CENTRAL NEW MEXICO COMMUNITY COLLEGE

Stormwater Management Program



Introduction

CNM is an institution obligated to the protection of New Mexico's natural resources and habitats. There are many operational processes in place, across many departments at the college, designed to protect our waterways from receiving polluted stormwater, to reduce excess runoff and water waste. These departments include Safety, Parking, Maintenance & Operations, Facilities and Academic Affairs. Educational outreach is also a component of CNM's Water Management Practices, which is hosted by sustainability staff and faculty members.

This document is in place to prevent illicit discharges. The Physical Plant Department has separate guidelines for Low Impact Development and Green Stormwater Infrastructure, some information is also included in this document (flow requirements section). All departments listed on the Elicit Discharge Elimination Form (page 3) must fill out the form annually or as directed by CNM's Safety and Environmental Health Department. If you are aware of any illicit discharges, please fill out the Incident Report form (page 4). Please see page 8 and Appendix for Campus Drain Maps.

Table 1.

US Environmental Protection Agency NPDES Chapter 1: The Basics of Illicit Discharges. Land Uses, Generating Sites and Activities That Produce Indirect Discharges

https://www3.epa.gov/npdes/pubs/idde_chapter-1.pdf

Land Use	Generating Site	Activity that Produces Discharge
Residential	ApartmentsMulti-familySingle Family Detached	 Car Washing Driveway Cleaning Dumping/Spills (e.g., leaf litter and RV/boat holding tank effluent) Equipment Washdowns Lawn/Landscape Watering Septic System Maintenance Swimming Pool Discharges
Commercial	 Campgrounds/RV parks Car Dealers/Rental Car Companies Car Washes Commercial Laundry/Dry Cleaning Gas Stations/Auto Repair Shops Marinas Nurseries and Garden Centers Oil Change Shops Restaurants Swimming Pools 	 Building Maintenance (power washing) Dumping/Spills Landscaping/Grounds Care (irrigation) Outdoor Fluid Storage Parking Lot Maintenance (power washing) Vehicle Fueling Vehicle Maintenance/Repair Vehicle Washing Washdown of greasy equipment and grease traps

Industrial	 Auto recyclers Beverages and brewing Construction vehicle washouts Distribution centers Food processing Garbage truck washouts Marinas, boat building and repair Metal plating operations Paper and wood products Petroleum storage and refining Printing 	 All commercial activities Industrial process water or rinse water Loading and un-loading area washdowns Outdoor material storage (fluids)
Institutional	 Cemeteries Churches Corporate Campuses Hospitals Schools and Universities 	 Building Maintenance (e.g., power washing) Dumping/Spills Landscaping/Grounds Care (irrigation) Parking Lot Maintenance (power washing) Vehicle Washing
Municipal	 Airports Landfills Maintenance Depots Municipal Fleet Storage Areas Ports Public Works Yards Streets and Highways 	 Building Maintenance (power washing) Dumping/Spills Landscaping/Grounds Care (irrigation) Outdoor Fluid Storage Parking Lot Maintenance (power washing) Road Maintenance Spill Prevention/Response Vehicle Fueling Vehicle Maintenance/Repair Vehicle Washing

Illicit Discharge Detection Elimination Form									
A. FACILITY INFORMATION									
Instructions: Fill out parts A and C (respective of your department only) and return to the CNM Safety and FACILITY CONTACT and TITLE:									
Environmental Health Department via email within one week to <u>tfleming4@cnm.edu</u>									
DEPARTMENT AND FACILITY/SITE NAME: (e.g. AT—Automotive, TC lot)						FACILITY CONTACT EMAIL:			
FACILITY ADDRESS:	FACILITY ADDRESS:								
CITY:	ZIP:	PHONE:							
B. AUDITOR INFORMATION—To be fil	led out	t by Safe	ety and Environmental	Health					
Safety & Environmental Health Depart	ment			SITE VISIT TIME:	SITE VISIT	DATE:			
AUDITOR:				-					
C. FACILITY ACTIVITIES—Fill out section	n for y	our dep	artment only	STORED ONSITE CHEMICALS					
Responsible Department/Activity	Yes	No	Subcontracted to:	Material/Comments	Qty	Sto			
Parking Department/Cleaning									
Vehicle washing									
Equipment degrease/washing									
Other washing									
Safety and Parking Departments /Out	door S	torage			1	1			
Oil & Haz chemical storage									
Vehicle storage									
Equipment storage									
Salt/sidewalk deicers									
Safety Department/Handling & Dispo	sal of V	Vaste &	Materials						
Haz-Mat/waste generation									
Solid waste generation									
Animal waste									
Physical Plant Department/Building a	nd Gro	unds M	aintenance	l					
Landscape waste (clipping, debris)									
Pest / weed control									
Sidewalk/pavement anti-icing									
Culinary Arts, Brewing & SFI (BIT)									
Food waste generated									
Grease generated									
Outdoor equipment/mat/tool cleaning or maintenance									
Outdoor storage of product or equipment									
Welding/ Carpentry (AT)									
Outdoor equipment storage									
Outdoor materials storage									
Outdoor equipment washing									
Automotive/Aviation (AT)									
Vehicle/plane washing									
Equipment degrease/washing									
Other washing									
Art Department (CHSS)									
Outdoor materials/tools storage									
Haz/chem waste generated									

		Illicit Dis	charge Incident Rep	ort Form					
Instructions: con	nplete and return to CNM Safety	y and Environmental	Health Department	or email tfleming4@cnm	.edu				
Incident Time:	Incident Time:				Incident Date:				
Precipitation (inc	ches) in past 24-48 hrs:								
Caller Contact Inf	formation:								
INCIDENT LOCAT	ΓΙΟΝ - complete one or more bel	ow							
Campus building	and specific area:								
Primary Location	1 Description			Secondary Location Description					
Arroyo or stream corridor (In or adjacent to stream)		□ Outfall		□ In-Stream Flow	□ Along Banks				
Upland Area (Land not adjacent to stream, such as parking lot, sidewalk, street or other outdoor ssurface)		□ Near Storm Drain		□Near other water source (storm water pond, wetland, etc.):					
Narrative Descrip	Narrative Description of Location:								
UPLOAD PROBLE	EM INDICATOR DESCRIPTION								
Dumping		Oil/solvents/chemicals							
□ Wash water, suds, etc.		Other:							
STREAM CORRID	OOR PROBLEM INDICATOR DESCR	RIPTION							
Odor	□ None	Sewage		Rancid/Sour	Petroleum (gas)				
000	□ Sulfide (rotten eggs); natural	Other:							
Appearance	Normal	🗆 Oil Sheen		Cloudy	□ Suds				
Арреатансс	□ Other:								
Floatables	□ None	□ Sewage (toilet paper, etc)		□ Algae	Dead Fish				
FIUdlaules	□ Other:								
	otion of problem indicators: or (Name, personal or vehicle de	scription, license plate	e # , etc)						

Maintenance and Operations

Landscape—Hardscapes

CNM's maintenance processes are consulted prior to any maintenance performed on the site, grounds, and building exteriors of all CNM's buildings, at all campuses. Manual equipment such as brooms, rakes, and shovels are used instead of power equipment, as well as mulching mowers that return grass clippings to the softscape for nutrients. When snow and ice removal is needed CNM closes parking lots and roadways that are nonessential. CNM does not use deicers on parking lots or landscaped areas under any circumstance. When deicers are necessary for walkways, CNM uses EPA that meets the US EPA's product standards, <u>Premiere Pink Granular Ice Melt</u>. Manufacturer's safety standards are strictly adhered to, such as dilution instructions, applicable amounts and appropriate scenarios for use of product.

80% or more of the maintenance equipment used to clean the exteriors of buildings, sidewalks, pavement is environmentally friendly and/or the methods by which the equipment is being utilized is measured by a "not to exceed" hourly limit. Windows are washed with water only and sidewalks and pavement are cleared with brooms. 95% of the paints and sealants used outdoors are environmentally preferred products; they must meet South Coast Air Quality Management District standards. In addition, all maintenance activity is recorded and if any implementation goals are not being met, the responsible party will work with the individuals performing the maintenance to resolve the issue. For more information please see the CNM Building Exterior and Hardscape Management Plan (request from PPD).

Power washing building facades, sidewalks, parking lots and other surfaces occurs as needed. There are no chemicals used for power washing unless grease/oil cannot be absorbed or removed otherwise. If cleanser is needed, CNM uses <u>Spray</u> <u>Nine® (Permatex)</u> according to manufacturer's instructions. The classification of this cleanser is not considered hazardous by 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). In most cases, chemicals are not needed and water is directed into nearby landscaping, so that it does not enter storm drains.

Oil, antifreeze leaks from parking lots using non-hazardous absorbent product: <u>ZEP INSTANT SPILL ABSORB</u> product, material number: ZUABS3. Debris, trash and other potential pollutants are cleared from outdoor surfaces on a daily basis. No washing of these hardscapes is conducted. No flow is generated.

Ground storm drains throughout campuses are marked with "no dumping signs". Cleaning the drain grates of debris and trash occurs as needed, after major storm events, and every fall when dead foliage is also being removed from surfaces. Rooftop drains and gutters are inspected visually when roofs and rooftop equipment is being serviced or quarterly, whichever comes first.

Landscapes—Softscapes

CNM xeriscapes 80-90% of the non-paved landscape, depending on campus and status of building renovations and landscape upgrades. When needed, manual equipment such as brooms, rakes, and shovels are used instead of power equipment, as well as mulching mowers that return grass clippings to the softscape for nutrients. 70%-80% of weeds are manually removed. Pre-emergent herbicide is sprayed in problem areas, 1 time per year during spring season before weeds emerge. Post-emergent is also used on approximately 20% of the landscape. All herbicides are applied sparsely and in accordance with manufacturer's instructions. Following are a list of herbicides used on CNM campuses.

Pre-Emergent: Pendulum 3.3 EC. EPA Reg. No. 241-341 Post Emergent: Ranger® PRO Herbicide. EPA Reg. No. 524-517

Parking Lots and Fleet Vehicles

Parking Lot and Fleet Vehicle Maintenance

Parking lots

Trash and debris are removed on a daily basis, or as needed, by groundskeepers. Reported or observed leaks from automobiles, such as oil and antifreeze, are cleaned by groundskeepers with the following non-hazardous absorbent product: ZEP INSTANT SPILL ABSORB, material number: ZUABS3. Currently, the parking lots are not power-washed, nor treated with water or other liquids that could come in contact with a storm conveyance system or drain.

Fleet Vehicles

Mechanical repairs and fluid services are handled off site by 3rd party vendors. The majority of vehicles are washed at Mister[™] car wash. Those covered in wraps cannot go through a traditional, off-site, carwash. These vehicles are cleaned by a mobile detail car wash service that normally only details the interiors of vehicles; therefore very little water is used and rarely generates flow. There are 15 cars washed by the on-site service per month. Chemicals used to wash the exterior of the car are 1) Simpler Green[®] All Wheel Tire Cleaner and 2) Griot's Garage Brilliant Finish Car Wash. If exterior washing is needed, the wash water is directed towards the sewer drain (does not go to river) on the north side of the RPM Building property (Appendix A).

Safety

Hazardous Waste

Academics

Culinary arts and other food & beverage related programs may generate fats, oils and grease that may block stormwater collection systems if disposed of improperly. The college food and beverage programs maintain grease traps and conveyance systems designed to handle these substances. If items (e.g. floor mats) are too cumbersome to wash indoors, they are washed over the drain that is connected to the sewer on the north side of the RPM Building property (Appendix A).

All labs containing chemicals are required to have an updated binder or an Excel spreadsheet containing the chemical inventory safety data sheets. These forms are located online and hard copies are located in the physical lab where the class is being held. Section 13 of the safety data sheet, Disposal Information, outlines how to properly dispose of chemicals. For chemicals or solids that cannot be disposed of down the drain, hazardous waste containers are provided for each laboratory. Each laboratory must properly containerize, segregate, label and store the waste until Safety and Environmental Health can properly dispose of them. *

Used automotive fluids are collected by the department and disposed of by the Department of Safety and Environmental Health. * The diesel and automotive labs have sand catchers installed in locations where they wash the vehicles and engines. Throughout the year, as needed, the water in the sand catchers is pumped out by a contracted vendor that handles waste.

Metals and any welding waste is collected by the department for proper disposal. Unwanted or unused paints are poured into a collection drum. Once the drum is full, Safety and Environmental Health is notified for pick up and proper disposal. *

Art faculty are instructed to collect paints, rags and other materials that have come in contact with paints or other chemical containing substances. The Department of Environmental Health and Safety relinquish these products to be properly disposed of. *

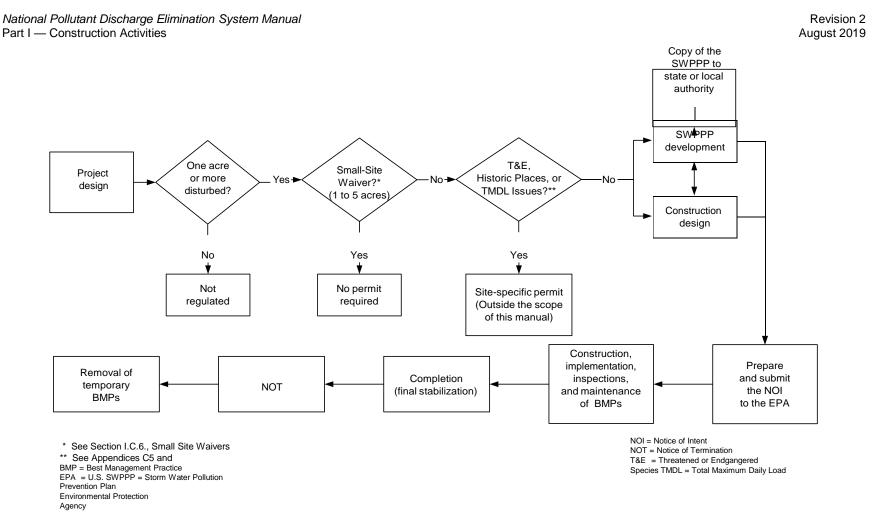
*For more information on collection and disposal of potentially hazardous and hazardous materials, please visit the Safety & Environmental Health Departmental <u>Website</u>.

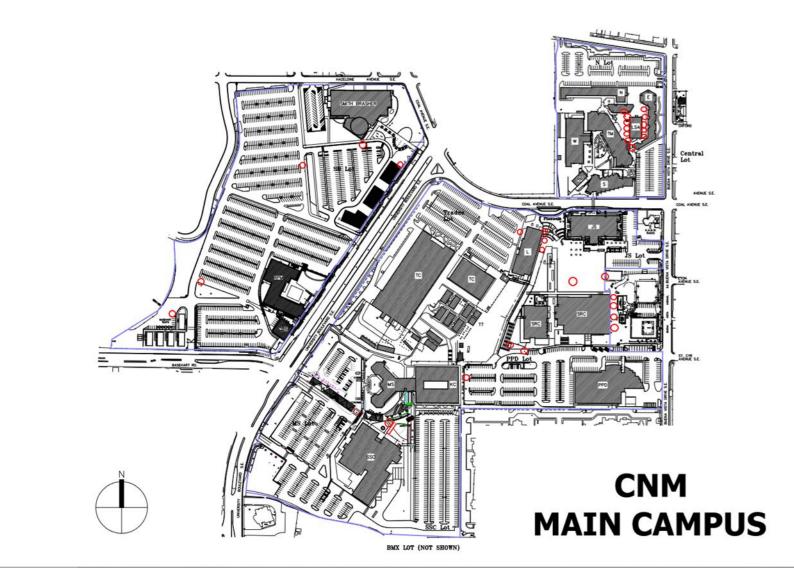
Facilities and Planning

Construction Site Permitting Process

Construction site stormwater runoff is of top concern to city and county managers for preventing the pollution of adjacent water bodies. Therefore, local jurisdictions require a Storm Water Pollution Prevention Plan (SWPPP) to be submitted by construction contractor, in order for the construction activity to move forward. Below is a flow chart including all steps to be taken from project design through Notice of Intent (NOI).

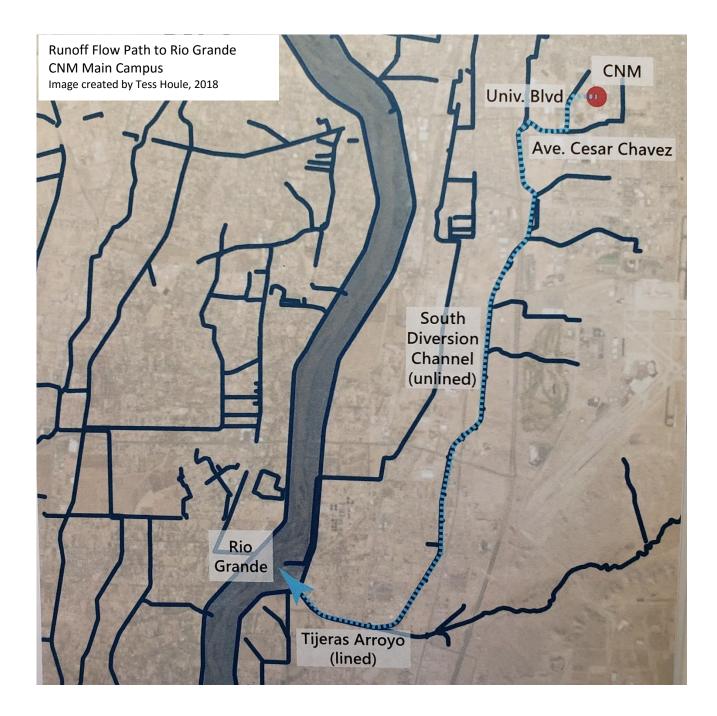
NOI Form https://www.epa.gov/sites/production/files/2017-02/documents/2017_cgp_final_appendix_j -_noi_fillable_508.pdf





Storm Drains 🔘

See Appendix for additional campus maps



Central New Mexico Community College Stormwater Management Program

Flow Requirements

As a general practice, CNM Facilities and Maintenance and Operations Departments implement Low Impact Development and Redevelopment (LID) whenever possible to reduce the volume of storm water runoff from leaving sites into the City's or other storm conveyance systems.

For construction, renovation and other activities that disturb natural conditions, CNM is also required to prevent water and debris from entering waterways in excess of what would enter under natural conditions (pre-development water flow). Adhering to pre-development runoff standards, CNM is also protecting the campus landscape from erosion and providing habitat for flora and fauna.

Additionally, by Executive Order (2006-001), CNM Facilities department is required to build to LEED Silver standard. LEED stands for Leadership in Energy and Environmental Design and is a building certification program developed by the U.S. Green Building Council (USGBC). To certify a project under this program, points must be obtained under a variety of categories. Some points may be gained by implementing site specific LID and Green Stormwater Infrastructure (GSI) features.

There are many design approaches CNM employs to ensure that water is not rapidly running off site, such as planting native vegetation in lieu of hardscapes, drip irrigation, and directing roof/other drainage towards landscaped areas.

Detention basins are also implemented on campuses where they are necessary to reduce flow by volumes that cannot be met by xeriscaping or other methods. Detention basins are designed to capture water, infiltrate and slowly release it over a specified amount of time. Pre-development runoff rates are calculated for the site where the project is being implemented. At CNM Detention basins are often unrecognizable because they have been designed according to Low Impact Development (LID) and Green Stormwater Infrastructure (GSI) guidelines. Therefore much of the infrastructure that manage infiltration and flow are buried under natural materials that provide a home to native vegetation and small animals.

The following campuses or buildings sites have one or more detention ponds:

-Joseph M. Montoya Campus (JMMC) -Max Salazar Parking lot at University (Main Campus) -Janet Stromberg (JS) and Student Resource Center shared lawn (Main Campus) -Smith Brasher (Main Campus) -Rio Rancho (Rio Rancho Campus) -Work Force Training Center (WTC—Alameda Campus)

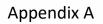
Educational Outreach

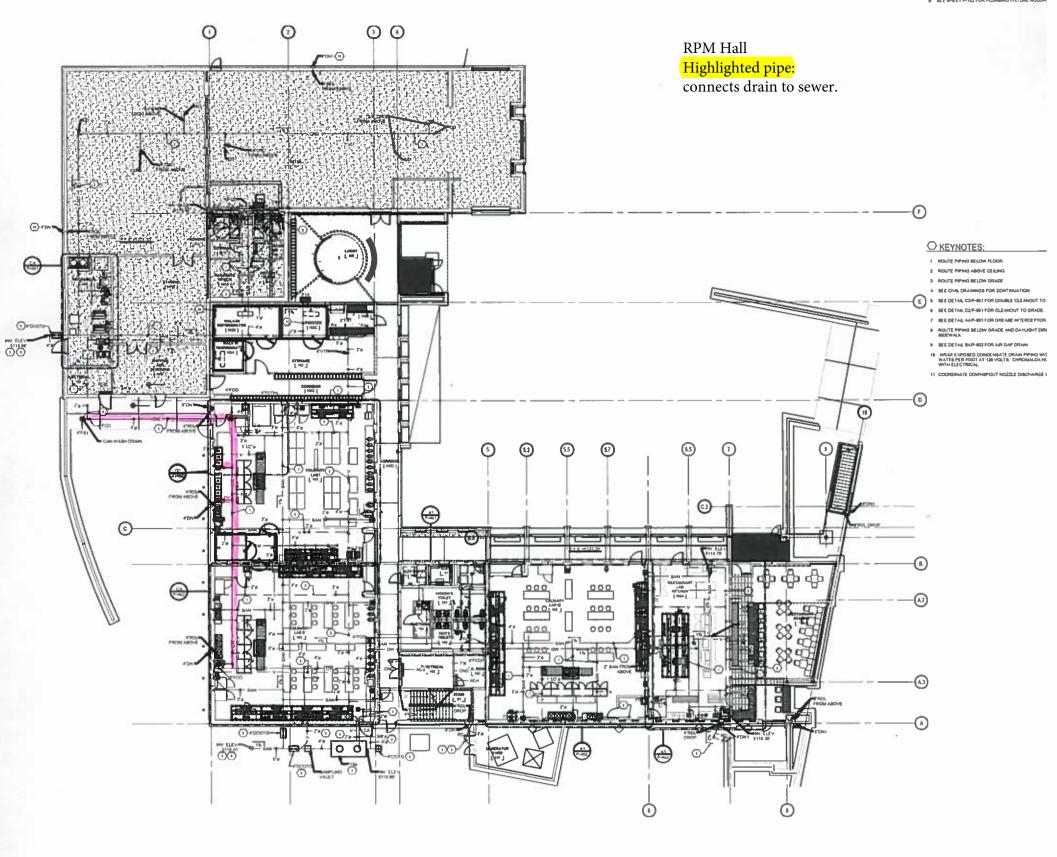
New Employee Orientation

During New Employee Orientation, new hires are required to receive training on appropriate hazardous waste disposal. They are also educated on types of illicit discharge and general best management practices to prevent storm water pollution and water waste. There are several storm drain markers that say "No Dumping Drains to River" throughout campus that were placed as a part of college-wide sustainability efforts.

Water in the Desert Program

CNM's Sustainability Committee and Sustainability Project Manager host an annual educational outreach event that emphasizes how water flows through both natural and manmade desert environments. This educational outreach program includes touring storm drains on campus while CNM's Sustainability Project Manager explains what is meant by the "no dumping" signs. Instructors may also assign their students to participate in the Water in the Desert Program for class credit.





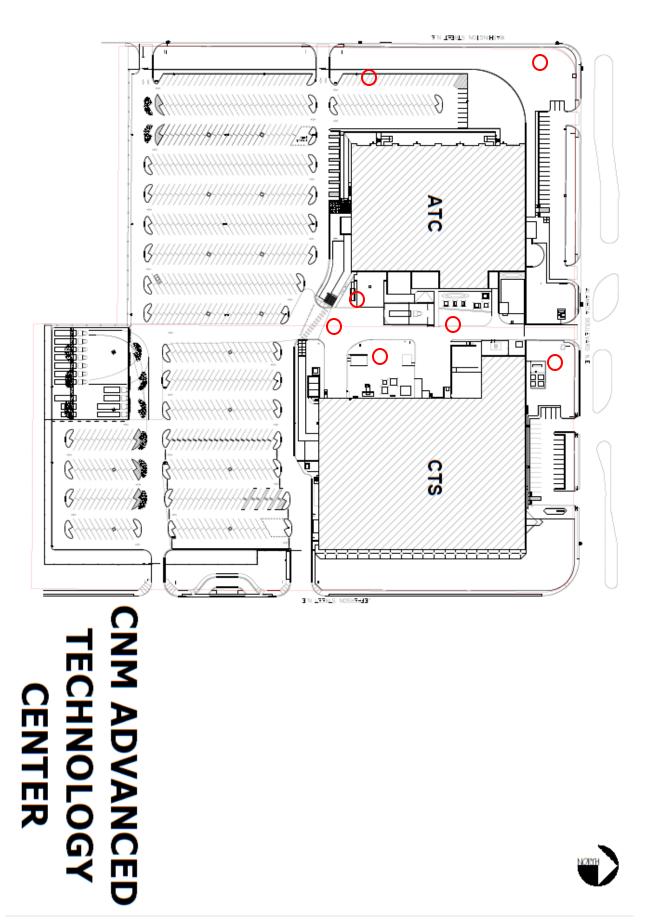
Ľ

A PLUMBING WASTE & VENT FLOOR PLAN LEVEL 1



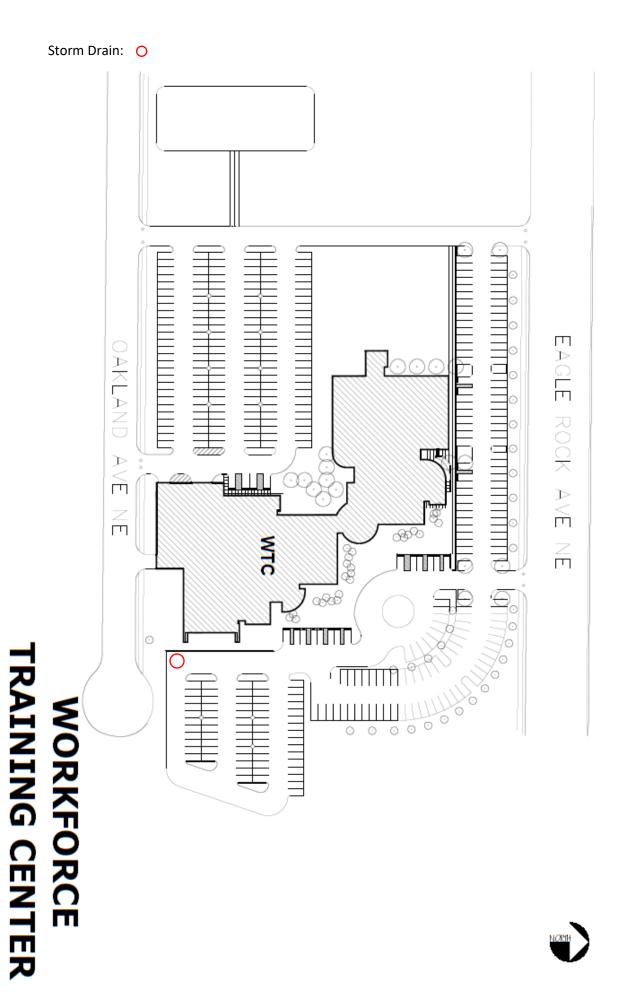
I.

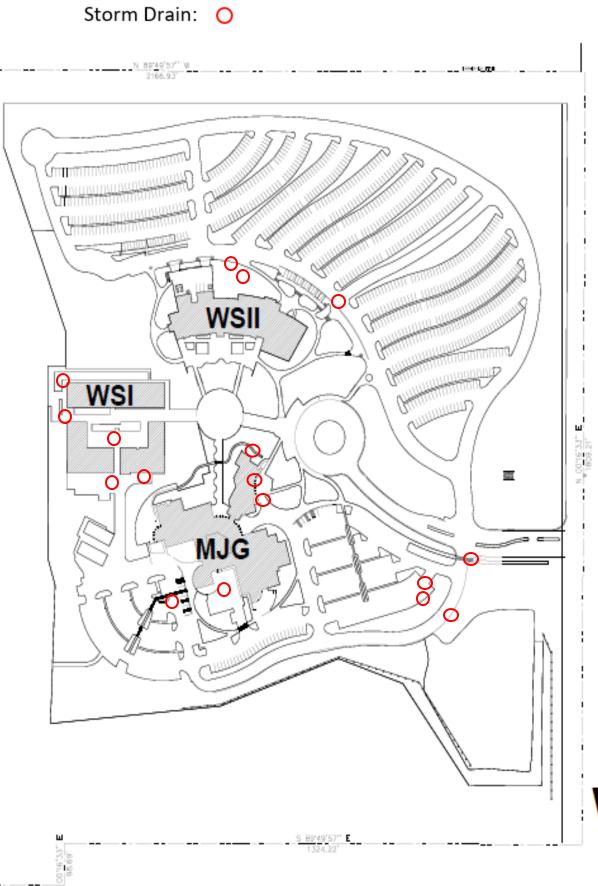
Storm Drain: O



MONTOYA CAMPUS

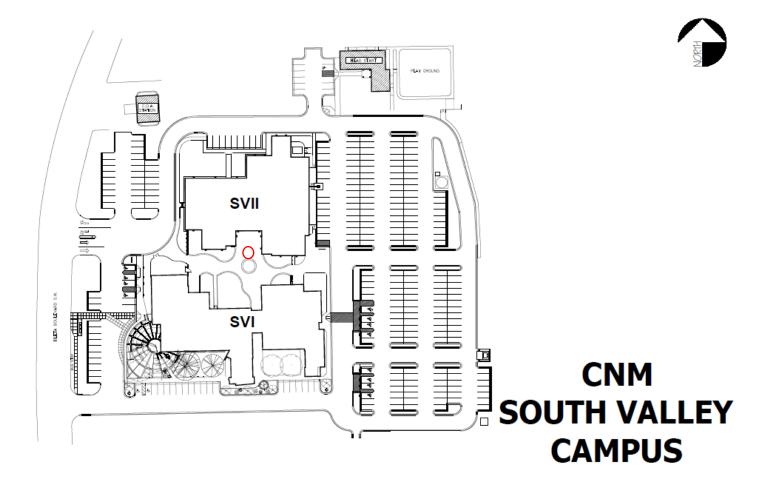




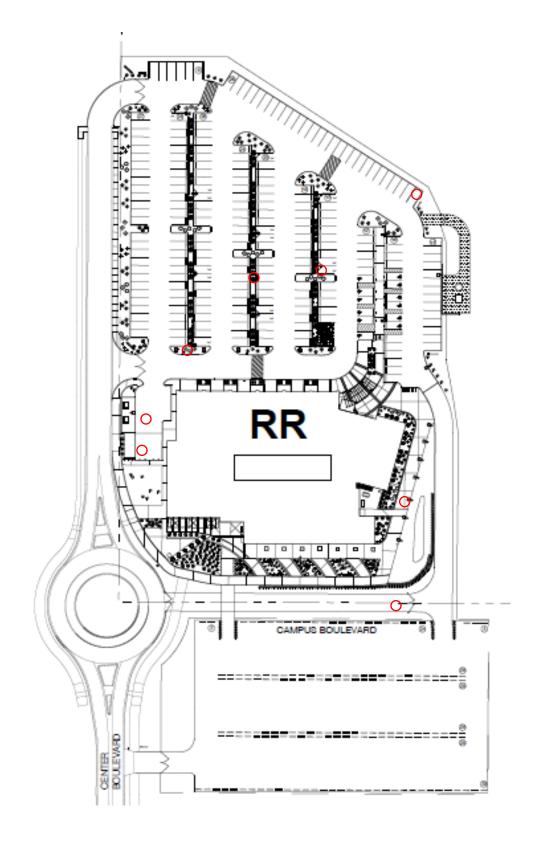




HINC



Storm Drain: O



Storm Drain: O