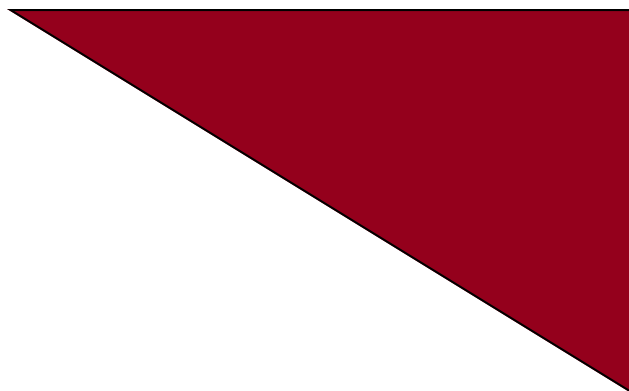




SANTA ANA

COLLEGE



Santa Ana College

Facilities Meeting

October 18, 2016





SAC Facilities Committee
October 18, 2016
1:30p.m. – 3:00p.m.
SAC Foundation Board Room, S-215

THE FACILITIES COMMITTEE is the participatory governance committee responsible for identifying and prioritizing capital projects including scheduled maintenance projects. It serves as an information and exchange body on facilities projects that are in construction or that are being planned.

Santa Ana College Participatory Governance Structure Handbook (May 27, 2015)

Agenda

1. Welcome and Introductions
2. Public Comments
3. Approval of Minutes: September 20, 2016 ACTION
4. Project Updates- Carri Matsumoto/ Darryl Taylor/ Matt Schoeneman INFORMATION
 - Bond Projects Update
 - SAC Active Project Update
 - Scheduled Maintenance Projects
5. Standing Reports (5mins.) INFORMATION
 - HEPSS Task Force - No report
 - Facilities Report – Mark Wheeler
 - Environmental Task Force – Susan Sherod
6. Old Business
 - Student, staff parking stalls assessment – Campus Safety Team
7. New Business
 - RARs for Facilities
8. Other

Next Meeting - Tuesday, November 15, 2016

The mission of Santa Ana College is to be a leader and partner in meeting the intellectual, cultural, technological, workforce and economic development needs of our diverse community. Santa Ana College prepares students for transfer, employment, careers and lifelong intellectual pursuit in a dynamic learning environment.



**SANTA ANA COLLEGE
FACILITIES COMMITTEE MEETING
OCTOBER 18, 2016**





ACTIVE PROJECTS

Santa Ana College

- ▶ Central Plant, Infrastructure and Mechanical Upgrades

Santa Ana College

- ▶ Perimeter Site Improvements
- ▶ Building G Renovation
- ▶ Artesia Street Improvements
- ▶ Property Acquisition of 17th/Bristol St. Lot
- ▶ Dunlap Hall Renovation
- ▶ Temporary Village
- ▶ Parking Lot 11 & Site Improvements
- ▶ Tessmann Planetarium & Restroom Addition
- ▶ Temporary Village Phase 2



PROJECTS

- ▶ Dunlap Hall Renovation - Completed
- ▶ Central Plant & Infrastructure
- ▶ Johnson Student Center
- ▶ Johnson Demolition
- ▶ Science Center & Building J Demolition
- ▶ 17th & Bristol Street Parking Lot



PROJECT UPDATE SANTA ANA COLLEGE CENTRAL PLANT AND INFRASTRUCTURE

Project Summary:

- ▶ Construction of a new central plant building and replacement of all underground utilities (domestic water, sewer, fire water, storm drain, gas, electric and data).
- ▶ Central Plant facts:
 - ▶ Reduces electrical loads during peak demand periods.
 - ▶ Has a chilled water loop, connecting 7 existing buildings to the HVAC equipment to provide cooling.
 - ▶ Includes a new Energy Management System (EMS) to control building temperatures and monitor system remotely.
 - ▶ Building is designed to meet LEED Silver certification.

Budget:

- ▶ \$68.17 million





PROJECT UPDATE SANTA ANA COLLEGE CENTRAL PLANT AND INFRASTRUCTURE

Current Activities:

- ▶ Excavate chilled water lines
- ▶ Backfill trenches
- ▶ Install fire and domestic water lines
- ▶ Install block at elevator 1 and 2 (Central Plant)
- ▶ Concrete pour by Don Express



Upcoming Activities:

- ▶ Insulate, test and backfill chilled water lines
- ▶ Install power and signal lines
- ▶ Pour walkway north of Building N
- ▶ Install electrical conduits (Central Plant)

Current Status:

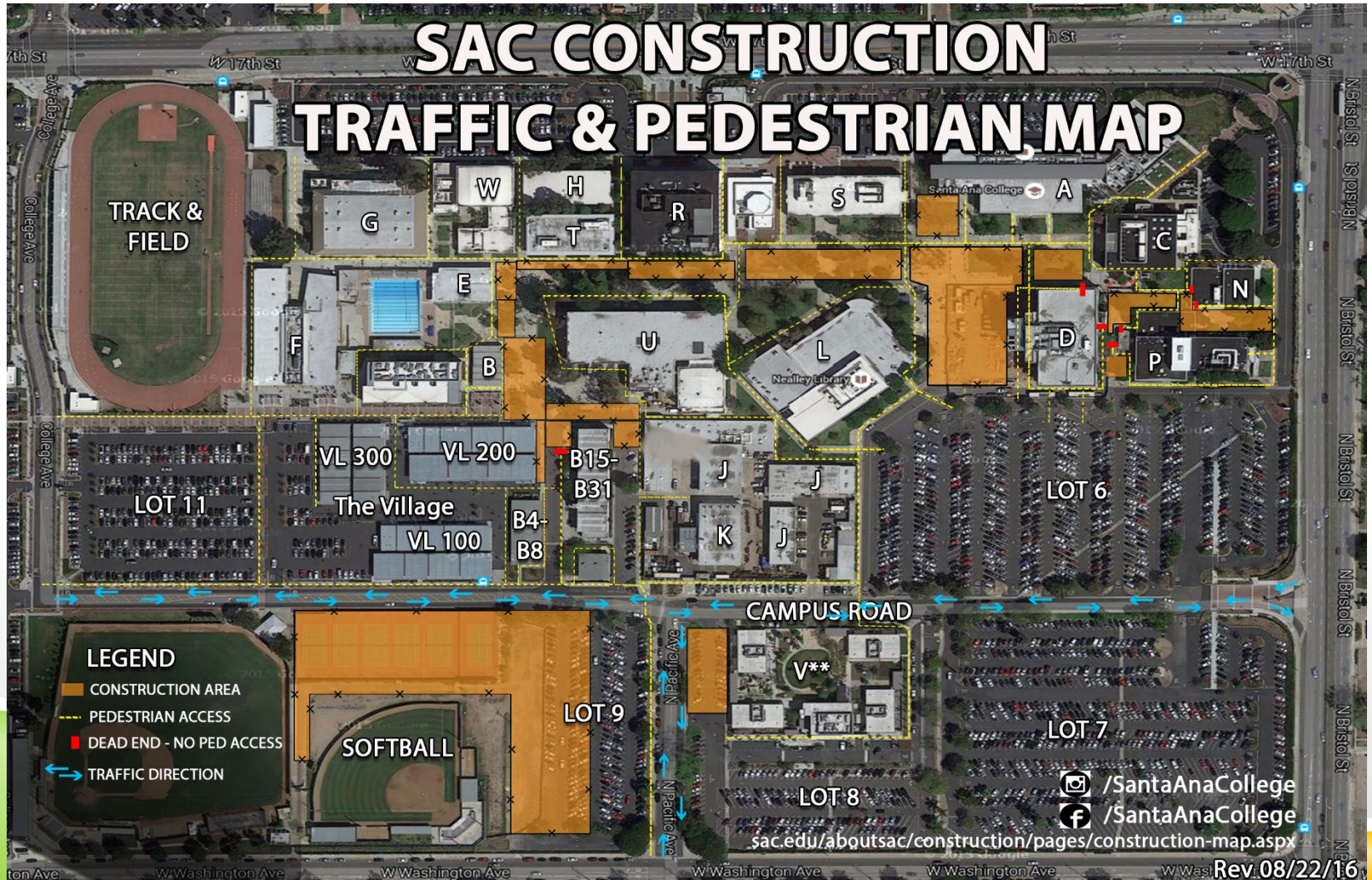
- ▶ The project is approximately 2 months behind the original target schedule.
- ▶ There have been numerous unforeseen conditions encountered.
- ▶ The project is 37% complete.

Target Occupancy/Completion

- ▶ December 2017 (under review)
- ▶ Project Close-Out 2018 (under review)



SANTA ANA COLLEGE CENTRAL PLANT AND INFRASTRUCTURE TRAFFIC & PEDESTRIAN MAP





PROJECT UPDATE SANTA ANA COLLEGE JOHNSON DEMOLITION

Project Summary:

- ▶ Demolition of existing Johnson Student Center.

Current Status:

- ▶ District will review options with the College prior to making a final recommendation.
- ▶ Decommissioning activities began in summer 2016.
- ▶ Target out-to-bid under review
- ▶ Target demolition start under review

Budget:

- ▶ \$2.5 million (increased budget due to costs associated with construction)





PROJECT UPDATE SANTA ANA COLLEGE JOHNSON STUDENT CENTER

Project Summary:

- ▶ Construction of a 59,638 square foot new Johnson Student Center.

Current Status:

- ▶ Schematic Design Phase has been completed and now in Design Development Phase. Review with College and user groups ongoing.
- ▶ Additional geotechnical borings have been completed to determine soil conditions.
- ▶ DSA approval anticipated May 2018.
- ▶ New Target construction start September 2018.
- ▶ New Target occupancy fall 2020.

Budget:

- ▶ \$40.7 million target

\$38.96 million funded by Measure Q

Note: Budget is currently deficient by \$1.74 million

Programs Include:

- ▶ Campus Store
- ▶ Grab-n-Go / Coffee & Juice
- ▶ DSPS
- ▶ EOPS/CARE & CalWORKS
- ▶ Student Financial Services
- ▶ SSSP / Upward Bound
- ▶ Warehouse
- ▶ Reprographics
- ▶ Conference Center
- ▶ Financial Aid
- ▶ Student Placement
- ▶ Health & Wellness Center
- ▶ DSPS
- ▶ Office of Student Life
- ▶ ASG
- ▶ The Spot





PROJECT UPDATE SANTA ANA COLLEGE SCIENCE CENTER

Project Summary:

- ▶ Construction of a new 65,428 square foot science center housing modern laboratories, classrooms, lecture classrooms, and faculty offices.
- ▶ Demolition of (3) J Buildings.

Current Status:

- ▶ 60% Construction Development package received by District. Ongoing review meetings with Campus user groups, M&O and IT.
- ▶ DSA submittal anticipated December 2016.
- ▶ DSA approval anticipated September 2017.
- ▶ Target construction start January 2018.
- ▶ Target occupancy summer 2020.

Budget:

- ▶ \$73.38 million



Programs Include:

- ▶ Division Office
- ▶ Faculty Offices
- ▶ (2) Standard Classrooms
- ▶ (1) Large Classroom
- ▶ (1) Large Divisible Classroom
- ▶ (1) Computer Lab
- ▶ (1) Engineering Lab & Support Space
- ▶ (6) Biology Labs & Support Space
- ▶ (2) Geology Labs & Support Space
- ▶ (5) Chemistry Labs & Support Space
- ▶ (1) Physics Labs & Support Space
- ▶ Student Collaboration Areas





PROJECT UPDATE SANTA ANA COLLEGE BUILDING J DEMOLITION (SCIENCE CENTER)

Project Summary:

- ▶ Relocation of Quick Copy Center into Temporary Village prior to demolition of (3) J Buildings.
- ▶ Relocation of maintenance storage items.
- ▶ Demolition of (3) J Buildings – part of the Science Project.

Current Status:

- ▶ New Relocation anticipated for summer 2017.
- ▶ District coordination meetings with user groups ongoing.
- ▶ New Target decommissioning activities fall 2017.

Budget:

- ▶ Included in Science Center Budget.



PROJECT UPDATE SANTA ANA COLLEGE PARKING LOT AT 17TH/BRISTOL ST.

Project Summary:

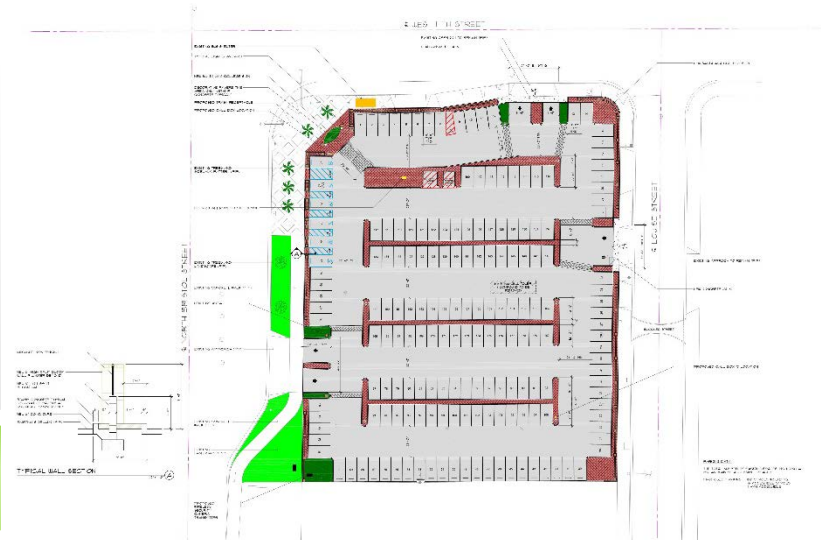
- ▶ New surface parking lot.

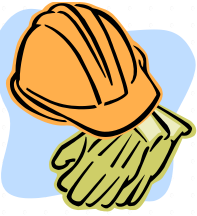
Current Status:

- ▶ Architect is revising plans to include walls, columns and fence as requested by the District and the Campus to address neighbor concerns.
- ▶ Plans submitted to City of Santa Ana Department of Public Works on March 8, 2016.
- ▶ Plans submitted to DSA on March 22, 2016. A re-submittal is required due to the revision of the plans.
- ▶ Target construction under review.

Budget:

- ▶ \$2.5 million
- ▶ Acquisition of property was paid by Measure E funds.





NEW 2016-2017 SCHEDULED MAINTENANCE PROJECTS

Santa Ana College *

State Allocation 2017 \$440,000

- ▶ Lighting Contact/Relays (D, H, L, R, T)
- ▶ Air Compressors (C, K, T)
- ▶ Window Replacement (H)
- ▶ Door Hardware Upgrade

* All projects are in the planning phase



2015-2016 SCHEDULED MAINTENANCE NEW PROJECTS

Santa Ana College

State Allocation 2016 \$1,837,665

- ▶ Roof Replacement (W)
- ▶ Roof Replacement (E, G, K & S)
- ▶ Water Conservation
- ▶ Door Replacement (C, H, L, R, S and OCSRTA)
- ▶ Flooring Repair (Gym)
- ▶ Flooring Repair (Dance)
- ▶ Painting (C, P, S)
- ▶ Waste Oil Tank Removal & Replacement (K)
- ▶ Carpet Replacement (B, L, S) - carryover from SM 2015 - \$149,650.



2015-2016 SCHEDULED MAINTENANCE PROJECTS SANTA ANA COLLEGE

PROJECT	STATUS	ESTIMATED BUDGET
Roof Replacement (W)	Notice of completion approved by Board of Trustees on August 15, 2016. Project to be closed out.	\$357,235
Roof Replacement (E, G, K, S)	Contractor commenced with Building S on September 19, 2016. Building E will start on October 3, 2016, and Building G will start on October 10, 2016.	\$1,059,100
Waste Oil Tank Replacement	Environmental consultant, Salem Engineering, has been hired to develop scope and bid documents. Bid documents to be developed for release November 2016.	\$62,540
Water Conservation	Bid documents are being prepared.	\$80,000
Door Replacement (C, H, L, R, S, OCSRTA)	Anticipated Board approval of contractor on October 24, 2016.	\$100,530
Flooring Repair (G)	Phase 1- Gym floor repair was completed on August 4, 2016. Phase 2- Resurface and restripe, schedule TBD.	\$100,005
Dance Room Floor Repair (G)	District has hired Performing Arts Architect to develop scope due to specialized nature of a dance floor.	Included in Flooring Repair Budget
Painting (C, P, S)	Schedule under review. Budget under review. Central Plant coordination of construction activities.	\$78,255 * Budget under review
Carpet Replacement (B, L, S)	Installation in Building B has been completed. Installation in Building S has been scheduled for December 2016. Building L is pending as per Campus and installer.	SM 2015 carryover
TOTAL		\$1,837,665

CURRENT CAPITAL PROJECTS SANTA ANA COLLEGE

PROJECT	STATUS	ESTIMATED BUDGET
Storm Water Management Improvements (Orange County Sheriff's Regional Training Academy)	Contractor was approved by Board of Trustees on October 10, 2016. Construction anticipated for end of October 2016.	\$153,500
Emergency Blue Phone and Path of Travel (Santa Ana College, Digital Media Center, Centennial Education Center, Orange County Sheriff's Regional Training Academy)	Schematic design cost estimate was received and is under review by the District. Campus walks were conducted to locate power and data availability.	\$828,300
Chavez Hall Renovation (moved from Measure E Funds)	Currently developing scope of work to remediate/renovate the building. Scope could be completed in phases.	\$230,000

CURRENT REQUESTED PROJECTS SANTA ANA COLLEGE

PROJECT	STATUS	ESTIMATED BUDGET
Football Field Fence & Gate	This project requires DSA approval. The District's on-call Architect will commence design.	\$14,000 (Redevelopment Fund)
Hammond Hall Clean Room	DSA re-submittal scheduled for October 25, 2016. The resubmittal addresses the revisions which include the new cleanroom support details (requested by DSA after the first submittal).	\$113,500 (SAC Grant Funds)
Block Wall (Orange County Sheriff's Regional Training Academy)	Bids were released September 21, 2016 with a due date of October 24, 2016. Anticipated start of construction in December 2016.	\$420,000 (Redevelopment Fund)
All Call Fire Alarm	The College has requested to add a building to building call feature "all-call" from the fire alarm panels in each building. Quotes have been requested for this programmatic change.	\$125,000



QUESTIONS



Central Utility Plant and Infrastructure Project

RSCCD Project Manager: Dave Gonzales

Architect: Westberg + White Architects

Construction Manager: Linik Corp.

Contractor: McCarthy Building Companies

Contract Start: 10/12/15

Contract Completion: 04/13/18

Scope: Construction of a new central plant building, a new electrical building, utility replacement, and mechanical upgrades to 7 buildings connecting them to the new central plant building. Site improvements include an underground chilled water piping loop, new gas, electrical, domestic water lines, sewer, drainage and fire water systems. New landscaping and hardscape will be replaced following the infrastructure improvements.

Recent Construction Activities:

- Excavate chilled water lines (Phase 3)
- Backfill trenches (Phase 4)
- Install fire and domestic water lines (Phase 3 and 5)
- Install block at Elevator 1 and 2 (Central Plant)
- Concrete pour by Don Express

Current Activities:

- Excavate and install fire and domestic water (Phase 5)
- Dry out and excavate piping affected by flood west of MCHS (Phase 4)
- Cold patch transitions and clean up by Don Express (Phase 3)
- Install, grout and clean out elevator tower (CUP)
- Install rebar, set up wall protection and concrete pour areas of the Ice Tank Storage (CUP)
- Install and backfill Electrical Room conduits (CUP)

Upcoming Activities:

- Re-install and backfill piping affected by the flood west of MCHS (Phase 4)
- Install fire water at Building A, B, J and K (Phase 3.2)
- Excavate, install and backfill chilled water lines (Phase 3.2)
- Excavate and install power and signal lines (Phase 3.2)
- Install sleeves and wires for irrigation (Electrical Building)
- Form and pour curb and gutter (Electrical Building)



Phase 4 Construction Zone



Concrete Pour by Don Express



Central Plant Construction Zone

SAC FACILITIES UPDATE

October 18, 2016

- Major leak in phase 5 necessitated a campus wide gas, fire water and domestic water shutdown. Assisted with coordination of turning it all back on.



- Made minor repairs to football field, heavy use issue. Moved MCHS to soccer field.
- Installed/coordinated new ice machine and canopy for athletics.
- Completed renovation of C207.
- Scoped and received bids for replacement of sliding glass doors in C102/C104.
- Painted walls, railing and steps outside Phillips Hall in preparation for board meeting.
- Painted and lettered concrete trip hazard between AEC and B33.
- Completed carpet installation of AEC, B4-B7 and B11. Coordinating replacement of balance of carpet in L and S.
- Scoped and bid renovation project at CEC Success center. Work to be conducted in November.
- Scoped work in CEC counseling.
- Scoped and submitted req. for replacing all card readers for elevators on campus.
- Scoped and waiting for bids for repair of men's locker room in G building.
- Moved classes from G106 to accommodate roof repair project. Class is now in AEC.
- Replaced pump motors in Russell Hall.



Warren Wilson College – Eco-Dorm

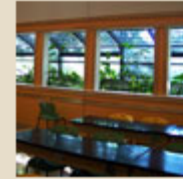
Ashville, North Carolina

- Dormitory serves 36 students
- LEED Platinum certification
- Two smaller systems handle 18,000 uses each per year
- Composting systems save almost 30,000 gallons of water per year

Additional Green Building Projects

SHARE

Click thumbnails to enlarge



Bunker Interpretive Center – Calvin College

Grand Rapids, Michigan

- Headquarters for Calvin College Biology department opened in 2004
- Educational resource for visitors to college's 35-acre eco-preserve
- Center includes laboratory, multi-purpose room, and display hall
- Designed by Wolverine Building Group to achieve LEED Gold certification
- One large composting system with two foam-flush toilet fixtures
- Composter can handle up to 65,000 uses annually
- Clivus systems saves up to 100,000 gallons of water annually
- Greywater system reuses washwater to irrigate indoor planter box

from <http://www.clivusmultrum.com/green-building-projects.php>

We don't have to *IMAGINE* the water savings with some things because there are projects in existence that document the savings! Yes! We can save more water for SAC. Yes! We can be innovative and award-winning in our projects.

Save \$. Save the environment. Lead the way. TEACH SOLUTIONS. Simultaneously!!!

We are billed for supply and wastewater. We can reduce both costs. Run with it! Dare to be different, for a better future and a lower bottom line!!!!!!! (so to speak!!!)



Midtown Community School Restroom in Neptune NJ

Midtown Community Elementary School

SHARE

Neptune, New Jersey

One of the first public schools to achieve a LEED rating, the Midtown Community Elementary School is created through a collaboration of a number of government agencies called the Schools Development Authority (SDA) which is charged with using its \$3.9 billion in funding to provide "safe, healthy, and sustainable schools." All newly-constructed public schools in New Jersey funded through the SDA shall be built to LEED standards.

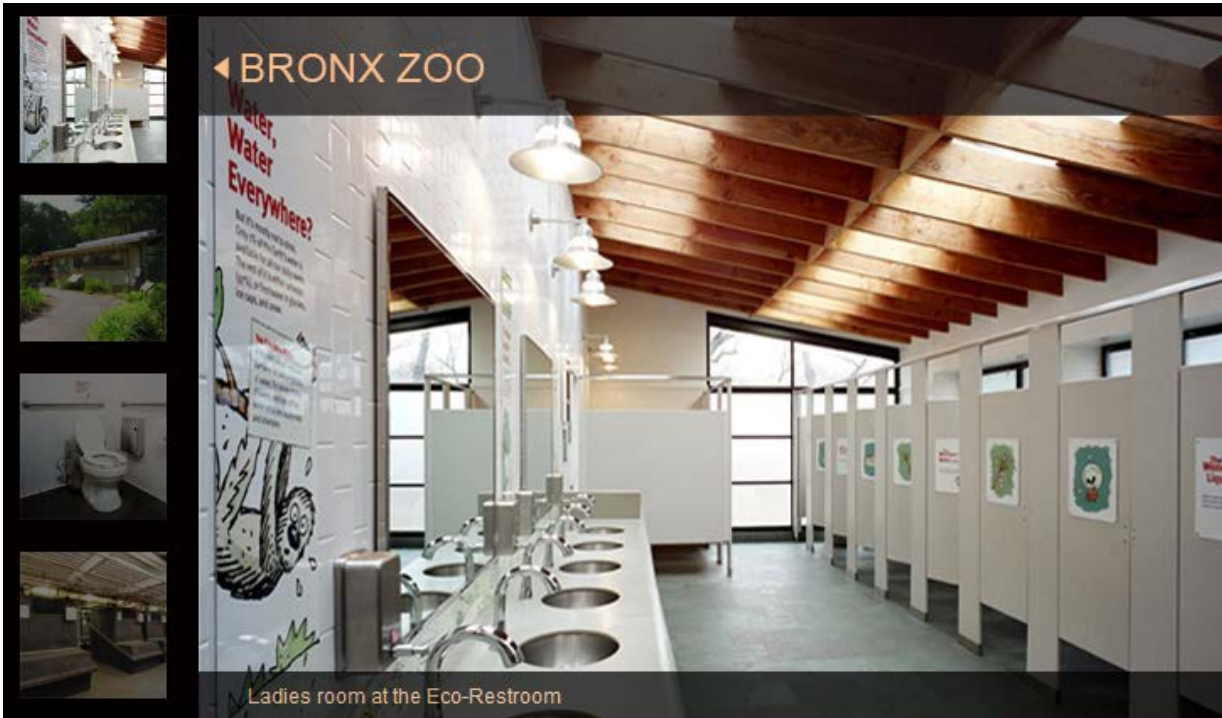
A Living Textbook

Serving 700 students (pre-K through grade 5), the 149,000-square-foot Midtown Community Elementary School is built to teach. Features include glass doors on mechanical rooms so students can see and learn about the schools energy-saving systems; transparent, raised flooring allowing students to see the structure's cabling; and a 6,000-square-foot roof garden for outdoor experiments.

Unforgettable Lesson

Although only a single bathroom in the structure is a Clivus system, the opportunities it offers are great. By saving over 95% of the water consumed by a standard 1.6-gallon toilet, the Foam-flush toilet will demonstrate that water need not be wasted for flushing. The planned instruction in the compost system's conversion of toilet waste into soil amendment will, no doubt, make a lasting impression.

<http://www.clivusmultum.com/green-building-neptune-school.php>



Eco Project of the Year

The Eco-Restroom accommodates more than ½ million visitors per year. Foam-flush toilets use only 6oz. of water per use, resulting in a savings of more than one million gallons of water each year, as compared to conventional low-flow (1.6gpf) toilets. Because the Eco-Restroom also includes a greywater irrigation system, the building manages all of its wastewater sustainably, onsite. The use of these technologies and others, including a rainwater harvesting system, maximized natural daylighting, and efficient radiant floor heating, contributed to the Eco-Restroom being named New York Construction's 2007 Eco Project of the Year.

- 10 commercial composters
- 15 Foam-flush toilets & 4 waterless urinals
- Greywater irrigation system
- Winner of New York Construction's 2007 Eco Project of the Year

<http://www.clivusmulttrum.com/green-building-bronx.php>

**ONE HALF MILLION VISITORS PER YEAR! SAVINGS OF MORE THAN ONE MILLION GALLONS OF WATER/YR!
HOW MUCH CASH IS THAT?? 1 ccf = 748 gallons. So a million gallons is about 1337 ccf**

Water and Wastewater Rate Schedule

Fixed Monthly Charge By Meter Size

Meter Size	Water	Wastewater
5/8" by 3/4"	\$ 6.92	\$ 16.18
1"	\$ 12.32	\$ 36.01
1-1/2"	\$ 21.26	\$ 69.04
2"	\$ 32.02	\$ 108.68
3"	\$ 60.72	\$ 214.38
4"	\$ 92.98	\$ 333.31
6"	\$ 182.59	\$ 663.65
8"	\$ 290.14	\$1,060.06
10"	\$ 451.45	\$1,654.65

*Applies to most single-family homes

Volume Charges

Residential - Water	Per 1,000 Gallons
0-3,000 (gal)	\$ 1.10
4,000-10,000 (gal)	\$ 1.51
11,000-20,000 (gal)	\$ 3.02
21,000-30,000 (gal)	\$ 6.03
31,000 and above (gal)	\$ 12.04
Residential - Wastewater	Per 1,000 Gallons
Per 1,000 (gal)	\$ 3.68
Single-family/Mobile Home (maximum 14,000 gallons)	
Multi-family (2-4 units) (maximum 25,000 gallons)	

Volume Charges

Commercial - Water	Per 1,000 Gallons
5/8" by 3/4" Meter	
0-10,000 (gal)	\$ 1.51
11,000-20,000 (gal)	\$ 3.02
21,000-30,000 (gal)	\$ 6.03
31,000 and above (gal)	\$ 12.04
1" Meter & Larger	
All Consumption	\$ 1.51
Commercial - Wastewater	
Per 1,000 (gal)	\$ 3.68

Reclaimed Water Rate Schedule

Retail Rates

Meter Size	Fixed Monthly Charge	Allowed Monthly Usage in Gallons*
5/8" by 3/4"	\$ 3.64	4,000
3/4"	\$ 3.64	4,000
1"	\$ 9.12	10,000
1-1/2"	\$ 18.23	19,000
2"	\$ 29.14	31,000
3"	\$ 54.66	57,000

*Volume charge for usage above monthly allowance: \$.99 per 1,000 gal

Wholesale Rates

Fixed Monthly Charge

Meter Size	Priority User	Interruptible User	Interruptible User
		No On-site Storage	With On-site Storage
4"	\$ 176.68	\$ 106.01	\$ 70.67
6"	\$ 404.17	\$ 242.50	\$ 161.67
8"	\$ 631.66	\$ 378.99	\$ 252.66
10"	\$ 960.75	\$ 576.46	\$ 384.30
12"	\$1,465.76	\$ 879.46	\$ 586.31
16"	\$2,906.51	\$1,743.89	\$1,162.61

Monthly Usage Allowance

In Gallons

4"	218,000
6"	499,000
8"	780,000
10"	1,185,000
12"	1,808,000
16"	3,584,000

Volume Charges

For Any Usage Above Monthly Allowance

User	Per 1,000 Gallons
Priority User	\$.80
Interruptible User-No On-site Storage	\$.47
Interruptible User-With On-site Storage	\$.33

www.orangecountyfl.net%2FPortals%2F0%2FLibrary%2FWater-Garbage-Recycle%2Fdocs%2FWaterWastewaterReclaimedWaterRates.pdf&usg=AFQjCNGkIVhtxwT1T6phnF1LuSuvCdzHSQ&bvm=bv.135974163,d.amc