

A grayscale photograph of three students in a science laboratory. Two students in the foreground are looking down at a piece of equipment on a table, while a third student is visible in the background. The lab is filled with various scientific instruments, including microscopes and test tubes. The image has a dark, semi-transparent overlay with a fine grid pattern.

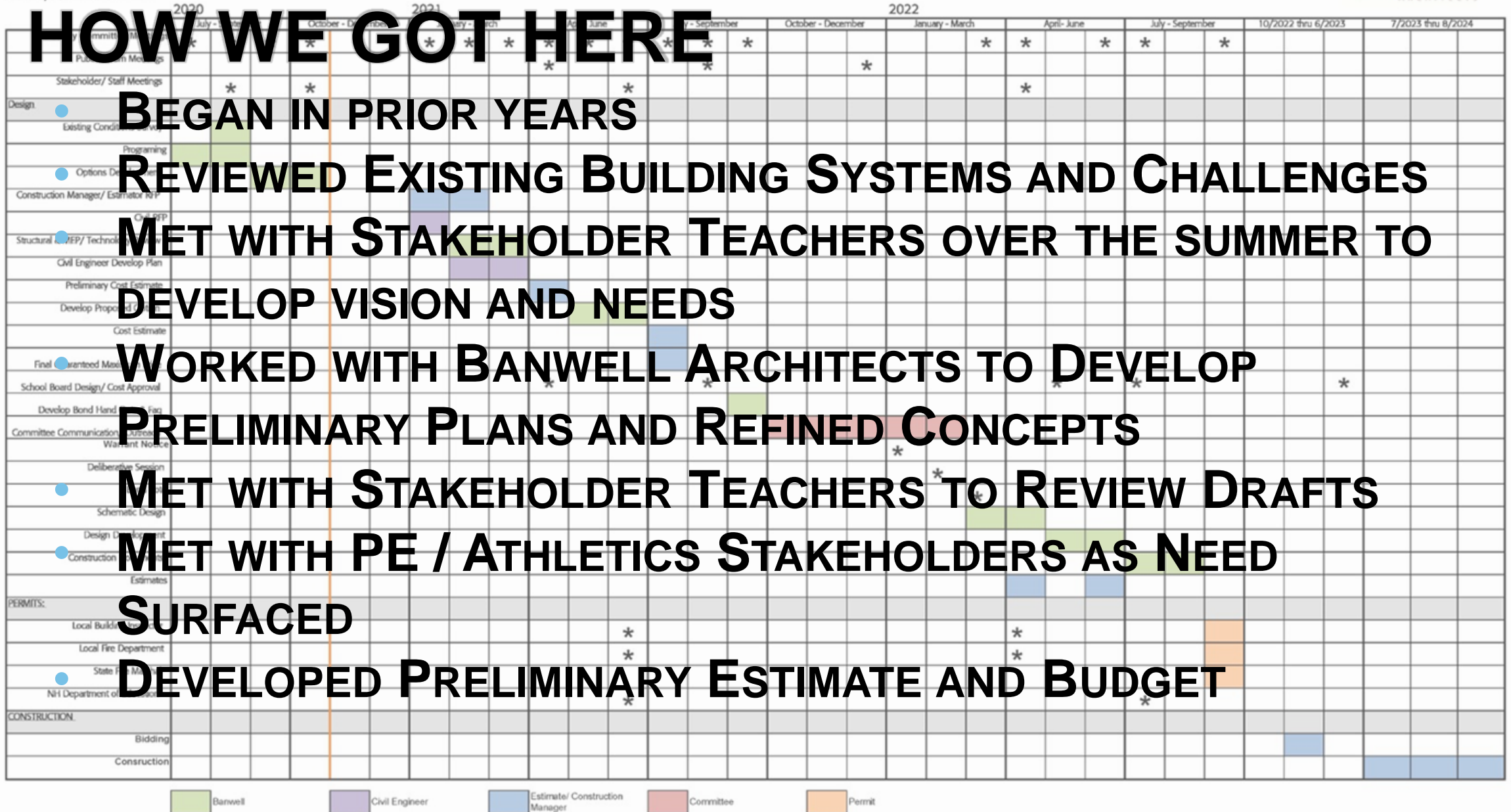
KEARSARGE REGIONAL HIGH SCHOOL:

S.T.E.A.M. WING PROPOSAL

PROGRAM REDESIGN

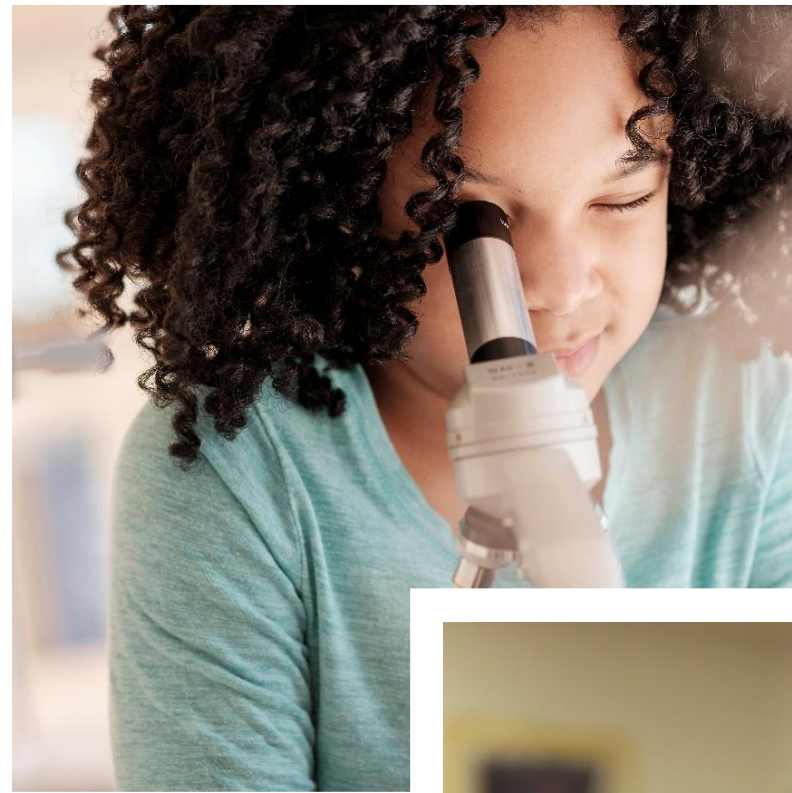
RENOVATION

NEW CONSTRUCTION



S.T.E.A.M.

- SCIENCE
- TECHNOLOGY
- ENGINEERING
- APPLIED ARTS
- MATHEMATICS



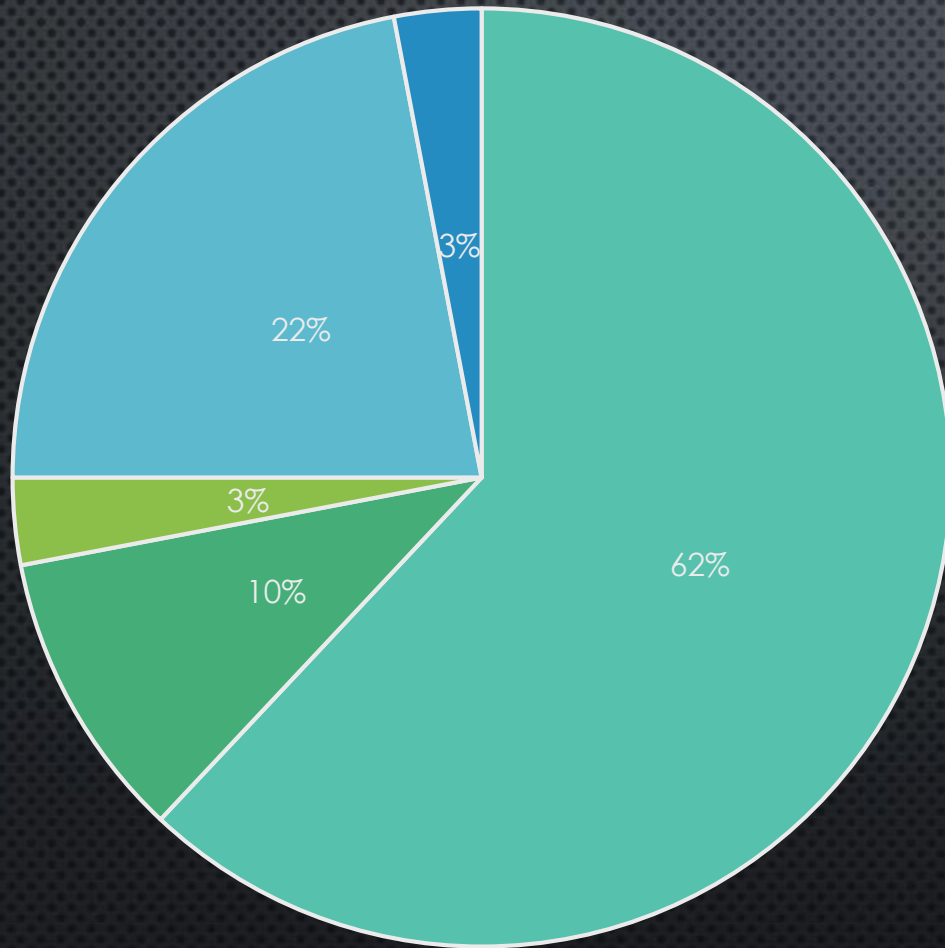
EXISTING S.T.E.A.M. PROGRAMS WITH *ADEQUATE* INSTRUCTIONAL SPACE

- SCIENCE (PHYSICS, BIOLOGY, CHEMISTRY LABS)
- MATHEMATICS
- PERFORMING ARTS (AUDITORIUM)

EXISTING S.T.E.A.M. PROGRAMS WITH *INADEQUATE* INSTRUCTIONAL SPACE

- COMPUTER SCIENCE, ROBOTICS
- TECHNICAL EDUCATION (TRADES, INQUIRY PRODUCTION)
- DIGITAL PHOTOGRAPHY, GRAPHIC DESIGN (PRINT PRODUCTION)
- ART
- CULINARY ARTS
- PERFORMING ARTS (BAND, CHORUS, THEATER)
- MEDIA PRODUCTION, COMMUNICATION, LEARNING COMMONS

- 4-Year College
- Military
- Other
- 2-Year College and Tech College
- World of Work or Apprenticeships



POST- SECONDARY PROFILE OF KEARSARGE GRADUATES (CLASS OF 2019)

21ST CENTURY PARADIGM SHIFT

OLD

- HIGH SCHOOL DIPLOMA
- COLLEGE DEGREE
- SEAT TIME AND CREDIT
- LIFELONG EMPLOYMENT

NEW

- CREDENTIAL
- CAREER PATHWAYS
- COMPETENCY
- ADAPTABILITY AND FLEXIBILITY



OUR VISION:

EXPANDED CAREER READINESS OPTIONS FOR ALL STUDENTS



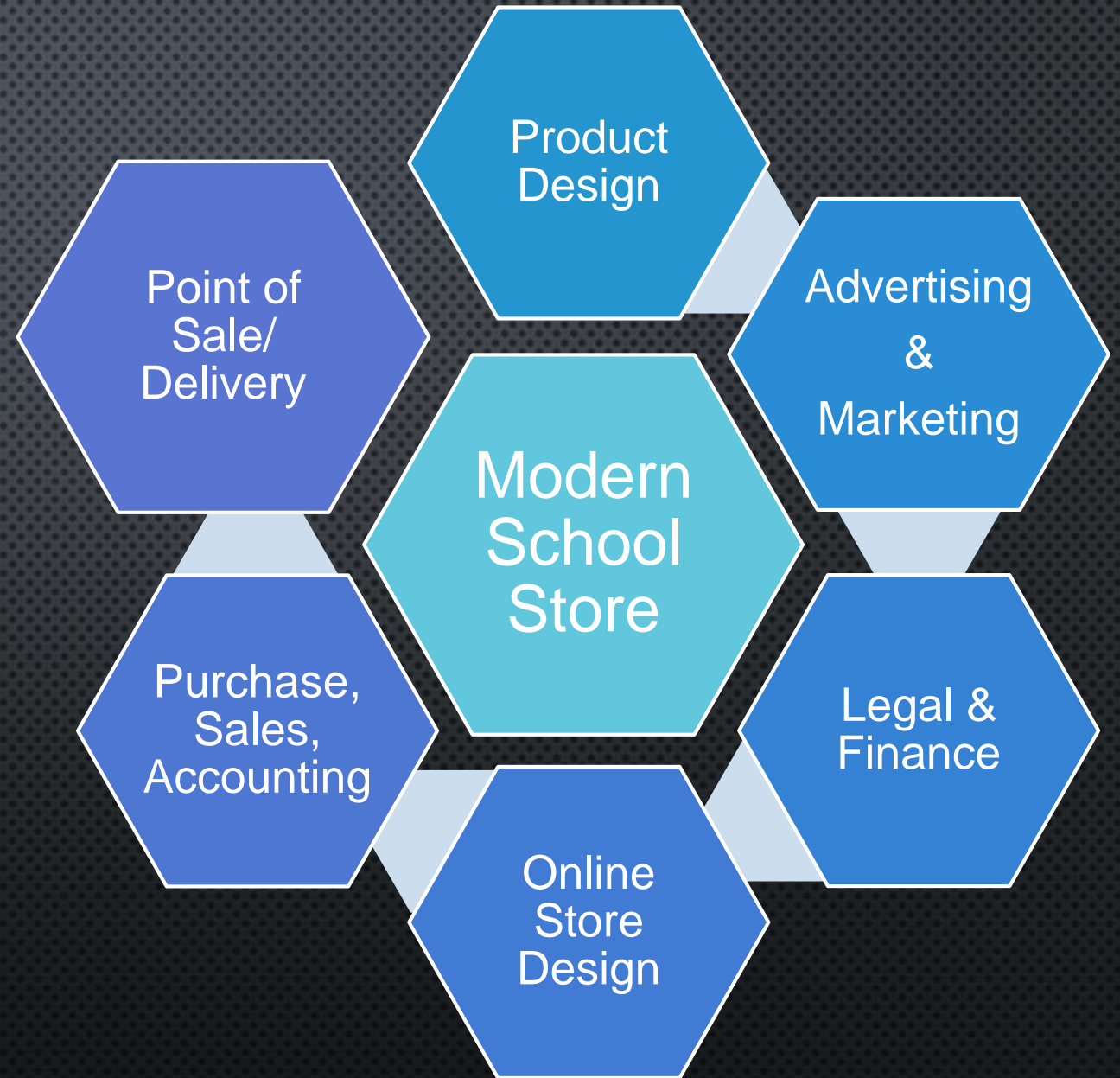
Develop local
options of career
education for
students with
vocational interests

Create additional
hands-on learning
resources beyond
CRTC

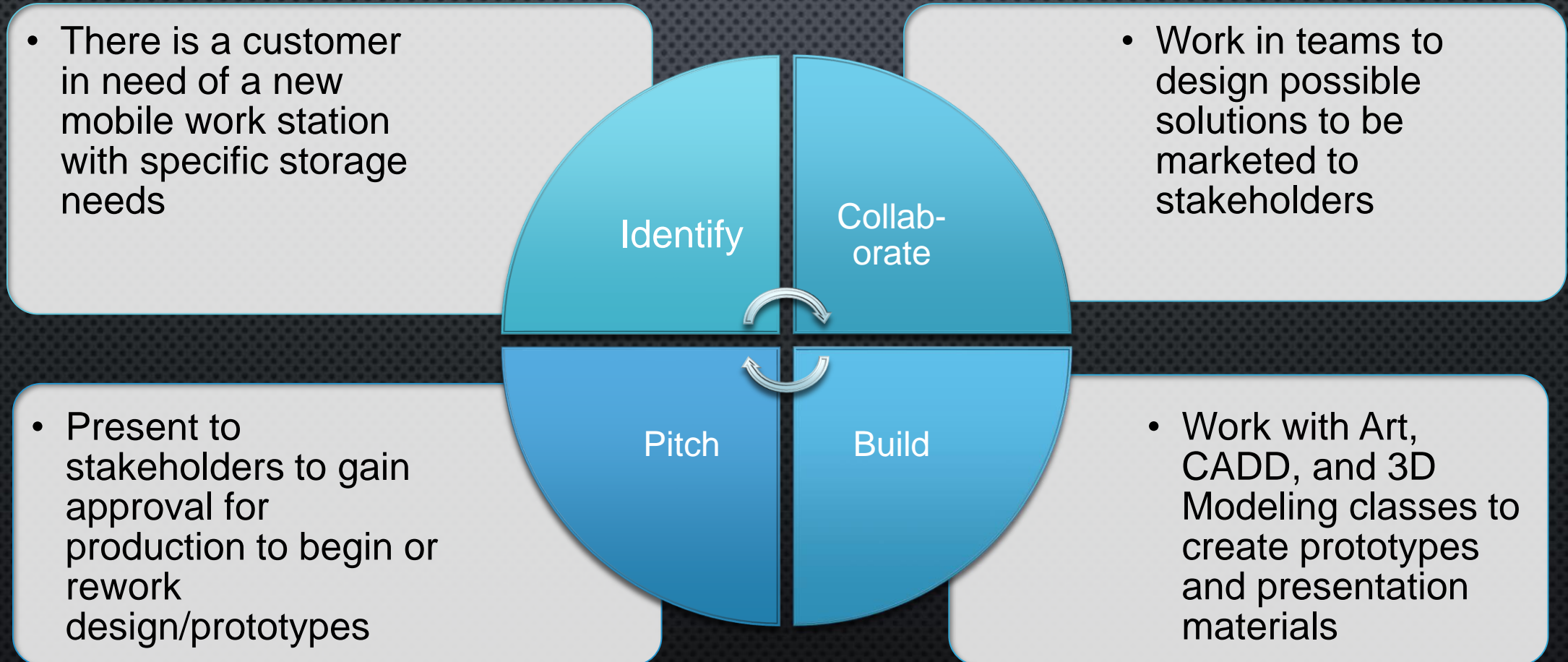
Focus on
competency and
project-based
learning (inquiry
education)

Expand trans-
disciplinary learning
options for all
students

CROSS- DISCIPLINARY S.T.E.A.M. LEARNING MODEL:



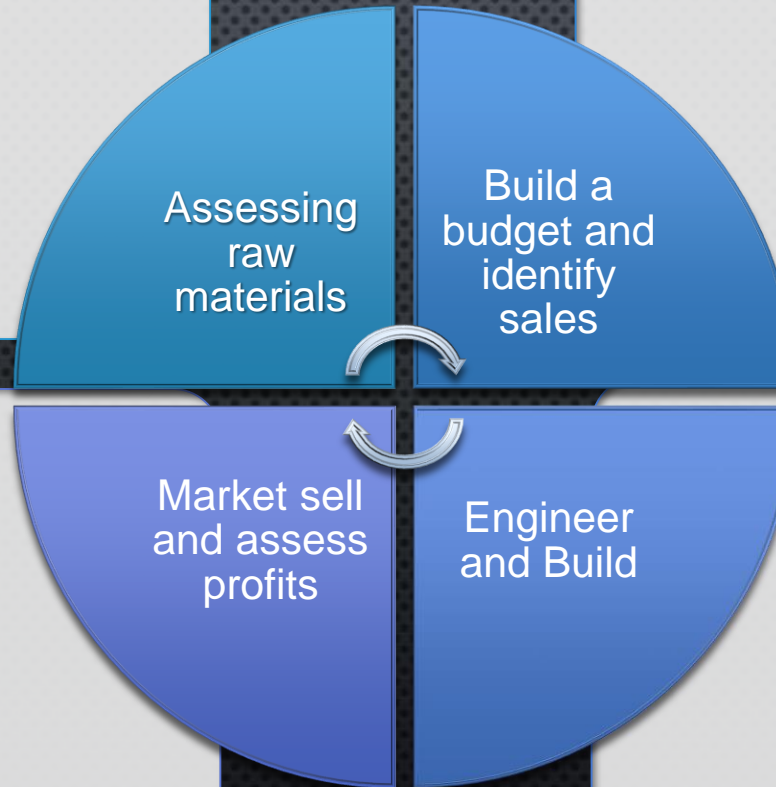
INQUIRY BASED S.T.E.A.M. LEARNING MODEL:



INQUIRY BASED S.T.E.A.M. LEARNING MODEL:

- Take the prototype and design to Manufacturing to procure raw materials

- Take costs of materials, labor, production expenses through Accounting and Marketing



- Set up the school store, sell the product and evaluate price point, sales, and production through Accounting

- Build templates, program equipment, robots, etc. to build the item(s) and produce the items

KEY ELEMENTS OF RENOVATED/EXPANDED SPACES

- TWO ART CLASSROOMS, ONE FOR 2-D AND 3-D (DRAWING, PAINTING, CERAMICS, SCULPTURE, JEWELRY)
- CULINARY (MEET NEEDS OF 3 SPACES: KITCHEN; EATING/SERVING; TEACHING)
- GRAPHIC DESIGN / PHOTOGRAPHY (PRINTING TO MOVE TO SHARED SPACE)
- MUSIC (INCREASE SIZE OF GENERAL CLASSROOM)
- INSTRUMENTAL INSTRUCTION AND PRACTICE (CONSOLIDATE / EXPAND INTO MORE FUNCTIONAL ROOMS)
- S.T.E.A.M. / COMPUTER SCIENCE LAB (IMPROVED FOCUS AND FUNCTION)
- TECHNICAL EDUCATION (IMPROVED STORAGE, MODERN MANUFACTURING SPACE, SPACE FOR COLLABORATIVE DESIGN)

RENOVATION/EXPANSION (EXISTING)

- TECH ED / WOODSHOP (EXPAND AND RECONFIGURE)
- THEATER AND PERFORMING ARTS (COSTUME STORAGE, IMPROVED BACK OF STAGE, PROP STORAGE)
- LEARNING COMMONS / LIBRARY (REPURPOSE, RECONFIGURE)
- GRAPHIC ARTS (EXPAND TO INCLUDE AUDIO-VISUAL RECORDING AREA (GREEN ROOM) AND EQUIPMENT, STORAGE)



NEW CONSTRUCTION OF NON-EXISTENT EDUCATIONAL SPACES

- FLEXIBLE CLASSROOM SPACES (3 INSTRUCTIONAL AND WORK SPACES FOR MULTIPLE PURPOSE AND USE FOR CULINARY/S.T.E.A.M. PROGRAM)
- 3-D ART ROOM (CLASSROOM, KILN ROOM, STORAGE)
- CULINARY (INSIDE AND OUTSIDE DINING AREA WITH SERVING COUNTER, POINT OF SALE, HOSTESS STATION, SEATING FOR 10)
- CULINARY (KITCHEN LAB, OFFICE, BATHROOM, DISHWASHING)
- MUSIC STORAGE AND OFFICES
- ROBOTICS LAB

NEW CONSTRUCTION (CONT'D)

- TECH EDUCATION LAB / ART FINISHING SPACE; VENTILATED SPRAY BOOTHS, COMPRESSOR CLOSET
- STORAGE FOR ROBOTICS, DESIGN WORK, SCIENCE, WOOD
- PERFORMING ARTS (DRESSING ROOMS, GREEN ROOM, BATHROOM, SET / PROP STORAGE, PERFORMER BATHROOM)
- NEW MAIN ENTRANCE, CENTRALIZED STAFF ROOM, SCHOOL ADMINISTRATIVE OFFICE RELOCATION



PHYSICAL EDUCATION / ATHLETICS

- PROPER PRIVATE AND SECURE ATHLETIC TRAINING SPACE
- MODERNIZED LOCKER ROOMS/TEAM SPACES
- SPACE FOR REFEREES/ADULTS SEPARATE FROM STUDENTS
- UPDATED CONCESSIONS
- STORAGE FOR FLOOR COVERINGS AND MACHINES
- IMPROVED AND ADDED STORAGE FOR PE

MAINTENANCE ENHANCEMENTS

- ROOF REPLACEMENT WITH STRUCTURAL ENHANCEMENTS
- BUILDING GENERATOR
- REPLACE AND REPAIR PLUMBING INSULATION
- REPLACE PLUMBING ISOLATION VALVES
- CLEAN EXISTING DUCTWORK

MAINTENANCE ENHANCEMENTS (CONT.)

- UPGRADE HVAC TO DDC (DIRECT DIGITAL CONTROL) SYSTEM
- REPLACE ACCU (AIR COOLED CONDENSING UNIT) AND EXHAUST IN AUDITORIUM
- REPLACE 3 EXISTING RTUs (ROOFTOP UNITS) AT COMMONS AREA
- REPLACE AHUs (AIR HANDLER UNITS) AND EXHAUST FANS IN GYMNASIUM
- RETRO COMMISSION EXISTING SYSTEMS
- REPLACE ALL 50-YEAR-OLD HEATING AND BALANCING VALVES
- REBALANCE ALL EXISTING AIR AND WATER SYSTEMS
- REPLACE FEDERAL PACIFIC TRANSFORMERS
- BUILDING-WIDE LUMINAIRE AND CONTROL REPLACEMENT



TAX MAP 5 LOT 506.365
OVERALL SITE PLAN - CONCEPT 1
KEARSARGE REGIONAL HIGH SCHOOL
457 NORTH ROAD, NORTH SUTTON, NH
 OWNED BY/PREPARED FOR
SAU 65

SCALE: 1" = 60' MAY 4, 2021

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Horizontal Scale 1" = 60'

NO.	DATE	DESCRIPTION	BY	CHK
1	4/28/2021	PRELIMINARY SITE PLAN	JP	OK
2	5/12/2021	ADJUST BOUNDARY	JP	OK

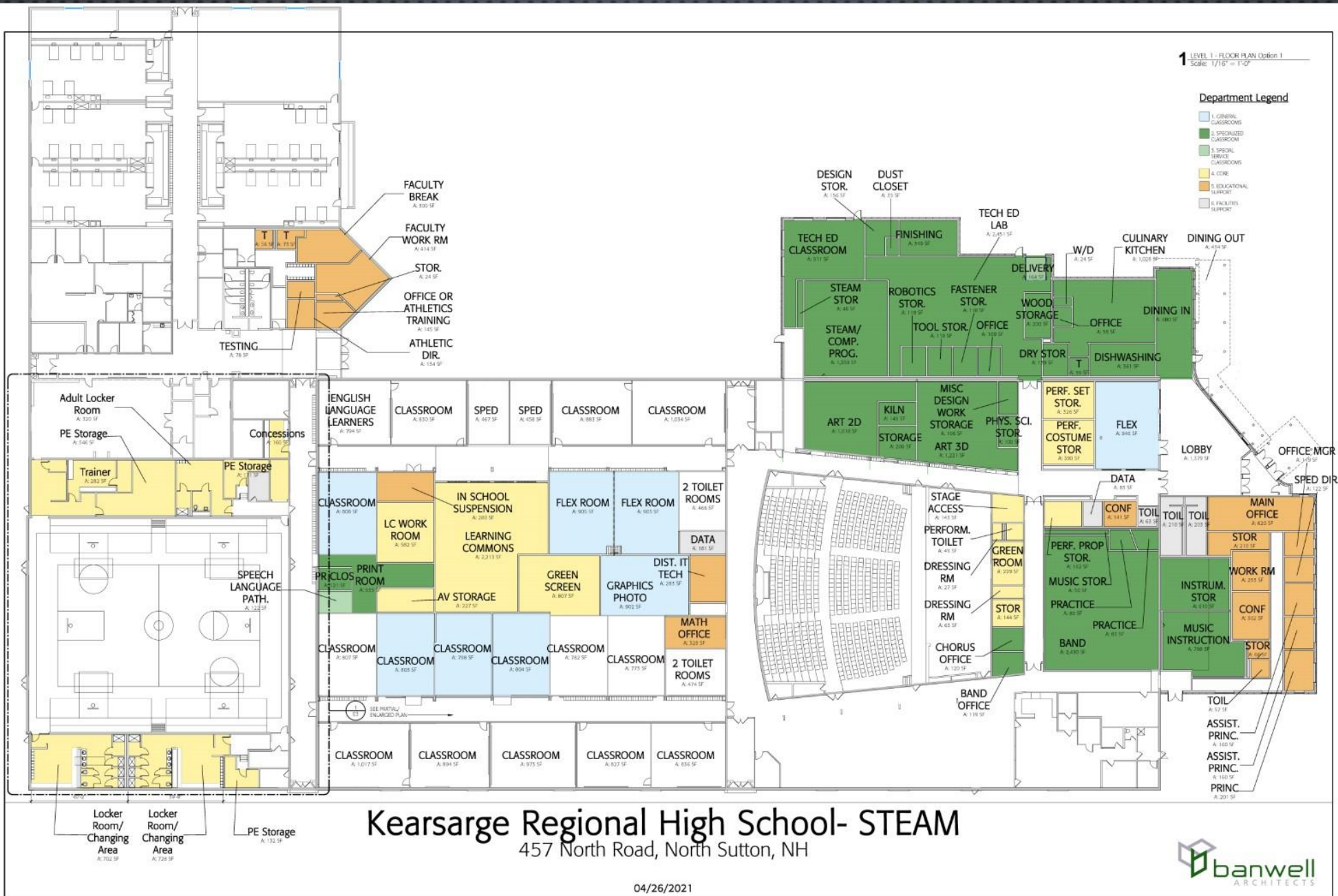
TFM
 Civil Engineers
 Structural Engineers
 Traffic Engineers
 Land Surveyors
 Landscape Architects
 Scientists

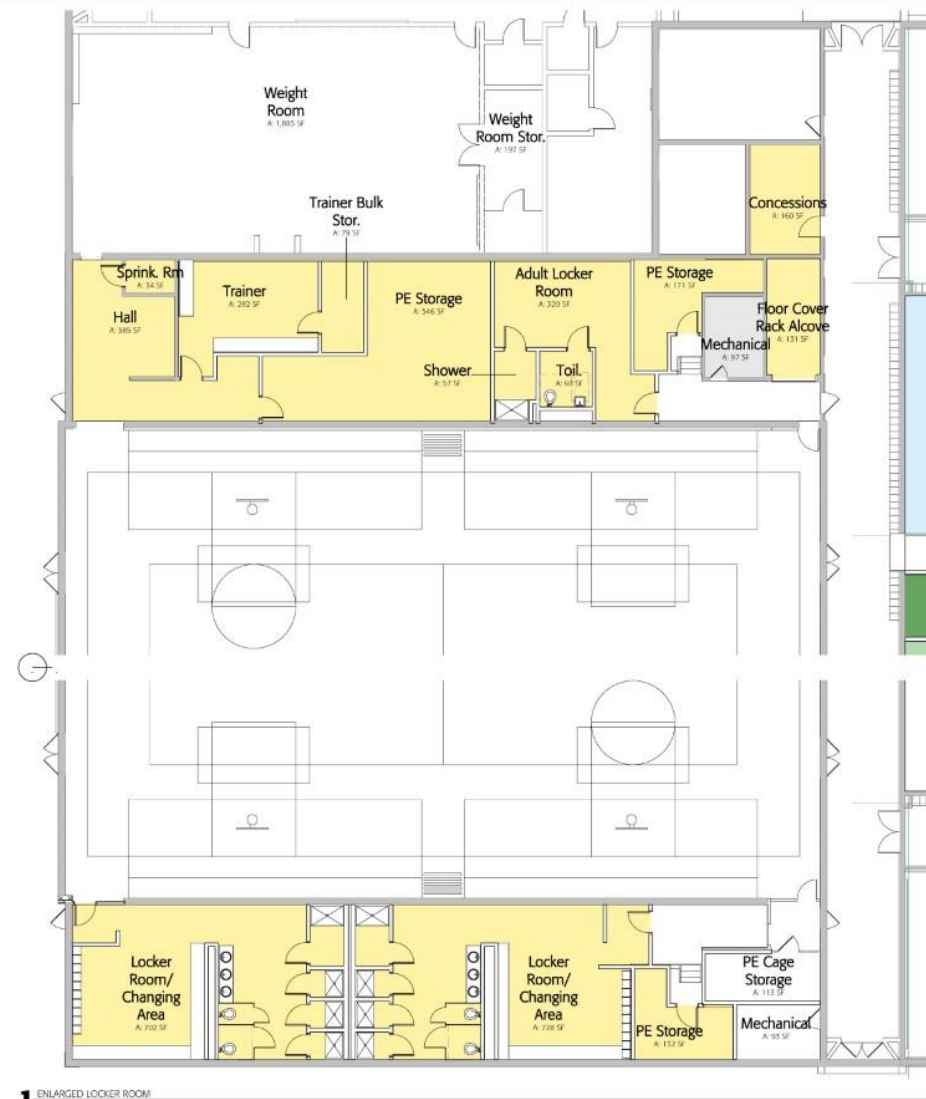
45 Cavendish Drive
 Bedford, NH 03110
 Phone (603) 472-4400
 Fax (603) 472-4747
 www.tfm-inc.com

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 04 000 10
 04 000 10

SHEET 1 OF 1

1 LEVEL 1 - FLOOR PLAN Option 1
Scale: 1/16" = 1'-0"





Kearsarge Regional High School- STEAM

457 North Road, North Sutton, NH

04/1/2021

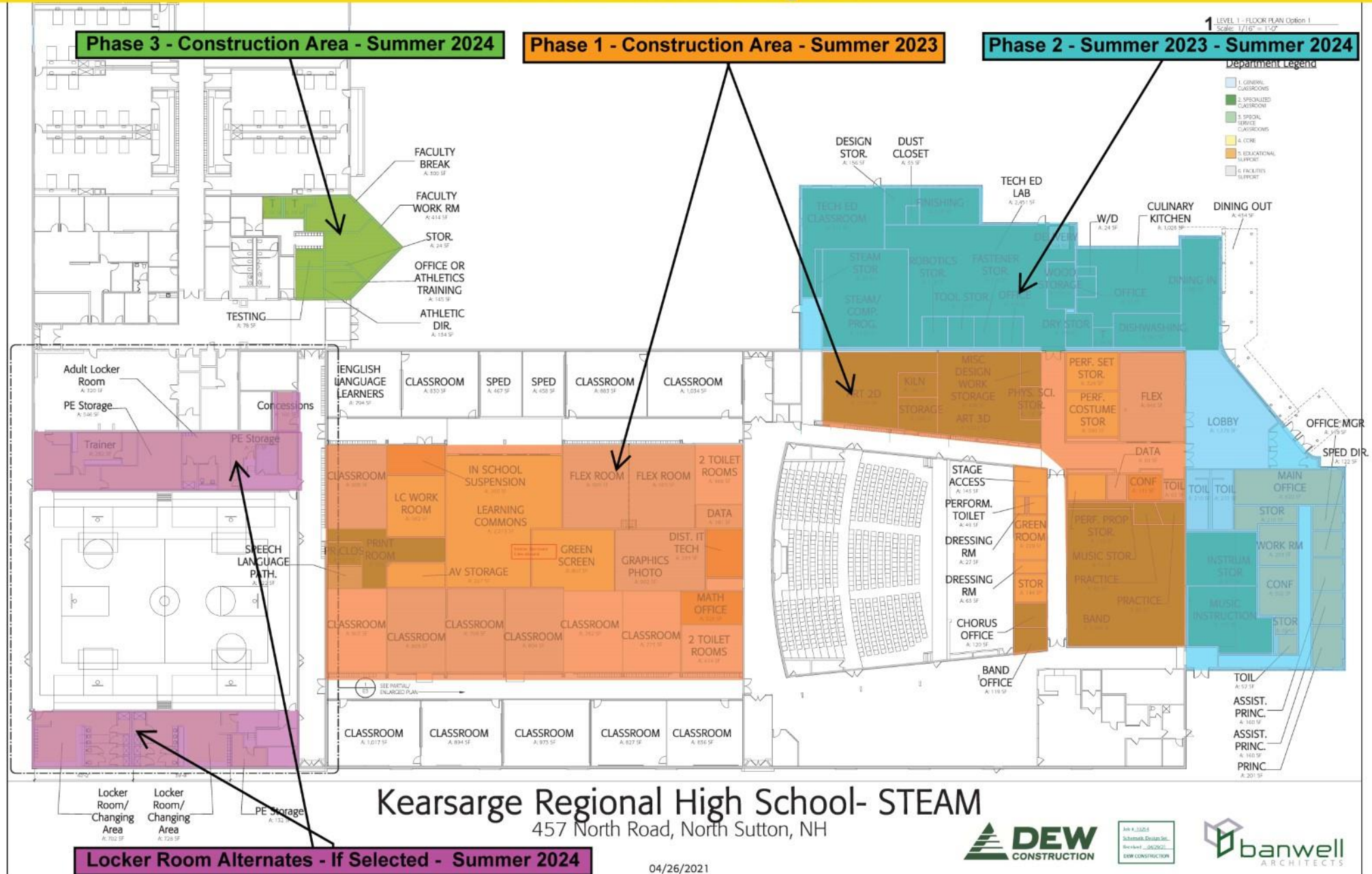
WELCOME TO
KEARSARGE REGIONAL HIGH SCHOOL:
HOME TO INNOVATIVE EDUCATION FOR ALL LEARNERS





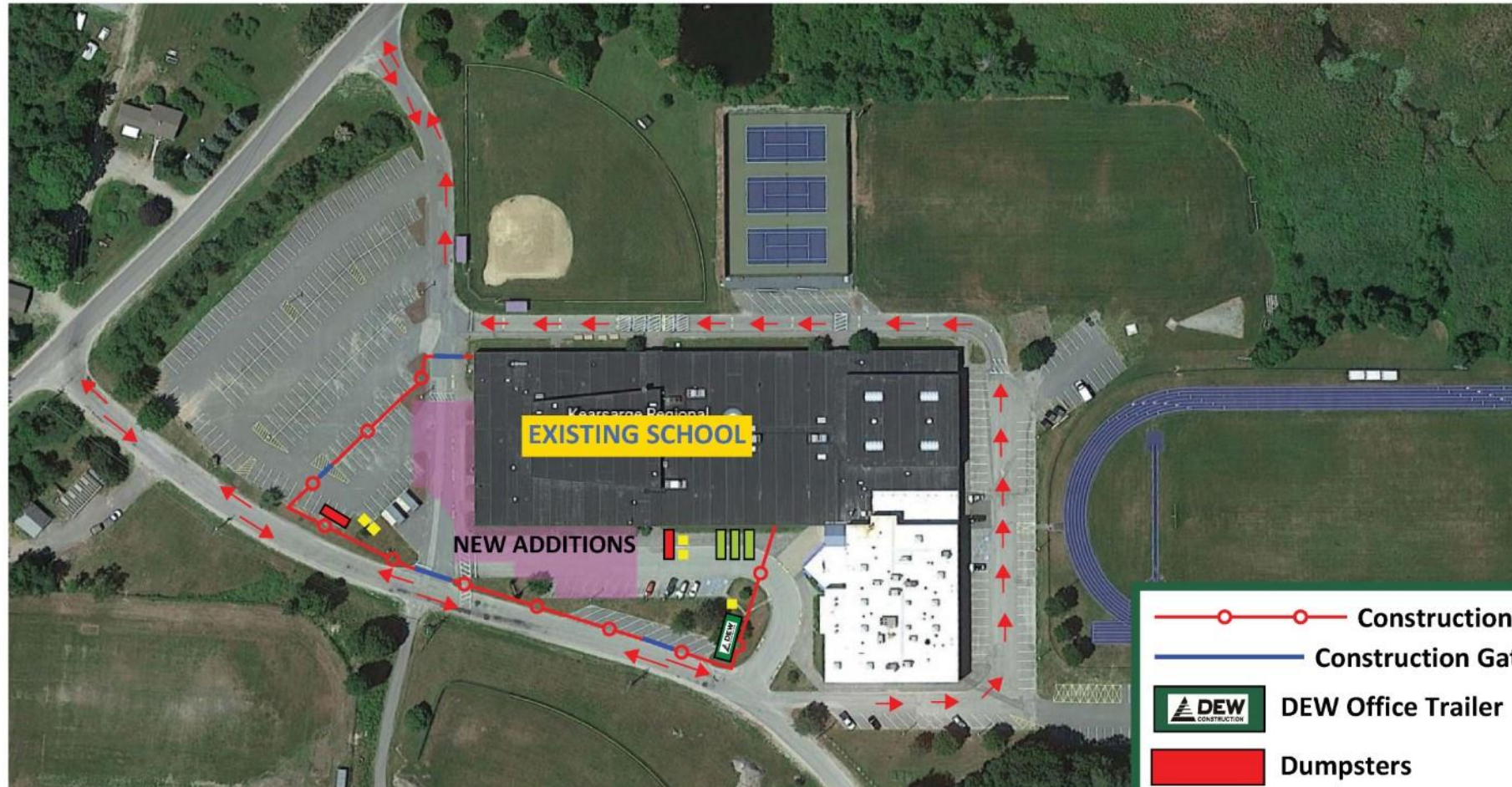


KRHS - Interior Phasing Plan





KRHS - Logistics Plan (June 2023 - June 2024)



- Construction Fence
- Construction Gates
- DEW Office Trailer
- Dumpsters
- Connex Storage
- Porta Lavs
- Traffic



June 03, 2021

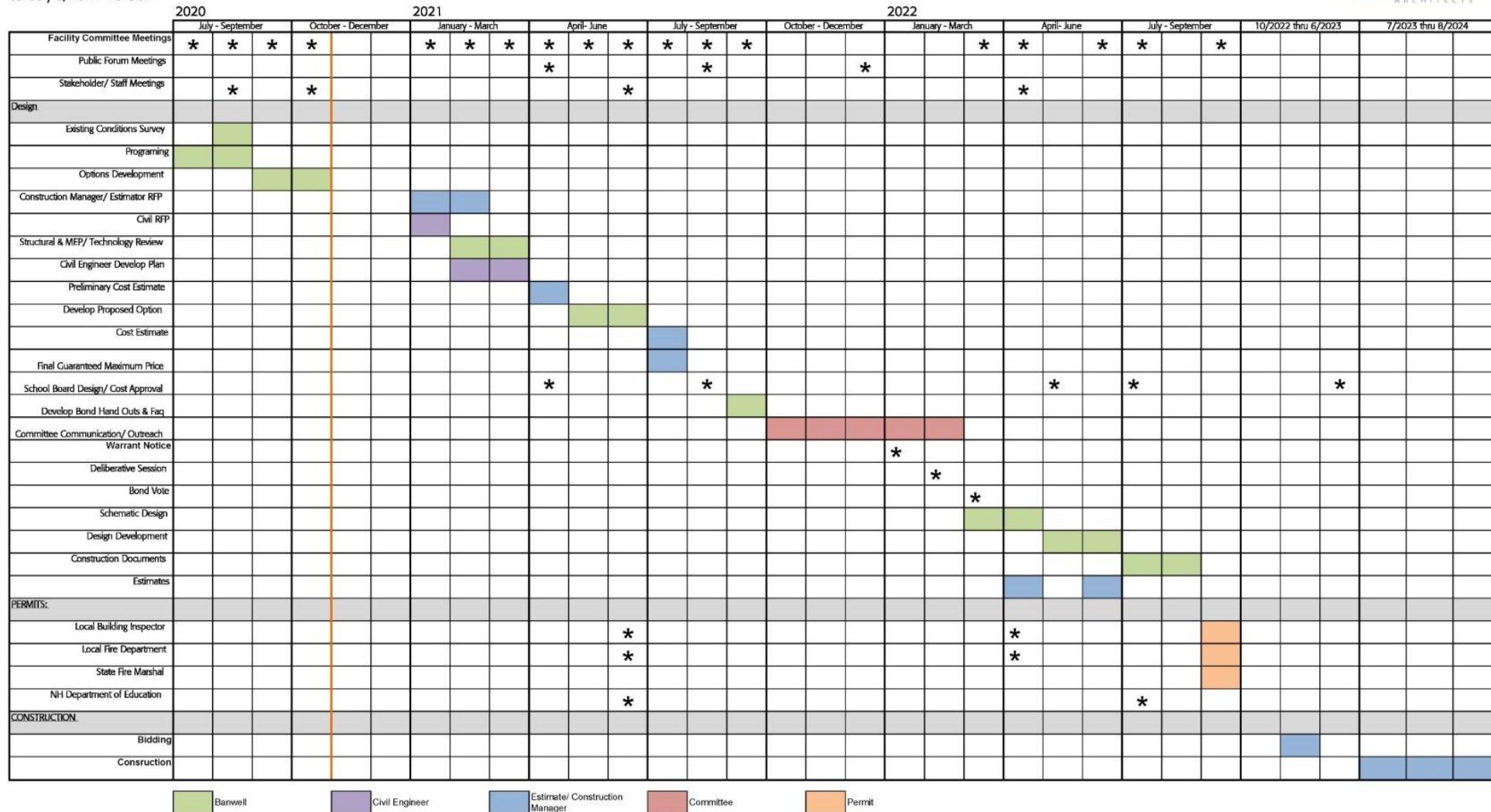
COST ESTIMATE

STEAM Base Scope (Addition/ Reno)	
Alternates	
• Roof Replacement	
• PE Commons	
• Maintenance Enhancements	
• Building Generator	
TOTAL:	\$22,270,244

NEXT STEPS

- GAIN DIRECTION FROM SCHOOL BOARD FOR FINAL PLAN
- COMMUNITY OUTREACH THROUGH CONTINUED PUBLIC/COMMUNITY FORUMS, MEDIA, AND WEB
- PURSUE ALTERNATIVE FUNDING FOR PROJECT
 - FUNDRAISING CAMPAIGN
 - COLLABORATION WITH LOCAL BUSINESS AND MANUFACTURING COMPANIES
 - STATE FUNDING
- DEVELOP WARRANT AND FINAL COST/FINANCING ESTIMATE
- BOND VOTE

Kearsarge Regional High School STEAM
Sutton, NH
PROJECT SCHEDULE DRAFT
January 8, 2021- Revision



A grayscale photograph of three students in a science laboratory. Two students in the foreground are looking at a book or document, while a third student is partially visible on the right. Microscopes and other lab equipment are on the table. The image has a dark, textured overlay.

TOGETHER...

**INNOVATIVE EDUCATION
FOR ALL LEARNERS**

QUESTIONS & COMMENTS:

S.T.E.A.M Wing Proposal

HEALTHY AND GREEN DESIGN ELEMENTS

- MINIMIZE IMPERVIOUS AREA OF SITE
- RETAINING MOST OF THE EXISTING SCHOOL
- ELECTRIC VEHICLE CHARGING STATIONS
- SMART DAYLIGHTING (SKYLIGHTS AND CLERESTORIES)
- NO INEFFICIENT PORTABLES/MODULAR
- LOW AIR INFILTRATION ENVELOPE AT ADDITIONS
- Low VOCs
- INDOOR AIR QUALITY WALKING GRATES/ENTRANCES
- RECYCLED 70% OF CONSTRUCTION WASTE
- INCREASE TO ROOF INSULATION
- LOW E GLASS
- HIGH EFFICIENCY MECHANICAL EQUIPMENT

HEALTHY AND GREEN DESIGN ELEMENTS (CONT.)

- HIGH EFFICIENCY BOILERS
- BUILDING MANAGEMENT SYSTEM, DIGITAL (SCHEDULED AND REMOTE)
HVAC CONTROLS
- DEMAND CONTROL VENTILATION (CO₂)
- LED LIGHTING
- SMART CONTROL LIGHTING



TAX MAP 5, LOT 506-365
EXISTING CONDITIONS PLAN
KEARSARGE REGIONAL HIGH SCHOOL
457 NORTH ROAD, NORTH SUTTON, NH
OWNED BY/PREPARED FOR
SAU 65

SCALE: 1" = 60'

FEBRUARY 26, 2021

Civil Engineers
Structural Engineers
Surveyors and Surveyors
Landscape Architects
Planners

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04 05 06 07 08 09 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

APPENDIX C

SHEET 1 OF 1



May 27, 2021 - 10:38:00
 Full M Project 2018 New Image, Ring HB - N. Sultan, 19405116-01, 162, Image H.S. - Our Eng. Service 19501901 - C&D Design Production Engineering 19501901 19501901

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HORIZONTAL SCALE 1"=60'

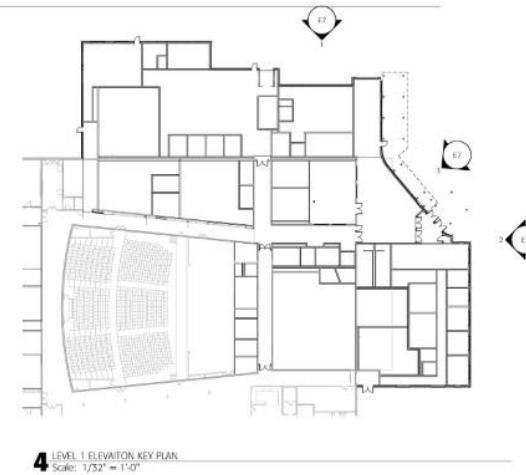
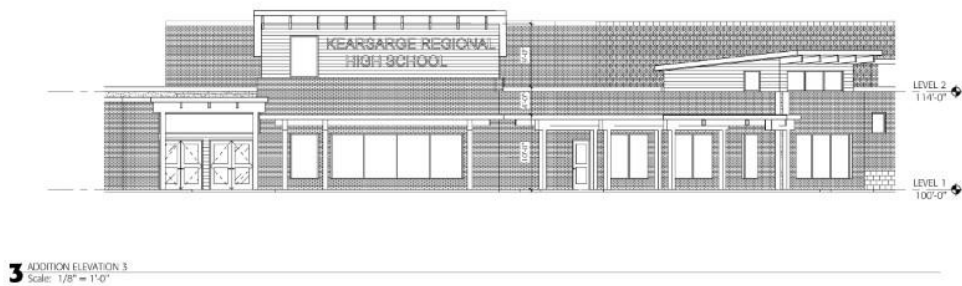
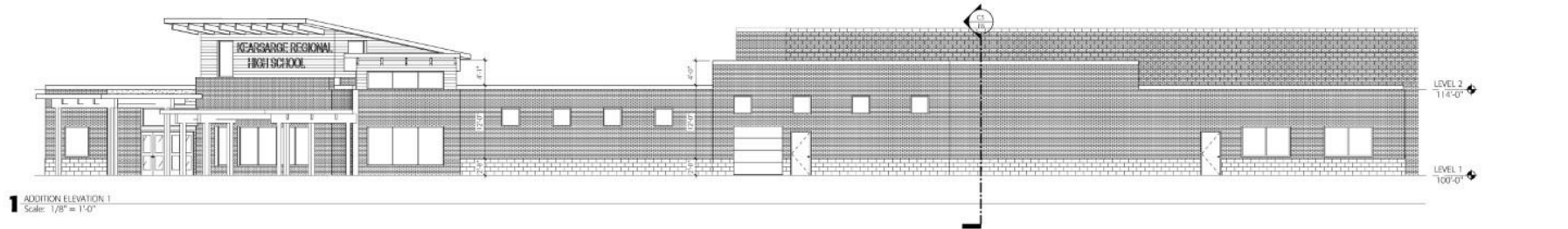
LINE NO.	DATE	DESCRIPTION	AMOUNT	CHECK NO.
1	4/25/2021	REUSE FIBER OF PAVEMENT AT RPOD ADDITION	500.00	JK
2	4/25/2021	ADJUST BUS ROUTE	500.00	JK
3	4/25/2021	DESCRIPTION	500.00	JK

TAX MAP 5 LOT 608-365
OVERALL SITE PLAN - CONCEPT 2
KEARSARGE REGIONAL HIGH SCHOOL
457 NORTH ROAD, NORTH SUTTON, NH
OWNED BY / PREPARED FOR
SAU 65
SCALE: 1" = 80'
MAY 4, 2021

TFM Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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96018.01	DR	SAP	FB	-	SHEET 1 OF 1
	OK	JA	CADRE	96018-DR SITE	



Kearsarge Regional High School- STEAM

457 North Road, North Sutton, NH

04/26/2021



Kearsarge Regional High School- STEAM

457 North Road, North Sutton, NH

04/26/2021

