	-130.8726	-47.9491	0.1709	-6.1224	-1.4402	-16.4601
Story2	CORE LIFT-6	USD ENV Min	Top	-262.6099	-57.8268	0.1183	-6.2761	-2.6516	-14.8639
Story2	CORE LIFT-6	USD ENV Min	Bottom	-282.4026	-57.8268	0.1183	-6.2761	-1.5312	-15.1923
Story1	CORE ST-1a	USD ENV Min	Top	-726.4107	-76.4913	0.8614	-6.168	14.7356	1080.7803
Story1	CORE ST-1a	USD ENV Min	Bottom	-772.6021	-76.4913	0.8614	-6.168	-6.7794	-1246.8438
Story1	CORE ST-1b	USD ENV Min	Top	-629.1441	-66.1907	-8.763	-5.2329	-5.6612	-18.925
Story1	CORE ST-1b	USD ENV Min	Bottom	-633.3463	-66.1907	-8.763	-5.2329	-10.0904	-1605.4207
Story1	CORE ST-2a	USD ENV Min	Top	-810.4347	-77.1338	4.2074	-6.5313	-17.6461	-861.8776
Story1	CORE ST-2a	USD ENV Min	Bottom	-814.7823	-77.1338	4.2074	-6.5313	2.8912	-131.9245
Story1	CORE ST-2b	USD ENV Min	Top	-793.9743	-78.0974	-14.9701	-6.6516	3.9636	-924.3083
Story1	CORE ST-2b	USD ENV Min	Bottom	-804.3071	-78.0974	-14.9701	-6.6516	-14.1379	-1079.684
Story1	CORE LIFT-1	USD ENV Min	Top	-864.1811	-279.9332	-7.9336	-22.6977	-20.8299	-110.4139
Story1	CORE LIFT-1	USD ENV Min	Bottom	-867.9433	-279.9332	-7.9336	-22.6977	-31.733	-361.317
Story1	CORE LIFT-2	USD ENV Min	Top	-861.9781	-117.1166	4.834	-6.0937	0.767	-24.4423
Story1	CORE LIFT-2	USD ENV Min	Bottom	-870.2305	-117.1166	4.834	-6.0937	-6.9282	-421.7708
Story1	CORE LIFT-3	USD ENV Min	Top	-841.9079	-11.8378	-22.8424	-18.4648	-13.1198	-188.7976
Story1	CORE LIFT-3	USD ENV Min	Bottom	-865.8641	-11.8378	-22.8424	-18.4648	-58.3754	-284.6209
Story1	CORE LIFT-4	USD ENV Min	Top	-183.1541	-32.0887	-0.5889	-6.039	-1.6589	-24.4833
Story1	CORE LIFT-4	USD ENV Min	Bottom	-181.1969	-32.0887	-0.5889	-6.039	1.1728	-46.7106
Story1	CORE LIFT-5	USD ENV Min	Top	-148.9671	-33.7636	-0.4763	-6.0549	-4.4255	-31.2467
Story1	CORE LIFT-5	USD ENV Min	Bottom	-156.2643	-33.7636	-0.4763	-6.0549	-1.0077	-37.3493
Story1	CORE LIFT-6	USD ENV Min	Top	-211.1283	-33.1082	-0.5647	-6.0461	-1.7117	-18.6333
Story1	CORE LIFT-6	USD ENV Min	Bottom	-222.8797	-33.1082	-0.5647	-6.0461	-1.1209	-26.0903

Pier Force - Page 4 of 4

K3-207

Pier Force - Strength Load Ex.

Story	Pier	Load Case/Combo	Location	P inf	V2 inf	V3 inf	T inf	M2 inf	M3 inf
Story3	CORE ST-0	USD ENV Min	Top	-377.2239	-48.8311	-14.8686	-4.0488	-14.9141	-242.2317
Story3	CORE ST-0a	USD ENV Min	Bottom	-366.7338	-48.8311	-14.8686	-4.049	-21.4384	-344.8617
Story3	CORE ST-2a	USD ENV Min	Bottom	-477.3206	-71.1933	1.331	-7.1012	-24.7449	-134.5248
Story3	CORE ST-2a	USD ENV Min	Bottom	-489.2048	-71.1933	1.331	-7.1012	1.3709	-333.3365
Story3	CORE ST-2b	USD ENV Min	Top	-445.7901	-76.6488	-22.0884	-3.3491	5.176	-130.4307
Story3	CORE ST-2b	USD ENV Min	Bottom	-457.6433	-76.6488	-22.0884	-3.3491	-21.7784	-326.1312
Story3	CORE LIFT-1	USD ENV Min	Bottom	-234.9222	-101.9783	0.3795	-17.4481	-29.7084	-95.2791
Story3	CORE LIFT-1	USD ENV Min	Bottom	-363.5142	-101.9392	-15.7823	-34.6319	-34.8663	-192.463
Story3	CORE LIFT-2	USD ENV Min	Top	-300.3074	-180.0764	-0.0873	-2.1343	1.8007	-148.2239
Story3	CORE LIFT-2	USD ENV Min	Bottom	-368.9807	-180.0764	-0.0873	-2.1343	-13.0241	-428.2073
Story3	CORE LIFT-3	USD ENV Min	Top	-246.6439	-24.8484	-2.2628	-3.9737	1.1661	-47.4778
Story3	CORE LIFT-3	USD ENV Min	Bottom	-287.0753	-24.8158	-13.0795	-13.1797	-18.2916	-75.267
Story3	CORE LIFT-4	USD ENV Min	Bottom	-314.4661	-24.8158	-13.0795	-13.1797	-18.2916	-75.267
Story3	CORE LIFT-4	USD ENV Min	Bottom	-104.2047	-40.5525	-0.284	-0.2031	0.2811	-47.095
Story3	CORE LIFT-5	USD ENV Min	Top	-314.4661	-24.8158	-13.0795	-13.1797	-18.2916	-75.267
Story3	CORE LIFT-5	USD ENV Min	Top	-314.4661	-24.8158	-13.0795	-13.1797	-18.2916	-75.267
Story3	CORE LIFT-6	USD ENV Min	Bottom	-49.4966	-82.5873	-0.4664	-0.3031	0.1976	-12.8227
Story3	CORE ST-1a	USD ENV Min	Top	-471.9354	-94.418	-1.3408	-5.976	-23.7962	-283.265
Story3	CORE ST-1a	USD ENV Min	Bottom	-480.7451	-74.8178	-1.3408	-5.976	-28.8574	-376.076
Story3	CORE ST-1b	USD ENV Min	Top	-450.442	-94.8481	-1.4499	-7.186	-26.814	-276.967
Story3	CORE ST-1b	USD ENV Min	Bottom	-459.7547	-94.8481	-1.4499	-7.186	-26.814	-276.967
Story3	CORE ST-2a	USD ENV Min	Top	-377.2231	-82.6482	1.9811	-6.4157	-28.7979	-297.323
Story3	CORE ST-2a	USD ENV Min	Bottom	-366.999	-82.6482	1.9811	-6.4157	1.7974	-325.495
Story3	CORE ST-2b	USD ENV Min	Top	-330.8753	-77.8995	-1.2191	-7.8907	5.995	-256.699
Story3	CORE ST-2b	USD ENV Min	Bottom	-347.8797	-77.8995	-1.2191	-7.8907	5.995	-256.699
Story3	CORE LIFT-1	USD ENV Min	Top	-443.1893	-107.9927	-0.8296	-20.7009	-33.4783	-84.2044
Story3	CORE LIFT-1	USD ENV Min	Bottom	-497.8997	-107.8992	-0.8443	-20.3014	-33.2103	-84.2044
Story3	CORE LIFT-2	USD ENV Min	Top	-409.8017	-126.211	-0.849	-20.667	3.567	-133.187
Story3	CORE LIFT-2	USD ENV Min	Bottom	-451.064	-126.211	-0.849	-20.667	-3.7626	-171.477
Story3	CORE LIFT-3	USD ENV Min	Top	-411.064	-126.211	-0.849	-20.667	3.567	-133.187
Story3	CORE LIFT-3	USD ENV Min	Bottom	-461.326	-126.211	-0.849	-20.667	-3.7626	-171.477
Story3	CORE LIFT-4	USD ENV Min	Bottom	-391.261	-254.683	-0.1792	-13.15	-36.481	-123.303
Story3	CORE LIFT-4	USD ENV Min	Top	-49.9571	-254.683	0.1861	-0.2525	0.266	-123.303
Story3	CORE LIFT-4	USD ENV Min	Bottom	-154.814	-37.777	0.179	-0.2343	0.3023	-48.389
Story3	CORE LIFT-5	USD ENV Min	Top	-44.8117	-37.777	0.1861	-0.2525	0.266	-123.303
Story3	CORE LIFT-5	USD ENV Min	Bottom	-154.814	-37.777	0.179	-0.2343	0.3023	-48.389
Story3	CORE LIFT-6	USD ENV Min	Top	-74.7448	-43.917	0.2249	-0.1321	0.2993	-9.7474
Story3	CORE LIFT-6	USD ENV Min	Bottom	-104.1791	-43.917	0.2249	-0.1321	0.2993	-9.7474
Story3	CORE ST-1a	USD ENV Min	Top	-471.9354	-94.418	-1.3408	-5.976	-23.7962	-283.265
Story3	CORE ST-1a	USD ENV Min	Bottom	-480.7451	-74.8178	-1.3408	-5.976	-28.8574	-376.076
Story3	CORE ST-1b	USD ENV Min	Top	-450.442	-94.8481	-1.4499	-7.186	-26.814	-276.967
Story3	CORE ST-1b	USD ENV Min	Bottom	-459.7547	-94.8481	-1.4499	-7.186	-26.814	-276.967
Story3	CORE ST-2a	USD ENV Min	Top	-377.2231	-82.6482	1.9811	-6.4157	-28.7979	-297.323
Story3	CORE ST-2a	USD ENV Min	Bottom	-366.999	-82.6482	1.9811	-6.4157	1.7974	-325.495
Story3	CORE ST-2b	USD ENV Min	Top	-330.8753	-77.8995	-1.2191	-7.8907	5.995	-256.699
Story3	CORE ST-2b	USD ENV Min	Bottom	-347.8797	-77.8995	-1.2191	-7.8907	5.995	-256.699
Story3	CORE LIFT-1	USD ENV Min	Top	-443.1893	-107.9927	-0.8296	-20.7009	-33.4783	-84.2044
Story3	CORE LIFT-1	USD ENV Min	Bottom	-497.8997	-107.8992	-0.8443	-20.3014	-33.2103	-84.2044
Story3	CORE LIFT-2	USD ENV Min	Top	-409.8017	-126.211	-0.849	-20.667	3.567	-133.187
Story3	CORE LIFT-2	USD ENV Min	Bottom	-451.064	-126.211	-0.849	-20.667	-3.7626	-171.477
Story3	CORE LIFT-3	USD ENV Min	Top	-411.064	-126.211	-0.849	-20.667	3.567	-133.187
Story3	CORE LIFT-3	USD ENV Min	Bottom	-461.326	-126.211	-0.849	-20.667	-3.7626	-171.477
Story3	CORE LIFT-4	USD ENV Min	Bottom	-391.261	-254.683	-0.1792	-13.15	-36.481	-123.303
Story3	CORE LIFT-4	USD ENV Min	Top	-49.9571	-254.683	0.1861	-0.2525	0.266	-123.303
Story3	CORE LIFT-5	USD ENV Min	Top	-44.8117	-37.777	0.1861	-0.2525	0.266	-123.303
Story3	CORE LIFT-5	USD ENV Min	Bottom	-154.814	-37.777	0.179	-0.2343	0.3023	-48.389
Story3	CORE LIFT-6	USD ENV Min	Top	-74.7448	-43.917	0.2249	-0.1321	0.2993	-9.7474
Story3	CORE LIFT-6	USD ENV Min	Bottom	-104.1791	-43.917	0.2249	-0.1321	0.2993	-9.7474
Story3	CORE ST-1a	USD ENV Min	Top	-471.9354	-94.418	-1.3408	-5.976	-23.7962	-283.265
Story3	CORE ST-1a	USD ENV Min	Bottom	-480.7451	-74.8178	-1.3408	-5.976	-28.8574	-376.076
Story3	CORE ST-1b	USD ENV Min	Top	-450.442	-94.8481	-1.4499	-7.186	-26.814	-276.967
Story3	CORE ST-1b	USD ENV Min	Bottom	-459.7547	-94.8481	-1.4499	-7.186	-26.814	-276.967
Story3	CORE ST-2a	USD ENV Min	Top	-377.2231	-82.6482	1.9811	-6.4157	-28.7979	-297.323
Story3	CORE ST-2a	USD ENV Min	Bottom	-366.999	-82.6482	1.9811	-6.4157	1.7974	-325.495
Story3	CORE ST-2b	USD ENV Min	Top	-330.8753	-77.8995	-1.2191	-7.8907	5.995	-256.699
Story3	CORE ST-2b	USD ENV Min	Bottom	-347.8797	-77.8995	-1.2191	-7.8907	5.995	-256.699
Story3	CORE LIFT-1	USD ENV Min	Top	-443.1893	-107.9927	-0.8296	-20.7009	-33.4783	-84.2044
Story3	CORE LIFT-1	USD ENV Min	Bottom	-497.8997	-107.8992	-0.8443	-20.3014	-33.2103	-84.2044
Story3	CORE LIFT-2	USD ENV Min	Top	-409.8017	-126.211	-0.849	-20.667	3.567	-133.187
Story3	CORE LIFT-2	USD ENV Min	Bottom	-451.064	-126.211	-0.849	-20.667	-3.7626	-171.477
Story3	CORE LIFT-3	USD ENV Min	Top	-411.064	-126.211	-0.849	-20.667	3.567	-133.187
Story3	CORE LIFT-3	USD ENV Min	Bottom	-461.326	-126.211	-0.849	-20.667	-3.7626	-171.477
Story3	CORE LIFT-4	USD ENV Min	Bottom	-391.261	-254.683	-0.1792	-13.15	-36.481	-123.303
Story3	CORE LIFT-4	USD ENV Min	Top	-49.9571	-254.683	0.1861	-0.2525	0.266	-123.303
Story3	CORE LIFT-5	USD ENV Min	Top	-44.8117	-37.777	0.1861	-0.2525	0.266	-123.303
Story3	CORE LIFT-5	USD ENV Min	Bottom	-154.814	-37.777	0.179	-0.2343	0.3023	-48.389
Story3	CORE LIFT-6	USD ENV Min	Top	-74.7448	-43.917	0.2249	-0.1321	0.2993	-9.7474
Story3	CORE LIFT-6	USD ENV Min	Bottom	-104.1791	-43.917	0.2249	-0.1321	0.2993	-9.7474
Story3	CORE ST-1a	USD ENV Min	Top	-471.9354	-94.418	-1.3408	-5.976	-23.7962	-283.265
Story3	CORE ST-1a	USD ENV Min	Bottom	-480.7451	-74.8178	-1.3408	-5.976	-28.8574	-376.076
Story3	CORE ST-1b	USD ENV Min	Top	-450.442	-94.8481	-1.4499	-7.186	-26.814	-276.967
Story3	CORE ST-1b	USD ENV Min	Bottom	-459.7547	-94.8481	-1.4499	-7.186	-26.814	-276.967
Story3	CORE ST-2a	USD ENV Min	Top	-377.2231	-82.6482	1.9811	-6.4157	-28.7979	-297.323
Story3	CORE ST-2a	USD ENV Min	Bottom	-366.999	-82.6482	1.9811	-6.4157	1.7974	-325.495
Story3	CORE ST-2b	USD ENV Min	Top	-330.8753	-77.8995	-1.2191	-7.8907	5.995	-256.699
Story3	CORE ST-2b	USD ENV Min	Bottom	-347.8797	-77.8995	-1.2191	-7.8907	5.995	-256.699
Story3	CORE LIFT-1	USD ENV Min	Top	-443.1893	-107.9927	-0.8296	-20.7009	-33.4783	-84.2044
Story3	CORE LIFT-1	USD ENV Min	Bottom	-497.8997	-107.8992	-0.8443	-20.3014	-33.2103	-84.2044
Story3	CORE LIFT-2	USD ENV Min	Top	-409.8017	-126.211	-0.849	-20.667	3.567	-133.187
Story3	CORE LIFT-2	USD ENV Min	Bottom	-451.064	-126.211	-0.849	-20.667	-3.7626	-171.477
Story3	CORE LIFT-3	USD ENV Min	Top	-411.064	-126.211	-0.849	-20.667	3.567	-133.187
Story3	CORE LIFT-3	USD ENV Min	Bottom	-461.326	-126.211	-0.849	-20.667	-3.7626	-171.477
Story3	CORE LIFT-4	USD ENV Min	Bottom	-391.261	-254.683	-0.1792	-13.15	-36.481	-123.303
Story3	CORE LIFT-4	USD ENV Min	Top	-49.9571	-254.683	0.1861	-0.2525	0.266	-123.303
Story3	CORE LIFT-5	USD ENV Min	Top	-44.8117	-37.777	0.1861	-0.2525	0.266	-123.303
Story3	CORE LIFT-5	USD ENV Min	Bottom	-154.814	-37.777	0.179	-0.2343	0.3023	-48.389
Story3	CORE LIFT-6	USD ENV Min	Top	-74.7448	-43.917	0.2249	-0.1321	0.2993	-9.7474
Story3	CORE LIFT-6	USD ENV Min	Bottom	-104.1791	-43.917	0.2249	-0.1321	0.2993	-9.7474
Story3	CORE ST-1a	USD ENV Min	Top	-471.9354	-94.418	-1.3408	-5.976	-23.7962	-283.265
Story3	CORE ST-1a	USD ENV Min	Bottom	-480.7451	-74.8178	-1.3408	-5.976	-28.8574	-376.076
Story3	CORE ST-1b	USD ENV Min	Top	-450.442	-94.8481	-1.4499	-7.186	-26.814	-276.967
Story3	CORE ST-1b	USD ENV Min	Bottom	-459.7547	-94.8481	-1.4499	-7.186	-26.814	-276.967
Story3	CORE ST-2a	USD ENV Min	Top	-377.2231	-82.6482	1.9811	-6.4157	-28.7979	-297.323
Story3	CORE ST-2a	USD ENV Min	Bottom	-366.999	-82.6482	1.9811	-6.4157	1.7974	-325.495
Story3	CORE ST-2b	USD ENV Min	Top	-330.8753	-77.8995	-1.2191	-7.8907	5.995	-256.699
Story3	CORE ST-2b	USD ENV Min	Bottom	-347.8797	-77.8995	-1.2191	-7.8907	5.995	-256.699
Story3	CORE LIFT-1	USD ENV Min	Top	-443.1893	-107.9927	-0.8296	-20.7009	-33.4783	-84.2044
Story3	CORE LIFT-1	USD ENV Min	Bottom	-497.8997	-107.8992	-0.8443	-20.3014	-33.2103	-84.2044
Story3	CORE LIFT-2	USD ENV Min	Top	-409.8017	-126.211	-0.849	-20.667	3.567	-133.187
Story3	CORE LIFT-2	USD ENV Min	Bottom	-451.064	-126.211	-0.849	-20.667	-3.7626	-171.477
Story3	CORE LIFT-3	USD ENV Min	Top	-411.064	-126.211	-0.849	-20.667	3.567	-133.187
Story3	CORE LIFT-3	USD ENV Min	Bottom	-461.326	-126.211	-0.849	-20.667	-3.7626	-171.477
Story3	CORE LIFT-4	USD ENV Min	Bottom	-391.261	-254.683	-0.1792	-13.15	-36.481	-123.303
Story3	CORE LIFT-4	USD ENV Min	Top	-49.9571	-254.683	0.1861	-0.2525	0.266	-123.303
Story3	CORE LIFT-5	USD ENV Min	Top	-44.8117	-37.777	0.1861	-0.2525	0.266	-123.303
Story3	CORE LIFT-5	USD ENV Min	Bottom	-154.814	-37.777	0.179	-0.2343	0.3023	-48.389
Story3	CORE LIFT-6	USD ENV Min	Top	-74.7448	-43.917	0.2249	-0.1321	0.2993	-9.7474
Story3	CORE LIFT-6	USD ENV Min	Bottom	-104.1791	-43.917	0.2249	-0.1321	0.2993	-9.7474
Story3	CORE								

F3

$$\text{LOAD} = 189000 \text{ kg}$$

$$SW = 6000 \text{ kg}$$

$$EW = 195000 \text{ kg}$$

$$\text{load/pile} = 65000 \text{ kg}$$

$$M = (0.54)(25000) = 13500 \text{ kg-m}$$

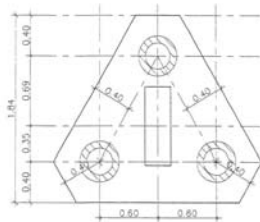
$$V = 0 ; P' = \frac{1}{30} (15 \times 7)(25000) = 13000 \text{ kg}$$

$$P = \frac{(3)(13000)}{(4.5)(80)} = 0.97 \text{ ksc} < 0.86 \text{ ksc}$$

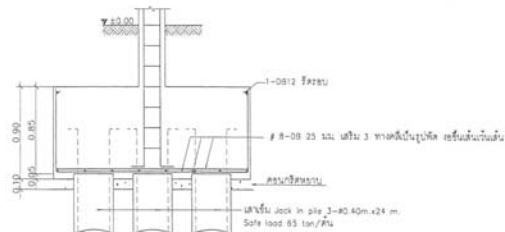
$$\xi_0 = \frac{25000}{(21.42)(0.88)(80)} = 41.71 \text{ cm}$$

$$A_s = 24.93 \text{ cm}^2$$

$$\text{Use } 8\text{DB25 } (A_s = 39.25 \text{ cm}^2 ; \xi_0 = 42.83 \text{ cm})$$



F3-PLAN



F3-SECTION

H3-209

F5

$$\text{LOAD} = 311500 \text{ kg}$$

$$SW = 13500 \text{ kg}$$

$$EW = 325000 \text{ kg}$$

$$\text{load/pile} = 65000 \text{ kg}$$

$$M = (2)(65000)(0.71) = 92300 \text{ kg-m}$$

$$V = \frac{(2)(65000)}{30} (15 \times 0.5) = 28167 \text{ kg}$$

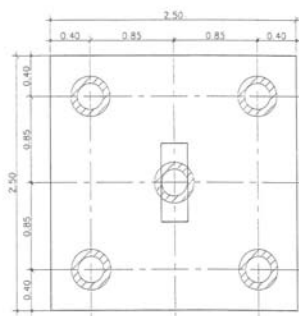
$$V = \frac{28167}{(250)(50)} = 1.41 \text{ ksc} < 4.84 \text{ ksc}$$

$$P = \frac{(4)(65000)}{(578)(80)} = 4.16 \text{ ksc} < 8.84 \text{ ksc}$$

$$\xi_0 = \frac{(2)(65000)}{(21.42)(0.88)(80)} = 85.42 \text{ cm}$$

$$A_s = 43.36 \text{ cm}^2$$

$$\text{Use } 14\text{DB25 } (A_s = 78.54 \text{ cm}^2 ; \xi_0 = 173.66 \text{ cm})$$



F5-PLAN



F5-SECTION

H3-211

F4

$$\text{LOAD} = 251300 \text{ kg}$$

$$SW = 8600 \text{ kg}$$

$$EW = 260000 \text{ kg}$$

$$\text{load/pile} = 65000 \text{ kg}$$

$$M = (2)(65000)(0.47) = 41100 \text{ kg-m}$$

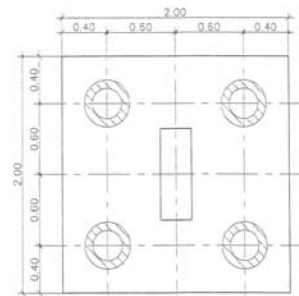
$$V = 0 ; P' = \frac{1}{30} (15 \times 2)(25000) = 30833 \text{ kg}$$

$$P = \frac{(2)(30833)}{(578)(80)} = 1.73 \text{ ksc} < 0.86 \text{ ksc}$$

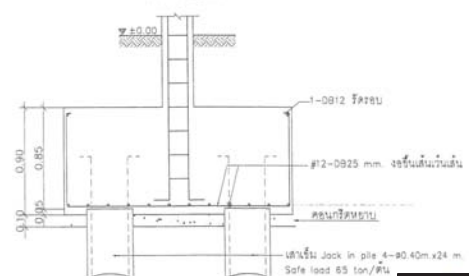
$$\xi_0 = \frac{(2)(65000)}{(21.42)(0.88)(80)} = 85.42 \text{ cm}$$

$$A_s = 43.40 \text{ cm}^2$$

$$\text{Use } 12\text{DB25 } (A_s = 58.72 \text{ cm}^2 ; \xi_0 = 94.26 \text{ cm})$$



F4-PLAN



F4-SECTION

H3-210

F4

$$\text{LOAD} = 571526 \text{ kg}$$

$$SW = 18432 \text{ kg}$$

$$EW = 590000 \text{ kg}$$

$$\text{load/pile} = 65000 \text{ kg}$$

$$V = 0$$

$$P' = \frac{1}{30} (25000)(15 \times 0.1) = 15167 \text{ kg}$$

$$P = \frac{(4)(65000) + (2)(15167)}{(488)(110)} = 4.08 \text{ ksc} < 8.84 \text{ ksc}$$

$$M = (3)(65000)(0.47) = 91650 \text{ kg-m}$$

$$\xi_0 = \frac{(3)(65000)}{(21.42)(0.88)(110)} = 93.18 \text{ cm}$$

$$A_s = 47.34 \text{ cm}^2$$

$$\text{Use } 12\text{DB25 } (A_s = 58.72 \text{ cm}^2 ; \xi_0 = 94.26 \text{ cm})$$

$$V = \frac{1}{30} (15 \times 3)(65000) = 21000 \text{ kg}$$

$$V = \frac{(2)(21000)}{(400)(110)} = 2.37 \text{ ksc} < 4.84 \text{ ksc}$$

$$P = \frac{(4)(65000)}{(488)(110)} = 3.17 \text{ ksc} < 8.84 \text{ ksc}$$

$$M = (2)(65000)(1.04) = 137000 \text{ kg-m}$$

$$\xi_0 = \frac{(3)(65000)}{(21.42)(0.88)(110)} = 93.18 \text{ cm}$$

$$A_s = 76.18 \text{ cm}^2$$

$$\text{Use } 15\text{DB25 } (A_s = 73.45 \text{ cm}^2 ; \xi_0 = 117.81 \text{ cm})$$

H3-212

LOAD : 870000 kg

SW : 48577 kg

EW : 746577 kg

load/pile : 63102 kg

load/area : 44705 kg/m²

S : 2.33 L : 4.93 m : 0.43

$$M^* = \frac{1}{6} (44705)(2.33)^2 = 30434 \text{ kg}\cdot\text{m}$$

$$A_s = 21.25 \text{ cm}^2$$
Use DB20 @ 0.125 ($A_s = 25.12 \text{ cm}^2$)
$$M^* = (5)(43102)(0.22) = 82038 \text{ kg}\cdot\text{m}/4.2 \text{ m}$$

$$= 13232 \text{ kg}\cdot\text{m}/\text{m}$$

$$A_s = 7.40 \text{ cm}^2/\text{m}$$

$$\xi_o = \frac{(5)(43102)}{(29.02)(0.88)(800)} = 15.88 \text{ cm}/4.2 \text{ m}$$

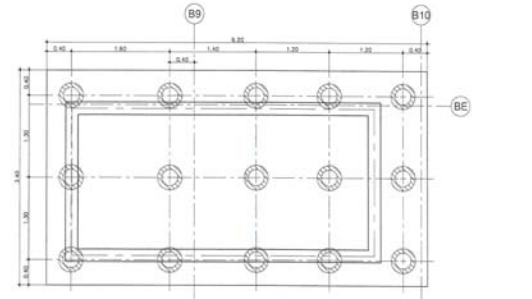
$$= 26.76 \text{ cm}/\text{m}$$
Use DB20 @ 0.125 ($A_s = 25.12 \text{ cm}^2/\text{m}$; $\xi_o = 50.26 \text{ cm}/\text{m}$)
$$M^* = (0.05)(44705)(2.33)^2 = 12170 \text{ kg}\cdot\text{m}$$

$$A_s = 8.66 \text{ cm}^2$$
Use DB20 @ 0.20 ($A_s = 15.70 \text{ cm}^2$)
$$M^* = (3)(43102)(0.5) = 94637 \text{ kg}\cdot\text{m}/3.4 \text{ m}$$

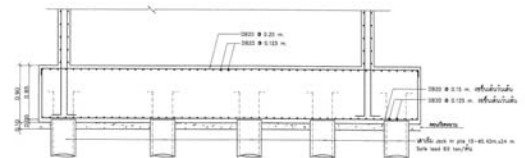
$$= 27841 \text{ kg}\cdot\text{m}/\text{m}$$

$$A_s = 17.28 \text{ cm}^2/\text{m}$$

$$\xi_o = \frac{(3)(43102)}{(29.02)(0.88)(800)} = 77.53 \text{ cm}/3.4 \text{ m}$$

$$= 29.26 \text{ cm}/\text{m}$$
Use DB20 @ 0.19 ($A_s = 20.93 \text{ cm}^2/\text{m}$; $\xi_o = 41.88 \text{ cm}/\text{m}$)

F15B - PLAN



F15B - SECTION

K3-217

K3-218



3-D View Rebar Percentage (ACI 318-08)

Solidity Building B Tender R.1 EDB

K3-219

Concrete Column Design Summary

Story	Label	Design Section	Design/Check	Status	PMM Combo	$A_{s,min}$ m ²	A_s m ²
Roof/2	C42	C-0.27x0.20	Design	No Message	EWL4	0.0004	0.0004
Roof/2	C9	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof/2	C12	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof/2	C13	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof/2	C16	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof/1	C42	C-0.27x0.20	Design	No Message	EWL4	0.0004	0.0004
Roof/1	C9	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof/1	C12	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof/1	C13	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof/1	C16	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
RWT	C42	C-0.27x0.20	Design	No Message	EWL4	0.0004	0.0004
RWT	C9	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
RWT	C12	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
RWT	C13	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
RWT	C16	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C27	C-0.77x0.27	Design	No Message	EWL4	0.001649	0.002865
Roof	C2	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C3	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C6	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C8	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C9	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C12	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C13	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C16	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C18	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C19	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C21	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C24	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C26	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C27	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C30	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C31	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C34	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C36	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C38	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C39	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C40	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C49	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C70	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C71	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C72	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C73	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C76	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C77	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C78	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C79	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C80	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079
Roof	C81	C-0.27x0.77	Design	No Message	EWL4	0.002079	0.002079

K3-220

[illegible]

W3-221

[illegible]

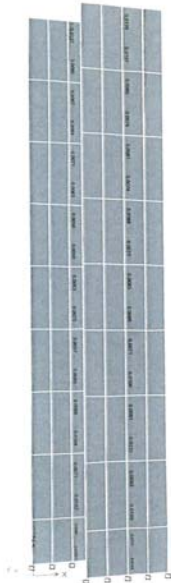
W3-222

[illegible]

W3-223

Story	Label	Design Section	Design Check	Status	PDM Combo	As/In	At
Story5	C39	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C68	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C70	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C71	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C72	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C73	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C76	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C77	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C78	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C79	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C88	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C81	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C82	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C83	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C84	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C85	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C86	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C87	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C88	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story5	C37	C-6.97a.17	Design	No Message	UWL	m0149	m0149
Story4	C2	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C3	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C6	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C8	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C9	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C12	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C13	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C14	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C18	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C19	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C21	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C24	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C26	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C27	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C30	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C31	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C34	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C36	C-6.27a.77	Design	No Message	UWL	m0279	m0279
Story4	C38	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story4	C39	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story4	C68	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story4	C69	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story4	C70	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story4	C71	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story4	C72	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story4	C73	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story4	C76	C-6.77a.27	Design	No Message	UWL	m0279	m0279
Story4	C77	C-6.77a.27	Design	No Message	UWL	m0279	m0279

N3-224



D-condo Holiday Building B Tender R-0506v Pier Longitudinal Reinforcing Ratios (ACI 318-08)

K3-229

Concrete Shear Wall Design

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Shear Rebar m/m
Roof	CORE ST-1a	Top	Uniform	DB12	DB20	0.25	1.39	0.0005
Roof	CORE ST-1a	Bottom	Uniform	DB12	DB20	0.25	1.07	0.0005
Story8	CORE ST-1a	Top	Uniform	DB12	DB20	0.25	0.8	0.0005
Story8	CORE ST-1a	Bottom	Uniform	DB12	DB20	0.25	0.76	0.0005
Story7	CORE ST-1a	Top	Uniform	DB12	DB20	0.25	0.81	0.0005
Story7	CORE ST-1a	Bottom	Uniform	DB12	DB20	0.25	0.74	0.0005
Story6	CORE ST-1a	Top	Uniform	DB12	DB20	0.25	0.68	0.0005
Story6	CORE ST-1a	Bottom	Uniform	DB12	DB20	0.25	0.77	0.0005
Story5	CORE ST-1a	Top	Uniform	DB12	DB20	0.25	0.65	0.0005
Story5	CORE ST-1a	Bottom	Uniform	DB12	DB20	0.25	0.86	0.0005
Story4	CORE ST-1a	Top	Uniform	DB12	DB20	0.25	0.71	0.0005
Story4	CORE ST-1a	Bottom	Uniform	DB12	DB20	0.25	1.06	0.0005
Story3	CORE ST-1a	Top	Uniform	DB12	DB20	0.25	0.81	0.0005
Story3	CORE ST-1a	Bottom	Uniform	DB12	DB20	0.25	1.11	0.0005
Story2	CORE ST-1a	Top	Uniform	DB12	DB20	0.25	0.92	0.0005
Story2	CORE ST-1a	Bottom	Uniform	DB12	DB20	0.25	1.15	0.0005
Story1	CORE ST-1a	Top	Uniform	DB12	DB20	0.25	1.12	0.0005
Story1	CORE ST-1a	Bottom	Uniform	DB12	DB20	0.25	1.43	0.0005
Roof	CORE ST-1b	Top	Uniform	DB12	DB20	0.25	1.27	0.0005
Roof	CORE ST-1b	Bottom	Uniform	DB12	DB20	0.25	0.9	0.0005
Story8	CORE ST-1b	Top	Uniform	DB12	DB20	0.25	0.67	0.0005
Story8	CORE ST-1b	Bottom	Uniform	DB12	DB20	0.25	0.64	0.0005
Story7	CORE ST-1b	Top	Uniform	DB12	DB20	0.25	0.71	0.0005
Story7	CORE ST-1b	Bottom	Uniform	DB12	DB20	0.25	0.63	0.0005
Story6	CORE ST-1b	Top	Uniform	DB12	DB20	0.25	0.56	0.0005
Story6	CORE ST-1b	Bottom	Uniform	DB12	DB20	0.25	0.66	0.0005
Story5	CORE ST-1b	Top	Uniform	DB12	DB20	0.25	0.53	0.0005
Story5	CORE ST-1b	Bottom	Uniform	DB12	DB20	0.25	0.75	0.0005
Story4	CORE ST-1b	Top	Uniform	DB12	DB20	0.25	0.57	0.0005
Story4	CORE ST-1b	Bottom	Uniform	DB12	DB20	0.25	0.85	0.0005
Story3	CORE ST-1b	Top	Uniform	DB12	DB20	0.25	0.66	0.0005
Story3	CORE ST-1b	Bottom	Uniform	DB12	DB20	0.25	1.08	0.0005
Story2	CORE ST-1b	Top	Uniform	DB12	DB20	0.25	0.71	0.0005
Story2	CORE ST-1b	Bottom	Uniform	DB12	DB20	0.25	1.22	0.0005
Story1	CORE ST-1b	Top	Uniform	DB12	DB20	0.25	0.84	0.0005
Story1	CORE ST-1b	Bottom	Uniform	DB12	DB20	0.25	1.19	0.0005
Roofap2	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofap2	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofap1	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofap1	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.33	0.0005
Roof	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.85	0.0005
Roof	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.62	0.0005
Story8	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.43	0.0005
Story8	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.39	0.0005

Wall Design - Page 1 of 6

K3-230

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Shear Rebar m/m
Story7	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.34	0.0005
Story7	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.32	0.0005
Story6	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Story6	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.31	0.0005
Story5	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Story5	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.41	0.0005
Story4	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.3	0.0005
Story4	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.49	0.0005
Story3	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.41	0.0005
Story3	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.68	0.0005
Story2	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.47	0.0005
Story2	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.77	0.0005
Story1	CORE ST-2a	Top	Uniform	DB12	DB20	0.25	0.52	0.0005
Story1	CORE ST-2a	Bottom	Uniform	DB12	DB20	0.25	0.64	0.0005
Roofap2	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofap2	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.27	0.0005
Roofap1	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	0.27	0.0005
Roofap1	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.41	0.0005
RWT	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	0.41	0.0005
RWT	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.49	0.0005
Roof	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	1.15	0.0005
Roof	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.91	0.0005
Story8	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	0.7	0.0005
Story8	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.71	0.0005
Story7	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	0.64	0.0005
Story7	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.66	0.0005
Story6	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	0.51	0.0005
Story6	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.6	0.0005
Story5	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	0.45	0.0005
Story5	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.6	0.0005
Story4	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	0.48	0.0005
Story4	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.71	0.0005
Story3	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	0.55	0.0005
Story3	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.83	0.0005
Story2	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	0.62	0.0005
Story2	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.86	0.0005
Story1	CORE ST-2b	Top	Uniform	DB12	DB20	0.25	0.65	0.0005
Story1	CORE ST-2b	Bottom	Uniform	DB12	DB20	0.25	0.74	0.0005
Roofap1	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofap1	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofap1	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.35	0.0005
RWT	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.35	0.0005
Roof	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.76	0.0005

Wall Design - Page 2 of 6

K3-231

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Shear Rebar m/m
Roof	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.76	0.0005
Roof	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.67	0.0005
Roof	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.67	0.001
Story8	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.41	0.0005
Story8	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.41	0.0005
Story8	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.74	0.0005
Story8	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.74	0.0004
Story7	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.46	0.0005
Story7	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.46	0.0005
Story7	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.87	0.0005
Story7	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.87	0.00094
Story6	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.6	0.0006
Story6	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.6	0.0005
Story6	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	1.27	0.0006
Story6	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	1.27	0.00101
Story5	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.86	0.00089
Story5	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.86	0.0005
Story5	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	1.95	0.00088
Story5	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	1.95	0.00114
Story4	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	1.3	0.00116
Story4	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	1.3	0.0005
Story4	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	2.85	0.00115
Story4	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	2.85	0.00129
Story3	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	1.75	0.00147
Story3	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	1.75	0.00056
Story3	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	3.78	0.00171
Story3	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	3.78	0.00112
Story2	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	2.4	0.00167
Story2	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	2.4	0.001
Story2	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	4.76	0.00192
Story2	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	4.76	0.00143
Story1	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	2.91	0.00109
Story1	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	2.91	0.00094
Story1	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	4.17	0.00126
Story1	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	4.17	0.00094
Roofap1	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofap1	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.51	0.0005
Roof	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.42	0.0005
Roof	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.44	0.0005
Story8	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.5	0.0005
Story8	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.47	0.0005
Story7	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.44	0.0005
Story7	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.45	0.0005
Story6	CORE LIFT-1	Top	Uniform	DB12	DB20	0.25	0.41	0.0005
Story6	CORE LIFT-1	Bottom	Uniform	DB12	DB20	0.25	0.53	0.0005

Wall Design - Page 3 of 6

K3-232

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Shear Rebar m ² /m
Story5	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.49	0.00067
Story5	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.82	0.00066
Story4	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.71	0.00088
Story4	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.19	0.00087
Story3	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.98	0.00108
Story3	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.61	0.00107
Story2	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.32	0.00111
Story2	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	2.07	0.00143
Story1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.89	0.00087
Story1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	2.21	0.00087
Roofup1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofup1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofup1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofup1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofup1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofup1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
Roof	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.67	0.0005
Roof	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.67	0.0005
Roof	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.91	0.0005
Roof	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.91	0.00096
Story8	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Story8	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
Story8	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.61	0.0005
Story8	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.61	0.00051
Story7	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Story7	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
Story7	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.46	0.0005
Story7	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.46	0.0005
Story6	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.42	0.0005
Story6	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.42	0.0005
Story6	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.68	0.0005
Story6	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.68	0.0005
Story5	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.69	0.0005
Story5	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.69	0.0005
Story5	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.04	0.0005
Story5	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.04	0.0005
Story4	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.11	0.0005
Story4	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.11	0.0005
Story4	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.59	0.0005
Story4	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.59	0.00056
Story3	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.64	0.0005
Story3	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.64	0.0005
Story3	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	2.23	0.0005
Story3	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	2.23	0.00079
Story2	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	2.28	0.00062

Wall Design - Page 4 of 6

K3-233

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Shear Rebar m ² /m
Story2	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	2.28	0.00061
Story2	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	3.68	0.00087
Story2	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	3.68	0.00131
Story1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	2.44	0.00081
Story1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	2.44	0.00104
Story1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	3.64	0.00081
Story1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	3.64	0.001
Roofup1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofup1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
Roof	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.75	0.0005
Roof	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.4	0.00076
Story8	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.37	0.0005
Story8	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.09	0.00054
Story7	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Story7	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.99	0.00052
Story6	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Story6	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.99	0.00051
Story5	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.3	0.0005
Story5	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.13	0.00052
Story4	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.47	0.0005
Story4	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.4	0.0005
Story3	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.65	0.0005
Story3	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.79	0.00061
Story2	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.14	0.0005
Story2	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	2.72	0.00094
Story1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.38	0.00078
Story1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.7	0.00069
Roofup1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofup1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.52	0.0005
Roof	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.4	0.0005
Roof	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.31	0.0005
Story8	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.75	0.00111
Story8	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.47	0.0011
Story7	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.54	0.00072
Story7	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.32	0.00071
Story6	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.51	0.00061
Story6	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.28	0.0006
Story5	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.62	0.00063
Story5	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.42	0.00063
Story4	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.77	0.00068
Story4	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.55	0.00067
Story3	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.93	0.00077
Story3	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.88	0.00077

Wall Design - Page 5 of 6

K3-234

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Shear Rebar m ² /m
Story2	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.28	0.0012
Story2	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.31	0.0012
Story1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.74	0.00102
Story1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.84	0.001
Roofup1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
Roofup1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.25	0.0005
RWT	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.65	0.0005
Roof	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.5	0.0005
Roof	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.37	0.0005
Story8	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.75	0.00118
Story8	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.48	0.00118
Story7	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.68	0.00113
Story7	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.44	0.00113
Story6	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	0.8	0.00128
Story6	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.52	0.00128
Story5	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1	0.00136
Story5	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	0.77	0.00136
Story4	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.27	0.00143
Story4	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.06	0.00142
Story3	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	1.54	0.00133
Story3	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.33	0.00133
Story2	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	2.06	0.00131
Story2	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	1.82	0.00131
Story1	CORE LIFT-2	Top	Uniform	DB12	DB20	0.25	2.37	0.00099
Story1	CORE LIFT-2	Bottom	Uniform	DB12	DB20	0.25	2.39	0.00089

Wall Design - Page 6 of 6

K3-235

Story	Local Code	Direction	Label	X mm	Y mm	Z mm	Degr	Story Depth mm	Story Height mm	Allowable mm	Status
Roofup2	SPECX Max	X	429	-17.71	47.70	26.13	0.000191	4.30	0.00174	2.80	0.0200 OK
Roofup2	SPECX Max	Y	417	-24.75	48.80	26.13	0.000196	4.30	0.00083	2.80	0.0200 OK
Roofup2	SPECX Max	X	419	-17.13	48.80	26.13	0.000131	4.30	0.00130	2.80	0.0200 OK
Roofup2	SPECX Max	Y	417	-24.75	48.80	26.13	0.000100	4.30	0.00252	2.80	0.0200 OK
Roofup1	SPECX Max	X	131	-1.80	16.17	24.13	0.000004	4.30	0.00190	0.60	0.0000 OK
Roofup1	SPECX Max	Y	136	1.91	19.15	24.13	0.000112	4.30	0.00101	0.60	0.0000 OK
Roofup1	SPECX Max	X	131	-1.80	16.17	24.13	0.000102	4.30	0.00252	0.60	0.0000 OK
Roofup1	SPECX Max	Y	463	3.17	37.81	24.13	0.000000	4.30	0.00012	0.60	0.0000 OK
RWT	SPECX Max	X	134	-0.82	19.14	23.13	0.000011	4.30	0.00043	0.60	0.0000 OK
RWT	SPECX Max	Y	132	2.94	18.19	23.13	0.000021	4.30	0.00009	0.60	0.0000 OK
RWT	SPECX Max	X	134	-0.82	19.14	23.13	0.000101	4.30	0.00131	0.60	0.0000 OK
RWT	SPECX Max	Y	132	2.94	18.19	23.13	0.000021	4.30	0.00019	0.60	0.0000 OK
Roof	SPECX Max	X	17	0.00	0.00	22.91	0.000019	4.30	0.00011	2.81	0.0201 OK
Roof	SPECX Max	Y	457	13.30	11.38	22.91	0.000123	4.30	0.00043	2.81	0.0201 OK
Roof	SPECX Max	X	17	0.00	0.00	22.91	0.000109	4.30	0.00072	2.81	0.0201 OK
Roof	SPECX Max	Y	457	13.30	11.38	22.91	0.000117	4.30	0.00091	2.81	0.0201 OK
Story8	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story8	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story8	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story8	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story7	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story7	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story7	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story7	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story6	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story6	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story6	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story6	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story5	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story5	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story5	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story5	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story4	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story4	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story4	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story4	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story3	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story3	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story3	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story3	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story2	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story2	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story2	SPECX Max	X	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story2	SPECX Max	Y	406	14.00	-0.10	16.18	0.000912	4.30	0.00042	2.81	0.0201 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	X	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	0.0200 OK
Story1	SPECX Max	Y	412	13.10	0.91	0.10	0.001016	4.30	0.00079	2.10	