APPENDIX

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- 02 GREENING SCORE BY SCHOOL
- 03 ADDITIONAL RESOURCES



LANDELS ELEMENTARY SCHOOL

INITIAL SITE ANALYSIS | JULY 2023



LANDELS ELEMENTARY SCHOOL

GREENING INDEX ANALYSIS | APRIL 2024

160













LANDELS ELEMENTARY SCHOOL

SITE PHOTOS | MARCH 2023













LANDELS ELEMENTARY SCHOOL

SITE PHOTOS | MARCH 2023

LANDELS METRIC CHECKLIST: PHYSICAL COMFORT



1	Seating areas are sheltered from sun, rain, and wind			
2	Multiple seating areas for different group sizes and activities, with at least one space for large school functions			
3	Learning and gathering areas are accessible and comfortable to students of all relevant ages and abilities			
4	Visual screening between campus and neighboring areas; planting buffers nearby noise			
5	Tree canopy will eventually cover 30% of school property			
6	Forest or grove setting			
7	Natural materials (mulch, decomposed granite, stone, etc.) are accessible for physical interaction			
8	Shaded, comfortable lunch area	/		
9	Existing shaded spaces are programmed to encourage use			
10	Heat island effect mitigated by painting asphalt with lighter, more reflective colors			
	TOTAL SCORE: PHYSICAL COMFORT			



ADDITIONAL NOTES

Seating areas are mostly under the solar panels.

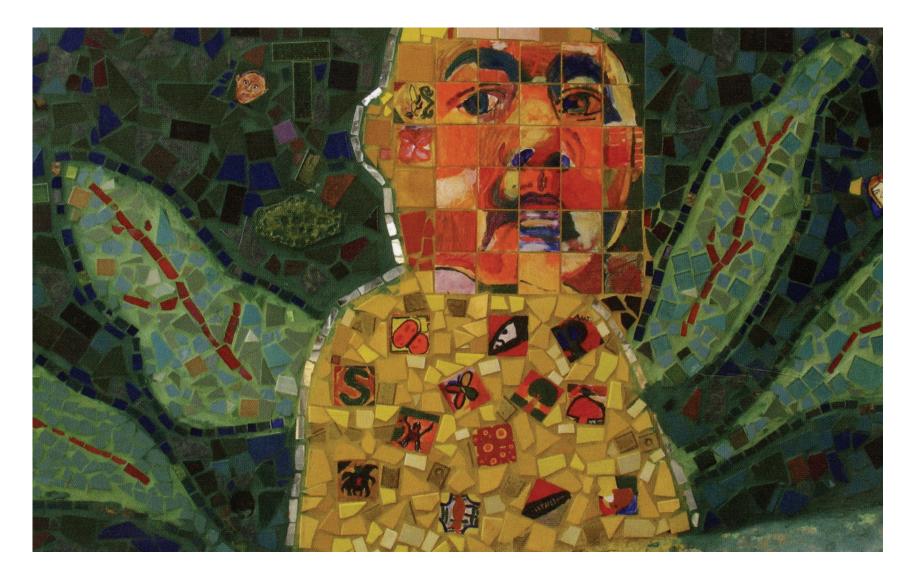
SCORING GUIDE:

0-3 \checkmark 's = NEEDS WORK | 4-7 \checkmark 's = ADEQUATE | 8-10 \checkmark 's = EXCELLENT

LANDELS METRIC CHECKLIST: MENTAL WELL-BEING



1	Quiet, semi-private spaces for contemplation			
2	Outdoor spaces for conflict resolution, and emotional & physical regulation are adjacent to classrooms			
3	Use zones on campus are laid out and defined to minimize conflict			
4	Opportunities for student horticulture	/		
5	Planting and materials engage all five senses			
6	Therapeutic interventions: sensory wall, walkway, auditory features			
7	Therapeutic interventions are accessible to the whole school population			
8	Student creations are used or on display			
9	Space for art production and/or performance			
10	ELEMENTARY: Space for messy play in a managed/controlled space (eg. mud table) MIDDLE: Spaces for socializing in various group sizes			
	TOTAL SCORE: MENTAL WELL-BEING			



ADDITIONAL NOTES

New outdoor learning space provides many opportunities for use.				

SCORING GUIDE:

0-3 \checkmark 's = NEEDS WORK | 4-7 \checkmark 's = ADEQUATE | 8-10 \checkmark 's = EXCELLENT

LANDELS METRIC CHECKLIST: EXPLORATION & DISCOVERY



1	Areas with varied topography			
2	Environment is explicitly designed to change with climate & weather conditions over time, and for student engagement			
3	At least one natural structure provides an outdoor "destination"			
4	Areas for native wildlife habitat			
5	Variety of tree types (deciduous/evergreen, small/large)	/		
6	Diverse planting palette without Cal-IPC-identified invasives species*			
7	ELEMENTARY: Nature play opportunities (informal play with natural materials) MIDDLE: Outdoor Science Laboratory			
8	ELEMENTARY: Nature play area compliments the traditional play structures and opportunities MIDDLE: Discovery Path connects distinct spaces around the campus			
9	ELEMENTARY: Movable/flexible play elements MIDDLE: Customizable outdoor space with movable furnishings			
10	ELEMENTARY: Nature play elements allow for vestibular movement MIDDLE: Natural areas with opportunities for physical challenges (e.g. a "Confidence Course")			
	TOTAL SCORE: EXPLORATION & DISCOVERY			

SCORING GUIDE:

0-3 \checkmark 's = NEEDS WORK | 4-7 \checkmark 's = ADEQUATE | 8-10 \checkmark 's = EXCELLENT



ADDITIONAL NOTES

Build on outdoor learning space (enhance it).

Creating experiences that can be used daily/frequently.

*Cal-IPC (California Invasive Plant Council) works to stop the spread of invasive plants across California They lists invasive plants on their website: https://www.cal-ipc.org/plants/inventory/

LANDELS METRIC CHECKLIST: OUTDOOR LEARNING



1	Facilitate and support student understanding of their environment through data collection, informed observations and guided learning	
2	Outdoor learning garden provides opportunities for students to participate in every stage of gardening (seeding, planting, harvesting, composting)	
3	Outdoor learning garden has seating, water, secure storage, and an appropriate number of raised beds	
4	Outdoor learning garden is shaded for comfort	
5	There is an outdoor space suitable for classroom instruction	/
6	District's maintenance staff is familiar with Bay-Friendly and other sustainable maintenance practices	
7	School organizes community maintenance days	/
8	Native plant garden or native planting throughout outdoor areas increases local ecological literacy	
9	Educational signage and/or artwork makes cultural references to local community	
10	Green infrastructure* is visible through signage and/or design	
	TOTAL SCORE: OUTDOOR LEARNING	

SCORING GUIDE:

0-3 \checkmark 's = NEEDS WORK | 4-7 \checkmark 's = ADEQUATE | 8-10 \checkmark 's = EXCELLENT



ADDITIONAL NOTES

PTA and Hands-on Bay Area come to site to perform volunteer opportunities.

*Green infrastructure filters and absorbs stormwater through a combination of natural and built materials. Examples of green infrastructure include: rain gardens, bioswales, infiltration basins, green roofs, permeable paving, subsurface detention systems.

LANDELS METRIC CHECKLIST: OPERATIONS & SUSTAINABILITY



1	Planting suited to the regional climate and campus microclimates			
2	Plants are irrigated with efficient systems			
3	Stormwater is actively captured and/or infiltrated on site			
4	Lawn limited to necessary areas (playfields, etc.)			
5	Impermeable surface limited to necessary areas (ball play, circulation, etc.)	/		
6	Library has adjacent seating/instructional outdoor space			
7	Existence of a schoolyard committee (dedicated or part of a related group)			
8	School community outside of maintenance staff (students included) involved in schoolyard stewardship			
9	School has acquired outside resources (community partnerships and/or funding) for outdoor greening & learning	/		
10	School has an action plan/design vision for future school site improvements			
	TOTAL SCORE: OPERATIONS & SUSTAINABILITY	2		



ADDITIONAL NOTES

SCORING GUIDE:

0-3 \checkmark 's = NEEDS WORK | 4-7 \checkmark 's = ADEQUATE | 8-10 \checkmark 's = EXCELLENT

LANDELS METRIC CHECKLIST: STUDENT SAFETY & EXPERIENCE



1	Natural features define and reinforce the schoolyard boundary with public shared-use areas	
2	Natural features define and reinforce distinct outdoor spaces	
3	School entry reflects greening and sustainability objectives	
4	Waiting areas for pickup and dropoff have suitable amenities (shelter, seating, adequate visibility)	
5	Site exiting and accessibility requirement are maintained	/
6	Movement between outdoor spaces is fluid	
7	Recreation is encouraged in supervised areas of campus are easily accessible from school buildings	/
8	Gathering spaces for small groups in a natural setting	
9	Outdoor learning garden is secure but visible through gates, fencing and/or planted screens	<u></u>
10	Loose materials are not sharp or heavy and tripping hazards are mitigated	
	TOTAL SCORE: STUDENT SAFETY & EXPERIENCE	4



ADDITIONAL NOTES

Kinder play yard is rusted/boarded off for safety.				

SCORING GUIDE:

0-3 \checkmark 's = NEEDS WORK | 4-7 \checkmark 's = ADEQUATE | 8-10 \checkmark 's = EXCELLENT

LANDELS SUMMARY: SCHOOL GREENING SCORES



RANKING LEGEND:

NEEDS WORK: 0-3 **√**′s ADEQUATE: 4-7 **√**′s EXCELLENT: 8-10 **√** 's

GREEN SPACE (SF PER STUDENT)	SHADED SPACE (SF PER STUDENT)	SHADED SPACE: TREE CANOPY (SF PER STUDENT)	OPEN SPACE: SCHOOLS (SF PER STUDENT)	OPEN SPACE: CITY PARKS (SF PER STUDENT)
606	260	81	1,010	2,347

RANKING LEGEND:

RANKS IN THE LOWEST 4 RANKS INTHE MIDDLE 4 RANKS INTHETOP 3

SHADED SPACE: TREE CANOPY (SF, % TOTAL SPACE) 68,162 **(21%)**

RANKING LEGEND:

NEEDS WORK: 0-14% tree canopy shade of total area ADEQUATE: 15-29% tree canopy shade of total area **EXCELLENT:** 30% or more tree canopy shade of total area

Transfer scores from category assessment pages



PHYSICAL COMFORT



MENTAL WELL-BEING



EXPLORATION & DISCOVERY



OUTDOOR LEARNING



OPERATIONS & SUSTAINABILITY



STUDENT SAFETY & EXPERIENCE

LANDELS GREENING PRIORITIES*



PHYSICAL COMFORT

- 1 More tree placement on interior of campus, especially around high use areas
- 2 Forest or Grove Setting
- 3 Increase shaded seating, especially around play areas
- 4 Paint blacktop to alleviate heat, including educational/playful striping to activate blacktop
- 5 Staff eating space outdoors (in frontage next to admin building)



MENTAL WELL-BEING

- 1 Quiet, semi-private areas for emotional regulation
- 2 Enhance existing outdoor classroom to make it useful for quiet time during lunch
- 3 Provide prominent display board for student art



EXPLORATION & DISCOVERY

- 1 Nature Play Opportunities (i.e rope climbing area with natural materials)
- 2 Nature play in fenced kinder yard
- 3 Greater diversity of seasonal and native plants including possible monarch butterfly garden, herb garden, zen garden and trees with edible fruit
- 4 Nature walking path around the fields w/areas of engagement along path



OUTDOOR LEARNING

- 1 Amphitheater-style seating with mini stage/central area for 'ReaderTheater' and other events (i.e. dramatic play)
- 2 Shaded outdoor spaces/seating for reading during breaks, including area adjacent to library
- 3 ADA upgrades for existing outdoor classroom
- 4 More outdoor teaching/instructional tools-chalkboard/cupboard
- 5 Designated classroom raised garden boxes that students can tend to, possibly with clear planters for viewing root development



OPERATIONS & SUSTAINABILITY

- 1 Choose plants that can be maintained without intense manicuring (i.e. right plant, right place)
- 2 Provide proper maintenance training to district maintenance staff (i.e. Rescape)



STUDENT SAFETY & EXPERIENCE

- 1 Provide safe and comfortable pick-up/drop-off area (i.e. replace damaged furnishings)
- 2 Remove and replace dead trees and plants in school interior
- 3 Create lineup area between asphalt & lawn w/trees

*The following greening opportunities were determined by the metric score assessments and meetings with the principal, staff and community conducted in September-December 2023.