	General Design Standards							
VC	CHC			A/E Signature				
	CHC	Exterior Design of	Crafton - reference Steinberg master plan					
VC		bldgs	VC - match existing contemporary style					
			Reference the Exhibit to the Standards					
VC								
"	CHC	LEED	District Sustainability Plan approved by District on 12/09/2010					
			building are to designed for a minimum LEED Silver					
VC	CHC	LEED	Rating Unless specifically noted otherwise.					
VC	СНС	LEED	A/E to provide a LEED Certified Associate to provide a matrix of LEED points available for the project. The A/E will note all available design and construction options they will use to demonstrate their intent and ability to meet the LEED requirements in their design. The A/E					
			LEED AP will work with the District to provide all documentation necessary to obtain the LEED Siler rating.	5				
			Provide ADA 'push button' automatic door openers at					
VC	CHC	ADA	all main bldg entrances					
VC	СНС	ADA	All Sidewalks are to be brought into ADA compliance inless specifically approved otherwise by the District and as required by DSA					
VC	СНС	ADA	Include requirement for the Contractor to provide any required ADA emergency exiting stair access chairs when the project is more than 1 story.					
X	СНС	Solar	Confirm with District on a Project by Project basis, relevant to cost and ROI (return on Investment)					
VC	CHC	Francis Efficiency	Reference the Exhibit to the Standards					
	CHC	Energy Efficiency Measures	CHC - Alternative Energy Plan - 1/12/2010 by P2S					
VC		Measures	SBVC - Alternative Energy Plan - 1/12/2010 by P2S					
VC	СНС	Energy Efficiency Measures	limit thermostats temperature range control in bldgs to allow control from central point. Keep thermostats away from door openings					
VC	СНС	Energy Efficiency Measures	All Architects must coordinate with SCE savings by design program					
VC	СНС	Energy Efficiency Measures	Use Lighting Control Design (LC&D) for interior lighting design, with occupancy sensors, and exterior lighting /					
X	СНС	Energy Efficiency Measures	Use EXERG lighting controls for exterior walkways and parking lots					
VC	Х	Energy Efficiency Measures	Use Douglas lighting controls for exterior walkways and parking lots					
VC	СНС	Energy Efficiency Measures	Provide localized metering at each bldg with internet access to the EMS					
VC	СНС	Energy Efficiency Measures	Urinals are to be low flow (unless required for LEED Gold)					

		Energy Efficiency	Plumbing fixtures to use IR for auto water flows and				
VC	CHC	Measures	flushes. IR is to be recessed and hard wired.				
Х	СНС	Energy Efficiency Measures	Hot water for custodial area only, unless authorized by District or code				
VC	Х	Energy Efficiency Measures	Hot water at all areas required				
VC	CHC	Energy Efficiency Measures	All boilers to have monitoring to the EMS system via an IP address				
VC	СНС	Energy Efficiency Measures	Provide power Conditioning at IDF rooms and FACPs				
VC	СНС	Acoustic Design	Provide sound attenuation between classroom walls, conference rooms and offices. This can be achieved with full ht walls, sound insulation, etc. The A/E is to specifically address this design issue with the District prior to completion of Schematic Drawings and budget.				
VC	СНС	Mass Communication	Achieved thru speaker and PA systems in all bldgs and exterior areas with a common input ability from campus				
VC	СНС	DSA Deferred Submittals	Avoid requiring deferred approvals to DSA. No deferred approvals are allowed without the express approval by the District.				
		Cna	sification Ctandords				
		Spe	cification Standards				
VC	CHC	specifications. The ar are not incorporating	ds are to be incorporated by the A/E into the design and chitect is to inform the District / Campus in writing if they the District Standard into the project design and provide ationale for written District approval.				
VC	СНС	Use local manufactu	uring as close a practicable vs. distant, Use off the shelf vs. special order				
VC	CHC		will impose a significant increase to the project budget, D silver rating, the A/E is to obtain District approval.				
VC	СНС		ers / products are noted as sole source or proprietary, nere will be no substitutions allowed.				
VC	СНС		Preferred Manufacturers and equipment, noted in the standards are to be listed in the top line of approved manufacturers in the submittal requirement sections				
VC	СНС	The top listed mains the basis of design be the performance product as an 'orschedule delay re	note the following regarding substitution requests or ate manufacturer than the top listed vendor.  nufacturer and product listed is the District standard and sign for the project. The top listed mfgr and product will be criteria used to measure any alternate manufacturers equal'. All costs for review, engineering, redesign, and quired to approve an alternate manufacturers product sibility of the contractor.				

		Description	Mfgr	Comments / Standard	
VC	СНС	Div. 01			
	СНС	closeout - key turn over		Each and every key is to be labeled for its intended use vs. being grouped together with multiple keys. Architect to confirm the required # of keys for any item with the District	
vc	СНС	Closeout - training		all training requirements are to include the mfgrs representative for initial start up training and an additional day of follow up with M&O upon their request after use of the system / equipment Before the NOC is filed. A/E is to discuss with the District any requirement for a Video of the training if the training is complex.	
vc	СНС	Closeout - as builts		Provide 2 full-size set of as-builts for the project with an electronic (PDF) for M&O). In addition to the office set of as-builts, provide a separate copy of the field foreman as-builts which were used to create the office as-builts.	
vc	СНС	Warranty requests		Warranty requests are to have a sign off line for the requestor to sign off at the time the work is completed on site by the contractor. The Contractor is to coordinate with the District when they will be on site to allow for District staff to be available for sign off.	
vc	СНС	Warranty Log		Warranty log is to be created with warranty #, request date, and completion date.	
vc	СНС	Division 03 - Concrete		Comments / Standard	
VC	CHC	Sidewalk Finishes		Match existing	
VC	CHC	Walk off mats at entrances		include for LEED credits when needed for points	
VC	СНС	Div. 05 - Metals			
		Roof access ladders		roof ladders to be interior and ship ladders where possible extending to the floor. If access ladders are vertical, the ladder shall extend above roof hatch when opened.	
VC	СНС	Fall Protection System		Fall protection system on roof, where roof access is required, unless the adjacent parapet height is 42"	
vc	СНС	Div. 06 - Wood, Plastics and Composites		Comments / Standard	

VC	CHC	Cabinetry	5	Conform to WIC standards - confirm key numbering and quantity with District	
vc	СНС	Div. 07 - Thermal and Moisture Protection		Comments / Standard	
VC	СНС	Roofing Types		Provide a Roof System with a minimum 25 year warranty for material and labor & include annual ongoing inspection reports from the mfgr. Roof pipe mounting systems to meet the 25 year requirement from the mfgr.	
VC	СНС	Roof Drains		hold back 10' from edge of roof for safety, or provide an adjacent 42" parapet or provide anchor point for fall protection attachment.	
VC	СНС	Roof Drain discharge location		connect to UG storm system when possible. Avoid water runoff onto sidewalk and pedestrian walkways.	
VC	СНС	Div. 08 - Openings		Comments / Standard	
VC	CHC			Review with District	
VC	CHC	•		Review with District	
		Skylights		Review with District, must require fall restraint system around skylights	
VC	CHC	Access Panels		NO keys - use screwdriver or Allen wrench only	
VC	CHC	Door hardware		Reference Exhibit to District standards dated 3/9/2012 - M&O Directors	
VC	CHC	Door Hardware	Von Duprin	Proprietary - use with thumb latch for lockdown if necessary	
VC	CHC	Door Closure	LCN	Proprietary - Door closures must be set to ADA pressure and rechecked prior to final NOC	
VC	CHC	Keyway	Schlage	Proprietary	
VC	CHC	Double Door openings	Von Duprin	single push panics on each door	
VC	CHC	ADA Door openers	LCN	Proprietary - ADA door openers are to be provided at all main exterior doors at each floor accessed by / for ADA	
VC	СНС	Door Hardware closeout rqmnts		Provide a complete door hardware as-built schedule in Excel by door opening to allow search capabilities by M&O by door opening. An electronic file to be given to M&O	
VC	СНС	Door Hardware Warranty requirement		Contractor to adjust the door hardware prior to punchlist and again before NOC and again at the 11 month warranty review.	

VC	СНС	Access Control at exterior doors, classrooms		Install a complete conduit backbone and pull string for future extending to the MDF room	
VC	СНС	Div 09 - Finishes		Comments / Standard	
VC	СНС	Control joints at exterior plaster		install control joints at every window, verify size of plaster panels is small enough to control cracking. Architect is responsible to determine the appropriate spacing, locations to avoid cracking. Provide additional waterproofing requirements at control joints to avoid water intrusion.	
VC	CHC	Drywall finish		Drywall finish to be smooth and level 4 - UNO	
VC	CHC	Carpet		Use of carpet tile vs. rolls. (aids in repair)	
VC	СНС	Ceiling tiles / grid system		Tiles at to be lay in only, minimum size of 2' X 2' and Maximum size of 2' X 4'. DO NOT use interlocking ceiling tile systems.	
VC	CHC	Ceramic tile		Larger tile, dark grout/tile prefer. Discuss epoxy flooring with District	
VC	СНС	Painting	Benjamin Moore	Do not specify flat paint. Eggshell / or semigloss acceptable for interior	
VC	СНС	closeout requirement		Include a palette of finishes with O&M at substantial completion. No additional touch up paint required.	
vc	СНС	Div 10 - Specialties		Comments / Standard	
VC	СНС	Toilet Partitions		Stainless, textured finish optional. Review with District.	
VC		Electric Hand Dryers	Dyson	Provide one (1) electric blade type (campus will provide any other paper towel after project is complete)	
VC	CHC	Metal Lockers		Match Quality at CHC Aquatic Center	
VC	CHC	Fire Extinguisher cabinets		DO NOT provide fire extinguisher cabinets which use keys.	
VC	CHC	Bird control Devices		Discuss with each campus	
VC	СНС	Trash cans at restrooms		Discuss with each campus - prefer not to use the Bobrick "in the wall" trash can, but rather a free standing trashcan for greater capacity.	
vc	СНС	Div 11 - Equipment		Comments / Standard	
vc	СНС	Parking ticket dispensers	Pacific Parking	Use Pacific Parking Systems, hard wired, with Wi-Fi capability. Confirm available features to be included with campus.	
VC	СНС	Facility fall protection - roof life line	A/E	Required on all bldgs where parapet edge is less than 40" high and / or required by OSHA, A/E to provide design for full roof access	
	•	t .	Ü	i	

VC	CHC	Kitchen Equipment		Discuss with campus	
VC	СНС	AV equipment		refer to District approved AV- communications Standards	
VC	СНС	Scoreboard & Marquee	5	use Daktronics - discuss features with campus	
vc	СНС	Div 12 - Furnishings		Comments / Standard	
VC	СНС	Blackout Shades		discuss with users - electric or manual - and requirement for classrooms with projectors.	
VC	СНС	Entrance Floor mats / frames / grills		Include for LEED credit points where possible.	
vc	СНС	Div 13 - Special Construction		Comments / Standard	
N/A	N/A	Greenhouse			
vc	СНС	Div 14 - Conveying Equipment		Comments / Standard	
VC	СНС	Elevators		Elevator company used for basis of design must agree to the non-proprietary requirements in the Exhibit included in the District Standards.	
VC	СНС	Elevators		Include emergency lowering device, confirm if this is connected to fire alarm panel to prevent the elevator from opening to a fire condition	
VC	СНС	Elevators		include lock out switch for Fire dept. and M&O	
VC	СНС	Handicap wheelchair lifts		wherever possible avoid the use of wheelchair lifts and design ADA ramps instead.	
VC	СНС	Div 22 - Plumbing		Comments / Standard	
VC				Do not provide chilled water function in drinking fountains	
VC	СНС	Sink faucet		use recessed IR auto sensor in lieu of handles, where possible the IR is to be hard wired.	
VC	СНС	Toilets	Kohler K- 4330 Bowl	Use Wall Hung toilets wherever possible. Use IR auto flush sensor recessed in wall and hard wired vs. exposed Sloan valve. Toilet seat - olsonite 95-sst sta tite, and recessed valve is Sloan Flush EBU 89 am.	

				Low flow with recessed IR auto flush	
				sensor hard wired. Avoid waterless urinals	
VC	CHC	Urinal		unless points are required for LEED	
		S		certification. If so, rough in pipe for future	
				water connection.	
VC	CHC	Sowogo Dumno		Alarm, failure	
VC	СПС	Sewage Pumps			
.,,		Electric water		Use of local water heater at sinks. Tank	
VC	Х	heaters		less, Review with District. Avoid cheap	
				insta hot heaters.	
				Minimize use of hot water in restrooms.	
X	СНС	Electric water		When desired, use of local insta - hot at	
^	CITIC	heaters		sinks. Provide hot water at custodial	
				rooms	
.,,	0110	F		T	
VC	CHC	Emergency showers		Trap primers required	
VC	CHC	Floor drains		Provide trap primers	
VC	СНС	De-ionizing		Effective Sciemic restraints, as required	
٧C	СПС	equipment		Effective Seismic restraints, as required.	
	CHC	Div 23 - HVAC		Comments / Standard	
VC	CHC	Boiler		IP addressable	
VC	CHC	HVAC units		Condensate piping to be copper	
VC	CHC	Chillers	Trane	preferred manufacturer - basis of design	
VC	CHC	Control Valves	Belimo	preferred manufacturer - basis of design	
				Must be accessible for inspection and	
VC	CHC	Fire Dampers		maintenance.	
	2112	Volume Control		Must be accessible for inspection and	
VC	CHC	Dampers		maintenance.	
		•		Florida No. 1 Decilial	
				Flow sensor alarm required. Decibel	
				standards (ASHRAE 47.29). Contractor to	
VC	СНС	Fume Hoods		certify fume hoods. Confirm with District	
' '	0.10	1 41110 1 10040		that noise level from fume hoods and	
				HVAC system will not exceed decibel	
				standards for the classroom function.	
		Conner nining to		All nining to the VAVe is to be a minimum	
VC	CHC	Copper piping to		All piping to the VAVs is to be a minimum	
		VAVs		of 3/4" for both HW & CHW	
			Flow	preferred manufacturer - basis of design.	
VC	CHC	VAV	Control	Must be accessible, and use Flow Control	
			Design	Design if water is brought to the VAV	
				<u> </u>	
		OLIMO LIMO		By- pass valves at each bldg tied into the	
VC	Х	CHWS - HWS		EMS. Flow and temp reading to be relayed	
		supply		to the EMS. Discuss with District and	
				Campus M&O.	
				By- pass valves at end of loop tied into the	
X	СНС	CHWS - HWS		EMS. Flow and temp reading to be relayed	
	5, ,5	supply		to the EMS. Discuss with District and	
				Campus M&O.	
		CHWS - HWS		provide flow metering at entrance to each	
VC	CHC			bldg and tie back to the EMS - IP address	
		supply			
VC	СНС	Boiler		Identify demand on boiler by connecting to	
VC	5110	DOILEI		EMS	

VC	СНС	Thermostats - locations		Min. user control with thermostats in bldgs. The HVAC system is to be controlled from M&O / Central Plant.	
VC	СНС	Chemical controls		This is to be no proprietary. Some vendors require use of a 'DYE" in their chemicals which are sensed by their controls. This specialized control system is to be avoided.	
VC	СНС	Chemical Treatment		Design to be indoors for storage and install	
1/0	CHC		Climatic	CHC - Allergen	
VC				VC - Automated Logic	
VC	CHC	Control and monitoring network		All new systems are to tie into the EMS system and use the District Controls contractor to make final adjustments with any graphics necessary for a complete operating system	
	0110				
VC	CHC			Comments / Standard	
		All interior and		Provide light fixtures that use only	
vc	СНС	exterior Light		bulbs contained in the Exhibit to the District Standards dated 3/07/2012 for	
		Fixtures / Light			
		bulbs		approved list of light bulbs. Use Campus approved list tie into the	
VC	СНС	Building wall paks		EMS system, color to match adjacent	
VC	CITC	building wall paks		sidewalk exterior lighting	
				Use copper windings only - NO	
VC	CHC	Transformers		ALUMINUM	
				Provide metering at each bldg compatible	
VC	CHC	Electrical meters		with the EMS	
V/0	0110	LIDO		Refer to AV standards for UPS	
٧C	CHC	UPS		requirements	
VC	СНС	Interior Lighting		Fixtures are to use campus standard	
VC	CITC	intendi Lighting		bulbs refer to campus bulb list.	
VC	СНС	Interior Lighting		Design for use of off the shelf and local	
				mfgr vs. special and / or distant mfgrs.	
	CHC	Interior Lighting		Use motion detectors for lighting - Leed	
VC	CHC	Interior Lighting	LC&D	Use integrated Lighting control design	
VC	СНС	Interior Lighting		Do not use pendant lighting with seismic cabling system without express approval by the District and M&O	
VC	CHC	Interior Lighting		Use Ceiling mounted or drop in light fixtures	
VC	CHC	Site Lighting Poles		Match new pole design on campus. Lighting color to match existing. Tie into the EMS	
VC	CHC	Site Lighting		No up lighting at the exterior of building is allowed	
	CHC	Site Lighting		DO NOT use solar light panels for exterior walkways.	
Х	CHC	non bldg lighting	Exergy	CHC - Exergy	
VC	Х	controls	Automated Logic	VC - Automated Logic	

VC	СНС	Electrical panels		all electrical panels to use the same Keyway on Campus, regardless of panel mfgr. Verify with District and Campus M&O.	
vc	СНС	Div. 27 - Communication		Comments / Standard	
				Reference Exhibit for District AV - IT standards dated 01/26/2012. This includes specification sections for Div 27.	
VC	СНС	speaker system / PA		install IP addressable PA system at each classroom and building. Where offices are small, the speaker in the VOIP phone is acceptable. Confirm speaker system and switching is supported by the District IP maintenance co.	
VC	СНС	Exterior speaker system		Same as above for exterior area affected by the bldg. This exterior design should be discussed with the District to integrate into the mass communication system	
VC	СНС	power conditioning		Provide power conditioning for bldg MDF panels. Confirm if this can be achieved via a UPS system	
vc	СНС	Div. 28 - Electronic Safety and Security		Comments / Standard	
		Security		Use motion detectors	
		Access control at bldgs		See door hardware - each exterior door, classroom and dept. office is to have backbone installed (conduit / boxes / pull wire in mullions, etc.) for future installation of card system.	
VC	СНС	Electronic cameras		cameras to have zoom - in capability, PTZ. Confirm with District for locations and quantity.	
X	CHC	Fire alarm control	Simplex	CHC - Simplex	
VC VC	CHC	panels Fire alarm control panels	FCI	VC - FCI provide power conditioning for FACP. Annunciator to be Reportable to Campus Police directly and include information regarding location of initiating addressable fire alarm device	
VC	СНС	Div. 31 - Earth Work		Comments / Standard	
VC	CHC	SWPP / QSD / QSD requirement		Include SWPP in each bid contract. Confirm with District that the SWPP has been designed for inclusion. Confirm QSP requirements.	

vc	СНС	Div. 32 - Exterior Improvements		Comments / Standard	
VC	CHC	Paving design rqmnts		discuss with district	
VC	CHC	Sidewalk design requirements		discuss with district	
VC	CHC	Fire lane design requirements		per code	
VC	CHC	'		use concrete tiles unless District approves mat.	
		Chain link fence			
VC		Landscape design		low (or minimal) maintenance design, low water design	
VC	CHC	Landscape design		All plants must be approved by M&O.	
VC	CHC	Landscape design		Avoid thick ground cover which allows trash accumulation and cover / housing for rodents.	
VC	CHC	Landscape sprinkler heads	Hunter		
VC	CHC	Landscape controllers	John Deere/Rain Master	Controller (DX2 - confirm with District) with data IP address and radio control	
VC	СНС	Irrigation control wiring		Control wiring is to be ran in conduit. Conduit to be minimum of 1" and 1 size larger that the required conduit size required for the quantity of wires. Conduit to be ran to main controller valve. Provide 10% spare control wiring.	
VC	СНС	irrigation shut off valves		Provide shut off valves at each manifold and an isolation valve at each branch line off of the main line. Verify irrigation water metering requirements with District and Campus M&O.	
VC	СНС	Div. 33 - Utilities		Comments / Standard	
				Paint fire - red / domestic blue / irrigation	
VC	CHC	Backflows		green / reclaim purple	
VC	CHC	Main Line Utility trace wires		Install trace wires on all non metallic UG utilities. 2" or larger.	
VC	СНС	UG water valve types		Identify the water line and source for the water valve in the UG valve sleeve.	