			General Design Standards	
VC	CHC			A/E Signature
N. C.	CHC	Exterior Design of	Crafton - reference Steinberg master plan	
VC	PORT I	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	
VC	СНС	LEED	All building are to designed for a minimum LEED Silver	
		erreron renterior	Rating Unless specifically noted otherwise.	
			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	
VC	СНС	LEED	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.	
			Tourig.	
		y _ y	Provide ADA 'push button' automatic door openers at	
VC	CHC	ADA	all main bldg entrances	
			All Sidewalks are to be brought into ADA compliance	
VC	СНС	ADA	unless specifically approved otherwise by the District	
			and as required by DSA	
	СНС	HC ADA	Include requirement for the Contractor to provide any	
VC.			required ADA emergency exiting stair access chairs	
••			when the project is more than 1 story.	
	-			
		ex as	Confirm with District on a Project by Project basis,	
X	CHC	Solar	relevant to cost and ROI (return on Investment)	
19,160			(rotain on in occurrency	
VC	СНС		Reference the Exhibit to the Standards	
	CHC	Energy Efficiency	CHC - Alternative Energy Plan - 1/12/2010 by P2S	
VC		Measures	SBVC - Alternative Energy Plan - 1/12/2010 by P2S	
			limit thermostats temperature range control in bldgs to	
VC	СНС	Energy Efficiency	allow control from central point. Keep thermostats away	
		Measures	from door openings	
		Energy Efficiency	All Architects must coordinate with SCE savings by	
VC	CHC	Measures	design program	
		Energy Efficiency	Use Lighting Control Design (LC&D) for interior lighting	
VC	CHC	Measures	design, with occupancy sensors, and exterior lighting /	
V	0110	Energy Efficiency	Use EXERG lighting controls for exterior walkways and	
X	CHC	Measures	parking lots	
VC	Х	Energy Efficiency	Use Douglas lighting controls for exterior walkways	
VC	^	Measures	and parking lots	
VC	СНС	Energy Efficiency	Provide localized metering at each bldg with internet	
VO	0110	Measures	access to the EMS	
VC	СНС	Energy Efficiency	Urinals are to be low flow (unless required for LEED	
		Measures	Gold)	
VC	СНС	Energy Efficiency	Plumbing fixtures to use IR for auto water flows and	
	- 10	Measures	flushes. IR is to be recessed and hard wired.	



Х	СНС	Energy Efficiency Measures	Measures District or code					
vc	Х	Energy Efficiency Measures	Hot water a	t all areas required				
vc	снс	Energy Efficiency Measures	All boilers to	have monitoring to the EMS system via an				
VC	снс	Energy Efficiency Measures	Provide pov	rovide power Conditioning at IDF rooms and FACPs				
VC	СНС	Acoustic Design	conference with full ht w specifically	nd attenuation between classroom walls, rooms and offices. This can be achieved valls, sound insulation, etc. The A/E is to address this design issue with the District pletion of Schematic Drawings and budget.				
VC	СНС	Mass Communication		ru speaker and PA systems in all bidgs and as with a common input ability from campus				
vc	СНС	DSA Deferred Submittals	; ·	ing deferred approvals to DSA. No deferred re allowed without the express approval by				
		Spe	cification	n Standards				
VC	СНС	specifications. The ar are not incorporating	Comments / Standards are to be incorporated by the A/E into the design and specifications. The architect is to inform the District / Campus in writing if they are not incorporating the District Standard into the project design and provide rationale for written District approval.					
vc	СНС	Use local manufactu						
VC	СНС		f a project standard will impose a significant increase to the project budget, or impact a LEED silver rating, the A/E is to obtain District approval.					
VC	СНС	Where manufacturers / products are noted as sole source or proprietary, there will be no substitutions allowed.						
vc	СНС	Preferred Manufacturers and equipment, noted in the standards are to be						
		Specifications are to rapproval of an alterna						
VC	СНС	The top listed man is the basis of des be the performand product as an 'or- schedule delay re will be the respon						
		Description	Mfgr	Comments / Standard				
	0110		9,					
VC	CHC	Div. 01						

vc	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.	
		Division 03 -		100000000000000000000000000000000000000
VC	СНС	Concrete	Comments / Standard	
VC	CHC	Sidewalk Finishes	Match existing	
vc	СНС	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"	
		Div. 06 - Wood, Plastics and	Comments / Standard	
VC	СНС	Composites		

vc	СНС	Div. 07 - Thermal and Moisture Protection		Comments / Standard	
vc	CHC	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	CHC	Div 09 Ononings	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Comments (Classical States)	
	CHC	Div. 08 - Openings Storefront systems		Comments / Standard Review with District	
VC				Review with District	
vc				Review with District, must require fall	
VC	CHC	Skylights		restraint system around skylights	
VC	СНС	Access Panels		NO keys - use screwdriver or Allen wrench only	
vc	СНС	Door hardware		Reference Exhibit to District standards dated 3/9/2012 - M&O Directors	
VC	СНС	Door Hardware	Von Duprin	Proprietary - use with thumb latch for lockdown if necessary	
VC	СНС	Door Closure	LCN	Proprietary - Door closures must be set to ADA pressure and rechecked prior to final NOC	
VC	CHC	Door Cylinders / Keyway	Schlage	Proprietary	
VC	СНС	Double Door openings	Von Duprin	Use removable keyed center mullions and single push panics on each door	
VC	СНС	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	СНС	Drywall finish		Drywall finish to be smooth and level 4 - UNO	
vc	СНС	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	СНС	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	CHC	closeout requirement		Include a palette of finishes with O&M at substantial completion. No additional touch up paint required.	
VC	CHC	Div 10 - Specialties		Comments / Standard	
	СНС			Stainless, textured finish optional. Review with District.	
vc	СНС	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	СНС	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	CHC	Div 11 - Equipment		Comments / Standard	
	СНС	Parking ticket	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	
VC	CHC	Kitchen Equipment		Discuss with campus	
ı 1	1]		refer to District approved AV-	
vc	снс	AV equipment		communications Standards	

V	СНС	Div 12 - Furnishings		Comments / Standard	
V	ССНС			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 N/A	CHC	Div 13 - Special Construction Greenhouse		Comments / Standard	
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	CHC	Handicap wheelchair lifts		wherever possible avoid the use of wheelchair lifts and design ADA ramps instead.	
VC	СНС	Div 22 - Plumbing		Comments / Standard	
	СНС	Drinking fountains		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.	
	СНС	Urinal		Low flow with recessed IR auto flush sensor hard wired. Avoid waterless urinals unless points are required for LEED certification. If so, rough in pipe for future water connection.	
VC	СНС	Sewage Pumps		Alarm, failure	
vc	X	Electric water heaters		Use of local water heater at sinks. Tank less, Review with District. Avoid cheap insta hot heaters.	
X	СНС	Electric water heaters		Minimize use of hot water in restrooms. When desired, use of local insta - hot at sinks. Provide hot water at custodial rooms	

Г.						
			Emergency showe	rs	Trap primers required	
17	/C (CHC	Floor drains		Provide trap primers	
\ \	/C (СНС	De-ionizing equipment		Effective Seismic restraints, as required.	
1	/C /	СНС	Div on Three			
		CHC	Div 23 - HVAC		Comments / Standard	
			Boiler		IP addressable	
	ic la		HVAC units		Condensate piping to be copper	
_	ölö		Control Vol	Trane	preferred manufacturer - basis of design	
			Control Valves	Belimo	preferred manufacturer - basis of design	
	CC	HC	Fire Dampers		Must be accessible for inspection and maintenance.	
V	cc	HC	Volume Control Dampers		Must be accessible for inspection and maintenance.	
V	CC	НС	Fume Hoods		Flow sensor alarm required. Decibel standards (ASHRAE 47.29). Contractor to certify fume hoods. Confirm with District that noise level from fume hoods and HVAC system will not exceed decibel standards for the classroom function.	
V	CI	нс	Copper piping to VAVs		All piping to the VAVs is to be a minimum of 3/4" for both HW & CHW	
VC	C CH	нс	VAV	Flow Control Design	preferred manufacturer - basis of design. Must be accessible, and use Flow Control Design if water is brought to the VAV	
VC	;		CHWS - HWS supply		By- pass valves at each bldg tied into the EMS. Flow and temp reading to be relayed to the EMS. Discuss with District and Campus M&O.	
Х	СН	ıc	CHWS - HWS supply		By- pass valves at end of loop tied into the EMS. Flow and temp reading to be relayed to the EMS. Discuss with District and Campus M&O.	
vc	СН	С	CHWS - HWS supply		provide flow metering at entrance to each bldg and tie back to the EMS - IP address	
VC	СН	c	Boiler		Identify demand on boiler by connecting to EMS	
VC	СН	c —	Thermostats - locations		Min. user control with thermostats in bldgs. The HVAC system is to be controlled from M&O / Central Plant.	
vc	СН	c c	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	CHO	Ch	emical Treatment		Design to be indoors for storage and install	
	СНС	1		Ol:		
vc	71 IV		-	Climatic (CHC - Allergen	
· ~ [S)			VC - Automated Logic	

V	СНС	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	
VC	CHC	Div 26 - Electrical			
<u> </u>	1	All interior and		Comments / Standard	
vo	снс	avtorior Light		Provide light fixtures that use only bulbs contained in the Exhibit to the District Standards dated 3/07/2012 for approved list of light bulbs.	
VC	СНС	Building wall paks		Use Campus approved list tie into the EMS system, color to match adjacent sidewalk exterior lighting	
VC	СНС	Transformers		Use copper windings only - NO ALUMINUM	
VC	СНС	Electrical meters		Provide metering at each bldg compatible with the EMS	
VC	СНС	UPS		Refer to AV standards for UPS	\dashv
<u> </u>	10110	01 0		requirements	
VC	СНС	Interior Lighting		Fixtures are to use campus standard	┪
-				bulbs refer to campus bulb list.	ı
VC	CHC	Interior Lighting		Design for use of off the shelf and local	
VC	СНС	Interior Lighting		mfgr vs. special and / or distant mfgrs.	╛
VC		Interior Lighting	LC&D	Use motion detectors for lighting - Leed Use integrated Lighting control design	_
			LOGD	Do not use pendant lighting with seismic	_
VC	СНС	Interior Lighting		cabling system without express approval by the District and M&O	
VC	СНС	Interior Lighting		Use Ceiling mounted or drop in light	_
ļ		g		fixtures	
vc	СНС	Site Lighting Poles		Match new pole design on campus. Lighting color to match existing. Tie into the EMS	
VC	СНС	Site Lighting		No up lighting at the exterior of building is allowed	1
vc	снс	Site Lighting		DO NOT use solar light panels for exterior walkways.	1
X	CHC	non bldg lighting	Exergy	CHC - Exergy	\dashv
vc	Х	controls	Automated Logic	VC - Automated Logic	
vc	СНС	Electrical panels	Y	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	СН	C 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	СН	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	
	Ī	Security		Use motion detectors	
		Access control at		See door hardware - each exterior door, classroom and dept. office is to have	
		bldgs		backbone installed (conduit / boxes / pull wire in mullions, etc.) for future installation of card system.	
VC	СНС			cameras to have zoom - in capability, PTZ. Confirm with District for locations and quantity.	
Х	CHC	Fire alarm control	Simplex	CHC - Simplex	
VC	Х	panels	FCI	VC - FCI	
vc	СНС	Fire alarm control panels		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	СНС	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	
/C	снс	Paving design rqmnts		discuss with district	
+	СНС	Sidewalk design requirements		discuss with district	
-	СНС	Fire lane design requirements		per code	
/C C	CHC	ADA - tactile bumps Chain link fence		use concrete tiles unless District approves mat.	
$^{\prime\prime}$				low (or minimal) maintain	
(0)	CHC	Landscape design		low (or minimal) maintenance design, low water design	

VC	СН	Landscape design		All plants must be	
			<u> </u>	All plants must be approved by M&O.	
1vc	CHO	Landscape design		Avoid thick ground cover which allows	
		Landoodpe design		trash accumulation and cover / housing for	r
-	1	Landscape sprinkler		rodents.	
VC	CHC	heads	Hunter		
vc	сно	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	CHC				
VC.	CHC	Div. 33 - Utilities		Comments / Standard	
VC	CHC	Backflows		Paint fire - red / domestic blue / irrigation 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	[1	Identify the water line and source for the water valve in the UG valve sleeve.	