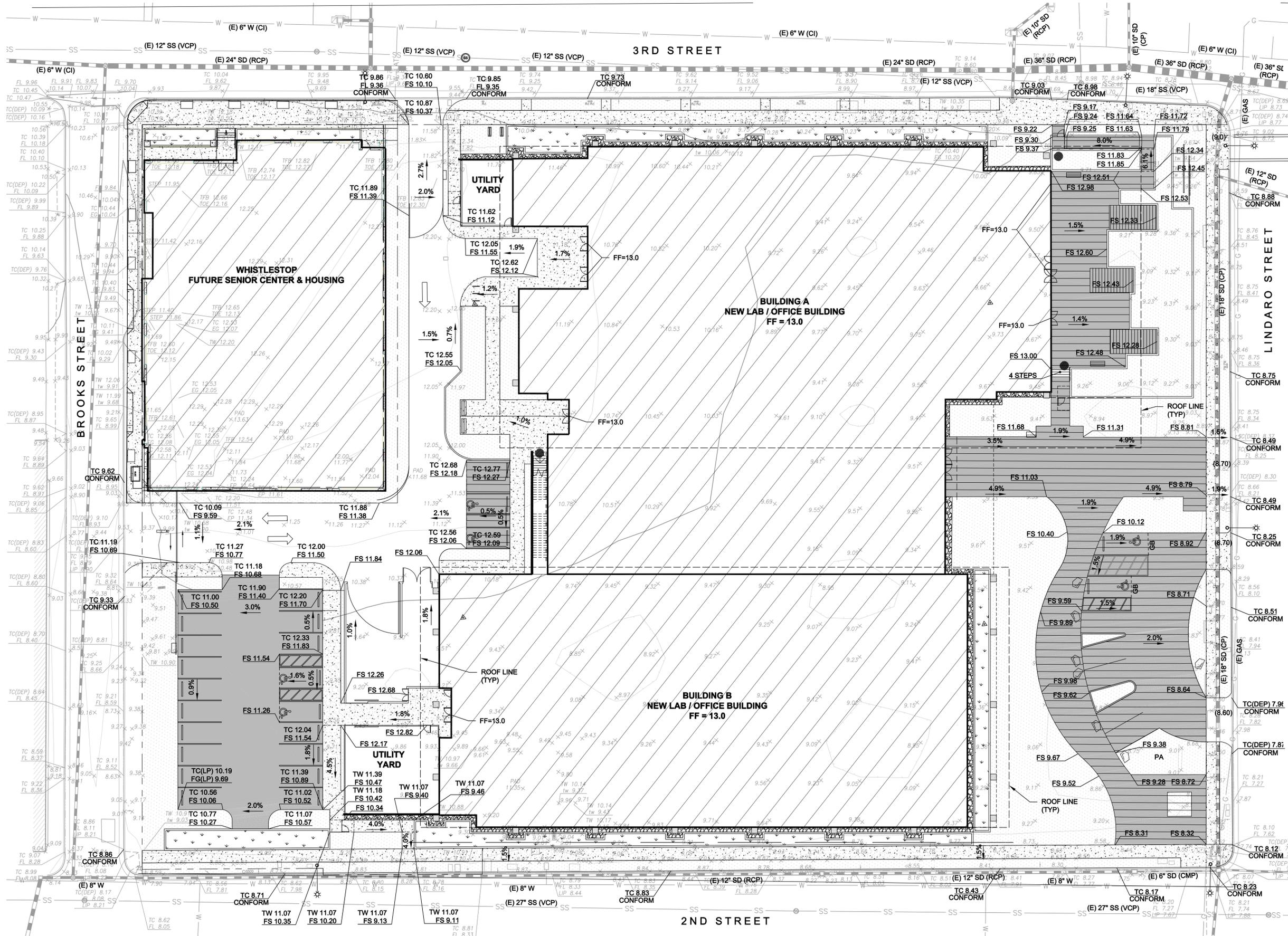
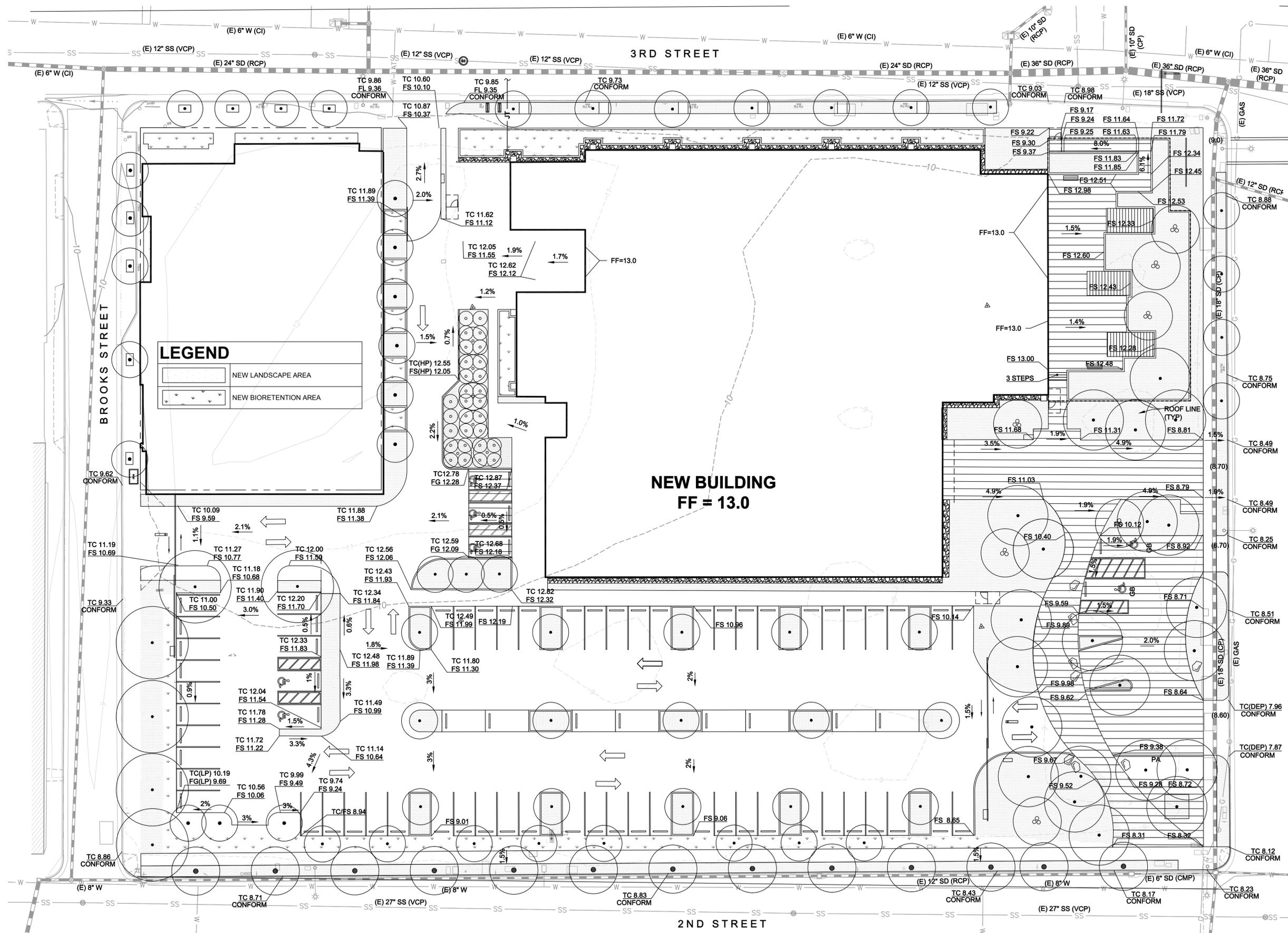


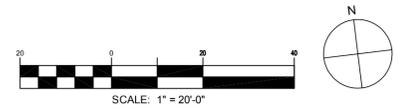
LEGEND	
	NEW BUILDING
	PEDESTRIAN CONCRETE WALK
	PERVIOUS CONCRETE PAVERS
	LANDSCAPE AREA
	BIORETENTION AREA

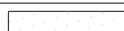


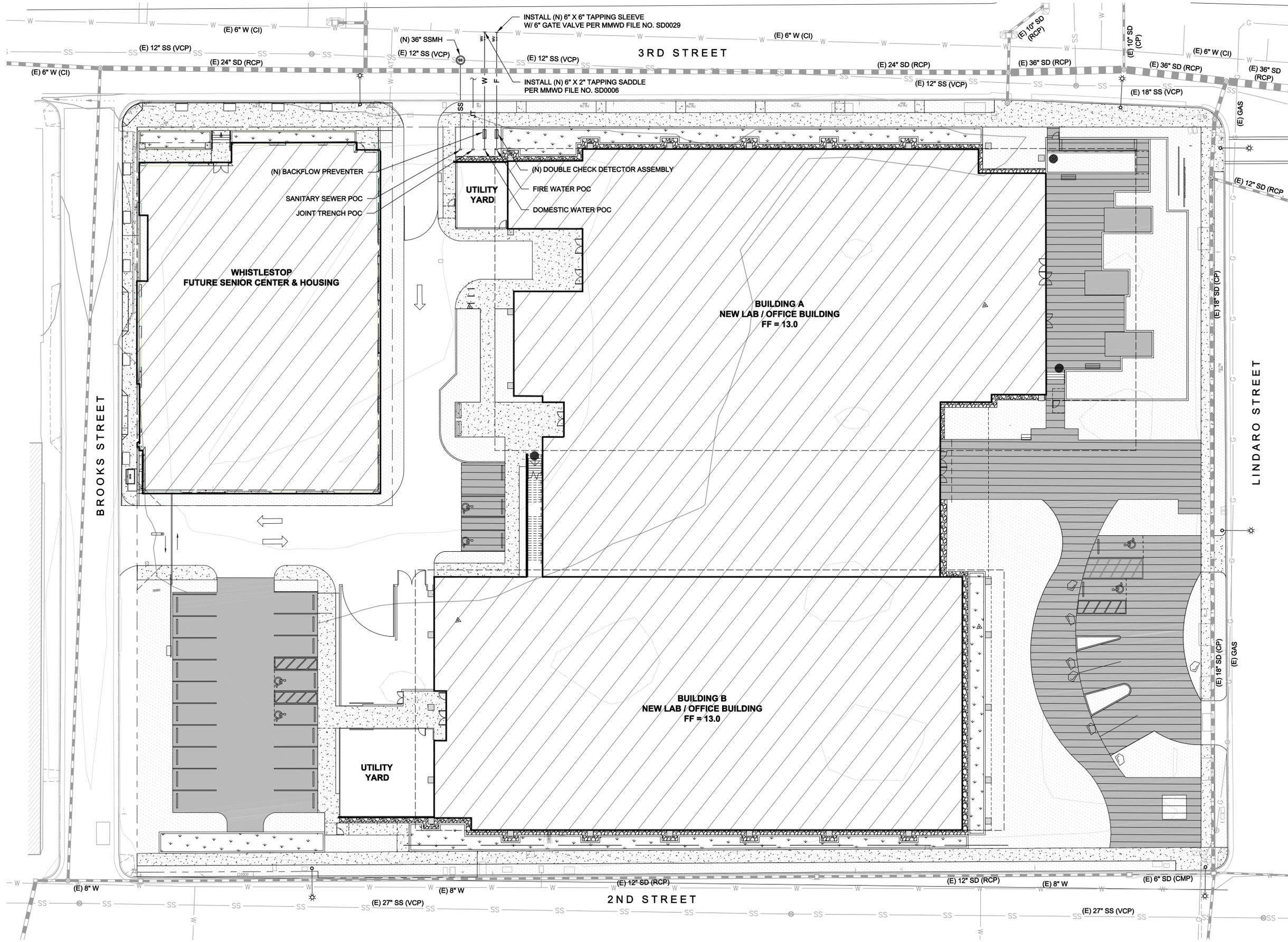


LEGEND

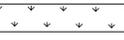
	NEW LANDSCAPE AREA
	NEW BIORETENTION AREA

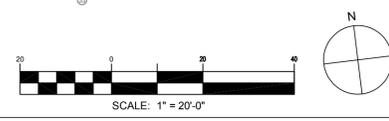
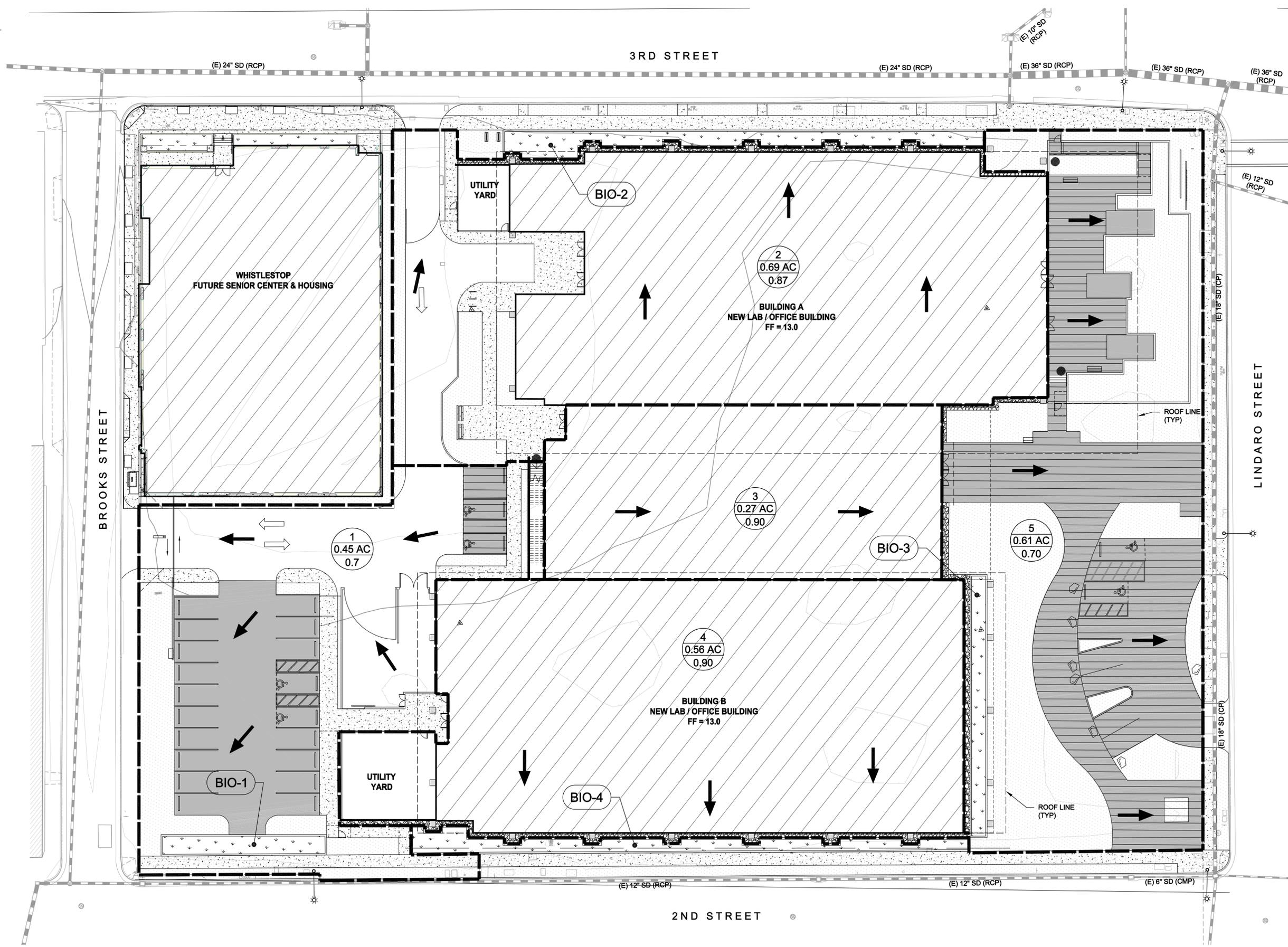


LEGEND	
	NEW BUILDING
	PEDESTRIAN CONCRETE WALK
	PERVIOUS CONCRETE PAVERS
	LANDSCAPE AREA
	BIORETENTION AREA



LEGEND

-  DRAINAGE MANAGEMENT AREA
-  AREA IN ACRES
-  RUNOFF COEFFICIENT
-  OVERLAND FLOW DIRECTION
-  DRAINAGE AREA BOUNDARY
-  BIORETENTION AREA
-  PERVIOUS CONCRETE PAVERS



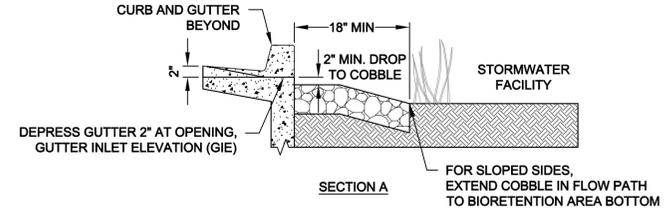
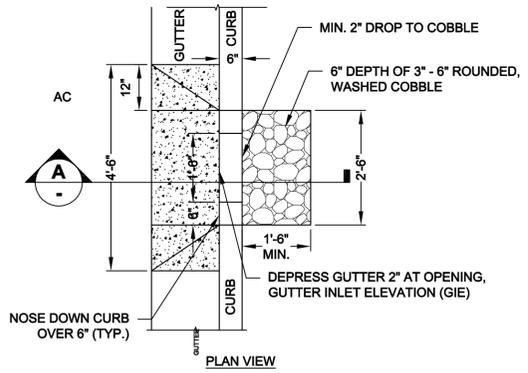
DMA NAME	DMA AREA (SF)	POST-PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP NAME	IMP SIZING FACTOR	MIN. IMP SIZE (SF)	PRO. IMP SIZE (SF)
DMA 1	0	ROOF	1.0	0	BIO AREA 1	0.04	379	495
	9,155	PAVEMENT	1.0	9,155				
	6,405	PERVIOUS CONCRETE	0.0	0				
	3,145	LANDSCAPE	0.1	315				
TOTAL >				9,469				

DMA NAME	DMA AREA (SF)	POST-PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP NAME	IMP SIZING FACTOR	MIN. IMP SIZE (SF)	PRO. IMP SIZE (SF)
DMA 2	21,885	ROOF	1.0	21,885	BIO AREA 2	0.04	1152	1185
	6,735	PAVEMENT	1.0	6,735				
	0	PERVIOUS CONCRETE	0.0	0				
	1,725	LANDSCAPE	0.1	173				
TOTAL >				28,793				

DMA NAME	DMA AREA (SF)	POST-PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP NAME	IMP SIZING FACTOR	MIN. IMP SIZE (SF)	PRO. IMP SIZE (SF)
DMA 3	11,775	ROOF	1.0	11,775	BIO AREA 3	0.04	471	620
	0	PAVEMENT	1.0	0				
	0	PERVIOUS CONCRETE	0.0	0				
	0	LANDSCAPE	0.1	0				
TOTAL >				11,775				

DMA NAME	DMA AREA (SF)	POST-PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP NAME	IMP SIZING FACTOR	MIN. IMP SIZE (SF)	PRO. IMP SIZE (SF)
DMA 4	22,735	ROOF	1.0	22,735	BIO AREA 4	0.04	987	1100
	1,936	PAVEMENT	1.0	1,936				
	0	PERVIOUS CONCRETE	0.0	0				
	0	LANDSCAPE	0.1	0				
TOTAL >				24,671				

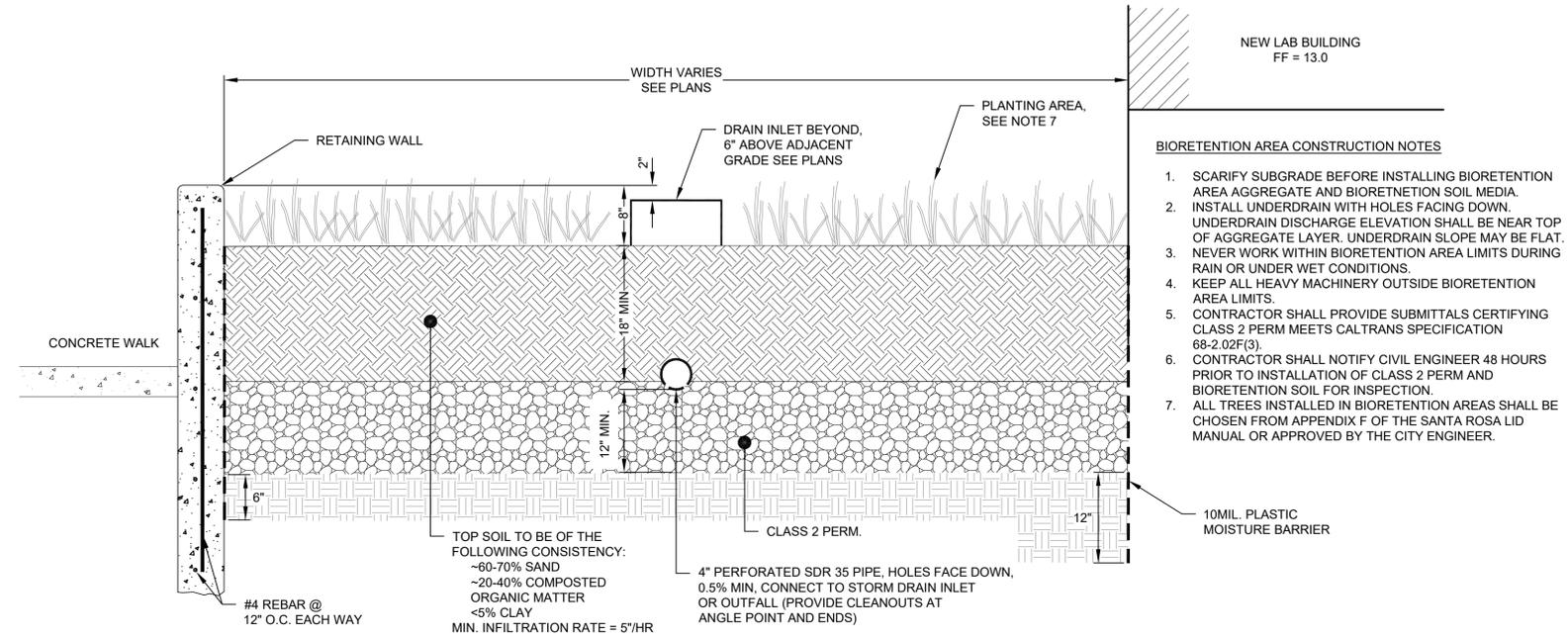
DMA NAME	DMA AREA (SF)	POST-PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP NAME	IMP SIZING FACTOR	MIN. IMP SIZE (SF)	PRO. IMP SIZE (SF)
DMA 5	0	ROOF	1.0	0	BIO AREA 3	0.04	50	620
	0	PAVEMENT	1.0	0				
	12,770	PERVIOUS CONCRETE	0.0	0				
	12,475	LANDSCAPE	0.1	1,248				
TOTAL >				1,248				



CONSTRUCTION NOTES

- AFTER CONSTRUCTION PLACE SAND BAGS AT GUTTER OPENINGS TO KEEP STORM FLOWS FROM ENTERING FACILITY UNTIL VEGETATION IS ESTABLISHED

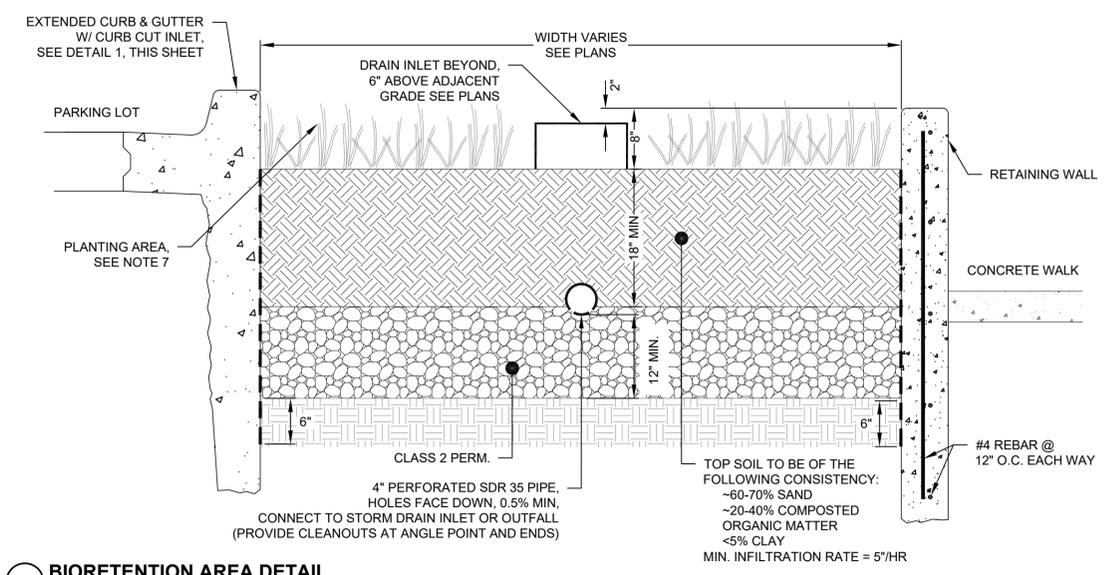
1 CURB CUT INLET WITH GRAVEL ENERGY DISSIPATION
SCALE: 1" = 1'



BIORETENTION AREA CONSTRUCTION NOTES

- SCARIFY SUBGRADE BEFORE INSTALLING BIORETENTION AREA AGGREGATE AND BIORETENTION SOIL MEDIA.
- INSTALL UNDERDRAIN WITH HOLES FACING DOWN. UNDERDRAIN DISCHARGE ELEVATION SHALL BE NEAR TOP OF AGGREGATE LAYER. UNDERDRAIN SLOPE MAY BE FLAT.
- NEVER WORK WITHIN BIORETENTION AREA LIMITS DURING RAIN OR UNDER WET CONDITIONS.
- KEEP ALL HEAVY MACHINERY OUTSIDE BIORETENTION AREA LIMITS.
- CONTRACTOR SHALL PROVIDE SUBMITTALS CERTIFYING CLASS 2 PERM MEETS CALTRANS SPECIFICATION 68-2.02F(3).
- CONTRACTOR SHALL NOTIFY CIVIL ENGINEER 48 HOURS PRIOR TO INSTALLATION OF CLASS 2 PERM AND BIORETENTION SOIL FOR INSPECTION.
- ALL TREES INSTALLED IN BIORETENTION AREAS SHALL BE CHOSEN FROM APPENDIX F OF THE SANTA ROSA LID MANUAL OR APPROVED BY THE CITY ENGINEER.

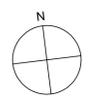
2 BIORETENTION AREA DETAIL
SCALE: N.T.S.



BIORETENTION AREA CONSTRUCTION NOTES

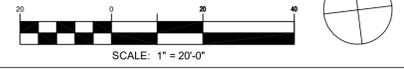
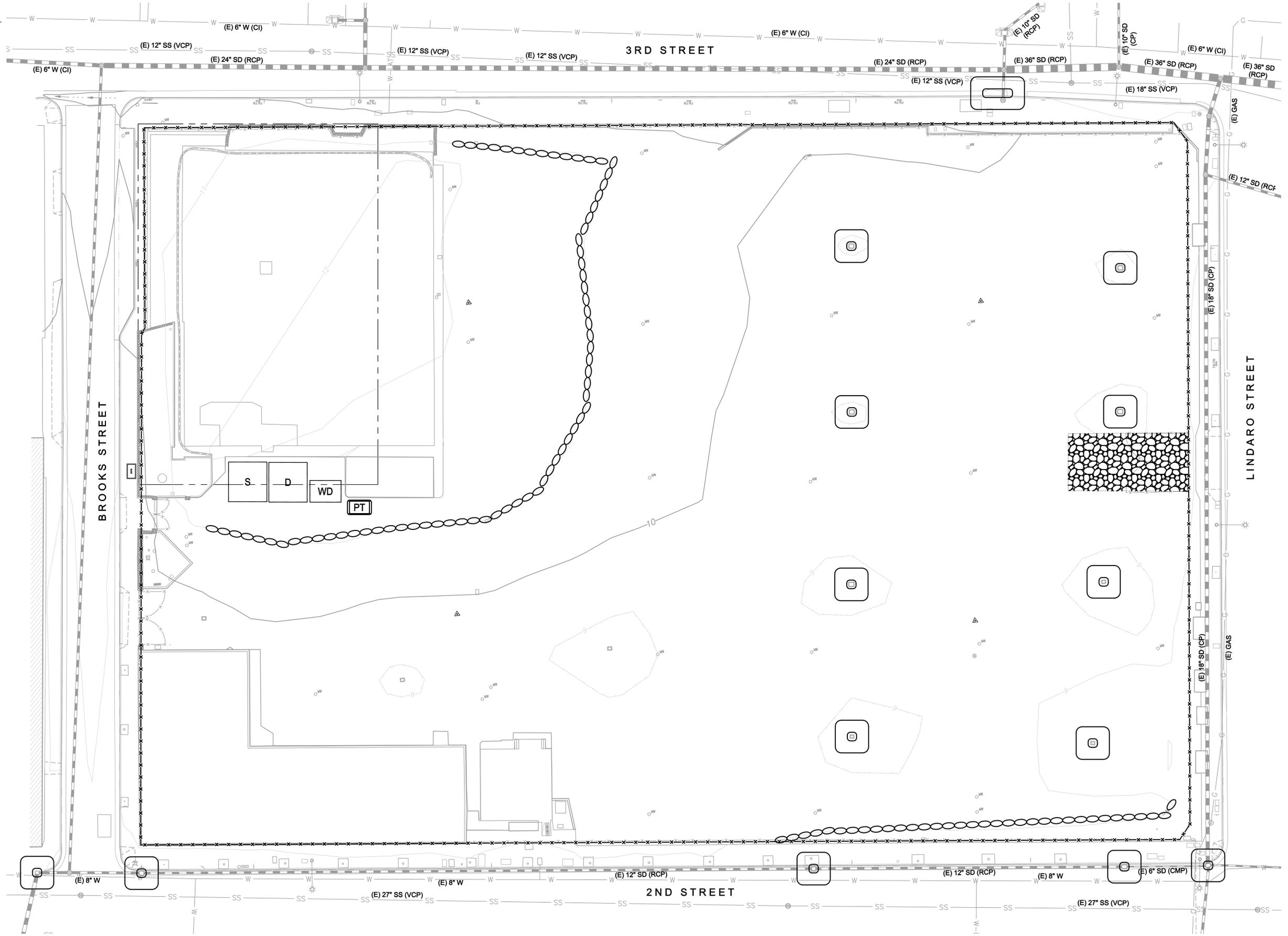
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3 BIORETENTION AREA DETAIL
SCALE: N.T.S.



LEGEND

-  CONSTRUCTION FENCING
-  FIBER ROLLS
-  CONSTRUCTION ENTRANCE
-  CONCRETE WASHDOWN AREA
-  DELIVERY AREA
-  NON HAZARDOUS STORAGE
-  STORM INLET PROTECTION
-  PORTABLE TOILET WITH LINER



	BMP	GENERAL DESCRIPTION
EROSION CONTROL BMPs		
A	PRESERVE EXISTING VEGETATION	EXISTING VEGETATION SHOULD BE PRESERVED AS MUCH AS POSSIBLE. CASQA: EC-2.
B	TRACK WALK SLOPES	DURING GRADING PHASE, TRACK-WALK UP AND DOWN SLOPES (NOT PARALLEL TO THEM). CASQA: EC-15.
C	SOIL COVER	COVER ALL EXPOSED SOIL WITH STRAW MULCH AND TACKIFIER (OR EQUIVALENT). CASQA: EC-3, EC-5, EC-6, EC-7, EC-14, AND EC-16.
D	EROSION CONTROL BLANKETS OR EQUIVALENT	INSTALL EROSION CONTROL, BLANKETS (OR EQUIVALENT) ON ANY DISTURBED SITE WITH 3:1 SLOPES OR STEEPER, KEYED INTO THE GROUND AT LEAST 3 INCHES. USE WILDLIFE-FRIENDLY BLANKETS MADE OF BIODEGRADABLE NATURAL MATERIALS. AVOID USING BLANKETS MADE WITH PLASTIC NETTING OR FIXED APERTURE NETTING. CASQA: EC-7.
E	REVEGETATION	AREAS OF DISTURBED SOIL/VEGETATION SHOULD BE REVEGETATED AS SOON AS PRACTICAL. CASQA: EC-4.
SEDIMENT CONTROL BMPs		
F	STABILIZED SITE ENTRANCE	STABILIZE SITE ENTRANCE AND TEMPORARY DRIVEWAY. USE 3 TO 4-INCH CRUSHED ROCK FOR A MINIMUM OF 50 FEET (OR AS FAR AS POSSIBLE) TO PREVENT TRACKING SOIL OFFSITE. THIS CAN BE USED IN CONJUNCTION WITH A TIRE WASH OR RUMBLE PLATES. CASQA: TC-1; TC-3.
G	FIBER ROLLS (E.G. STRAW WATTLES)	USE FIBER ROLLS ALONG CONTOURS OF SHORT SLOPES 3:1 OR FLATTER, KEYED INTO GROUND AT LEAST 3-INCHES DEEP (TYPICALLY 25 FEET APART). USE WILDLIFE-FRIENDLY FIBER ROLLS MADE OF BIODEGRADABLE NATURAL MATERIALS. AVOID USING FIBER ROLLS MADE WITH PLASTIC NETTING OR FIXED APERTURE NETTING. CASQA: SE-5.
H	SILT FENCE	INSTALL SILT FENCE ALONG CONTOURS AS SECONDARY MEASURE TO KEEP SEDIMENT ONSITE AND TO MINIMIZE VEHICLE AND FOOT TRAFFIC BEYOND LIMITS OF SITE DISTURBANCE. SILT FENCING MUST BE KEYED IN. CASQA: SE-1.
I	DRAIN INLET PROTECTION	USE PEA-GRAVEL BAGS, (OR SIMILAR PRODUCT) AROUND DRAIN INLETS LOCATED BOTH ONSITE AND IN GUTTER AS A LAST LINE OF DEFENSE. CASQA: NS-2.
GOOD HOUSEKEEPING BMPs		
K	CONCRETE WASHOUTS	CONSTRUCT A CONCRETE WASHOUT SITE PLACED AT LEAST 50 FEET AWAY FROM STORM DRAINS, WATERBODIES, OR OTHER DRAINAGES. IDEALLY, PLACE ADJACENT TO STABILIZED ENTRANCE. CLEAN AS NEEDED AND REMOVE AT END OF PROJECT. CASQA: WM-8.
L	STOCKPILE MANAGEMENT	COVER ALL STOCKPILES AND LANDSCAPE MATERIAL AND BERM PROPERLY WITH FIBER ROLLS OR SAND BAGS. KEEP BEHIND SILT FENCE, AWAY FROM WATERBODIES. AVOID USE OF PLASTIC SHEETING WHERE POSSIBLE TO KEEP PLASTIC FROM ENTERING WATERBODIES. CASQA: WM-3.
M	HAZARDOUS MATERIAL MANAGEMENT	HAZARDOUS MATERIALS MUST BE KEPT IN CLOSED CONTAINERS THAT ARE COVERED AND UTILIZE SECONDARY CONTAINMENT, NOT DIRECTLY ON SOIL. CASQA: WM-6.
N	SANITARY WASTE MANAGEMENT	PLACE PORTABLE TOILETS NEAR STABILIZED SITE ENTRANCE, BEHIND THE CURB AND AWAY FROM GUTTERS, STORM DRAIN INLETS, AND WATERBODIES. ALL PORTABLE BATHROOMS SHOULD HAVE OVERFLOW PAN/TRAY (MOST VENDORS PROVIDE THESE). CASQA: WM-9.
O	EQUIPMENT AND VEHICLE MAINTENANCE	PAVEMENT EQUIPMENT FLUID LEAKS ONTO GROUND BY PLACING DRIP PANS OR PLASTIC TARP UNDER EQUIPMENT. CASQA: NS-8, NS-9, AND NS-10.

POLLUTION CONTROL NOTES:

- ALL LOTS WILL BE ROUGH GRADED IN ACCORDANCE WITH THE GRADING PLANS PREPARED BY CSW/ST2. FUTURE FINISH GRADING SHALL DIRECT ALL STORM WATER RUNOFF TO THE STREETS OR INLETS SHOWN ON THIS PLAN AND ULTIMATELY TO THE CITY-MAINTAINED STORM DRAIN SYSTEM. ALL STORM WATER FROM THIS SITE IS INTENDED TO BE DIRECTED TO THE CITY STORM DRAINS.
- IF SIGNIFICANT SEDIMENT OR OTHER VISUAL SYMPTOMS OF IMPURITIES ARE NOTICED IN THE STORM WATER, CONTACT THE CIVIL ENGINEER IMMEDIATELY.
- CONTRACTOR IS RESPONSIBLE FOR INSPECTION AND RESTORATION OF ALL ASPECTS OF THIS PLAN. SEDIMENT ON SIDEWALKS AND GUTTERS SHALL BE REMOVED BY SHOVEL OR BROOM AND PLACED IN REAR LOT OR OTHER STOCKPILES.
- CATCH BASIN TOPS SHALL BE STAMPED TO READ, "NO DUMPING - FLOWS TO BAY".
- ALL DUMPSTERS OR OTHER TRASH STORAGE ENCLOSURES SHALL BE UTILIZED SOLELY FOR NON-HAZARDOUS MATERIALS.
- ALL EMPLOYEES, CONTRACTORS, AND SUBCONTRACTORS ARE RESPONSIBLE FOR CONFORMING TO THE ELEMENTS SHOWN ON THIS PLAN OR RELATED DOCUMENTS. ANY CONTRACTOR PLANNING TO DO WORK ON-SITE SHALL BE RESPONSIBLE FOR OBTAINING AND REVIEWING ALL INFORMATION PRIOR TO START OF WORK AND EDUCATING ALL OF THEIR EMPLOYEES OR SUBCONTRACTORS AS TO THE CONTENTS OF THIS PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND FILING ALL PLANS WITH RELATED AGENCIES ASSOCIATED WITH THEIR WORK. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, PERMITS FOR STORAGE OF HAZARDOUS MATERIALS, BUSINESS PLANS, PERMITS FOR STORAGE OF FLAMMABLE LIQUIDS, GRADING PERMITS, OR OTHER PLANS OR PERMITS REQUIRED BY MARIN COUNTY, THE CITY OF SAN RAFAEL, OR OTHER AGENCIES. ALL PROPERTY OWNERS, CONTRACTORS, OR SUBCONTRACTORS WORKING ON-SITE ARE INDIVIDUALLY RESPONSIBLE FOR OBTAINING AND SUBMITTING ANY BUSINESS PLANS OR PERMITS REQUIRED BY CITY, STATE OR LOCAL AGENCIES.
- CONTRACTOR MAY RELOCATE STORAGE, DELIVERY, OR WASH-OUT AREAS, TO SUIT THEIR OPERATIONS. RELOCATED LOCATION TO BE SHOWN ON PLANS MAINTAINED AT JOBSITE. CONTACT CIVIL ENGINEER FOR ANY PLAN REVISIONS. PLAN REVISIONS SHALL BE SUBMITTED TO CITY IF REQUESTED. CONTRACTOR TO MAINTAIN SECONDARY CONTAINMENT AS NECESSARY TO PROHIBIT POLLUTION AND TOXIC MATERIALS FROM ENTERING STORM DRAIN.
- AFTER COMPLETION OF THE CURB, GUTTER, AND PAVING, OR CONCRETE V-DITCHES THE SILT FILTERS SHALL BE MODIFIED TO BURLAP SACKS FILLED WITH 3/4" DRAIN ROCK OR OTHER ACCEPTED BMP POSITIONED SURROUNDING EACH CATCH BASIN.

EROSION CONTROL NOTES:

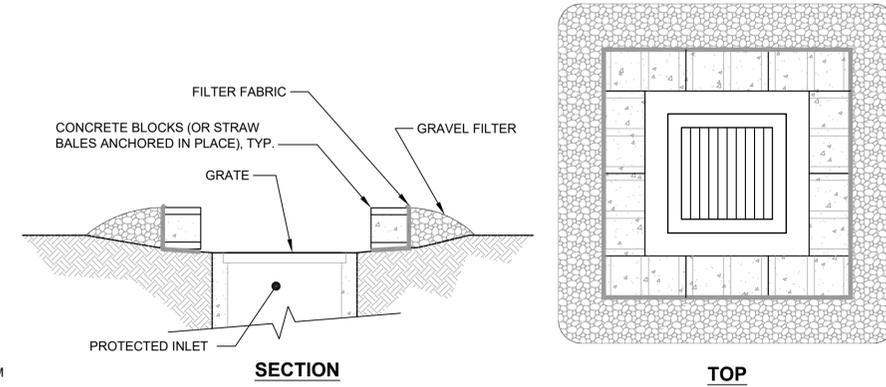
- NO VEHICLES SHALL BE ALLOWED TO TRACK OR SPREAD SOIL FROM THE CONSTRUCTION AREAS ONTO EXISTING PAVED PUBLIC STREETS. ANY VEHICLE OPERATING WITHIN THE PROJECT AREA AND OFF THE PAVED STREET SHALL CROSS A CONSTRUCTION ENTRANCE AS SHOWN HEREIN. THE ENTRANCE MAY BE MODIFIED BY THE CONTRACTOR TO FACILITATE HIS OPERATIONS.
- THE EROSION AND SEDIMENT CONTROL MEASURES WILL BE OPERABLE DURING THE RAINY SEASON, OCTOBER 1ST TO APRIL 15TH. NO GRADING WILL OCCUR BETWEEN OCTOBER 1ST AND APRIL 15TH, UNLESS AUTHORIZED BY THE DIRECTOR OF PUBLIC WORKS.
- CHANGES TO THIS STORM WATER POLLUTION PREVENTION PLAN TO MEET FIELD CONDITIONS WILL BE MADE ONLY WITH THE APPROVAL OF, OR AT THE DIRECTION OF THE CITY. CHANGES MADE TO SUIT FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CIVIL ENGINEER AND THE CITY ENGINEER.
- DURING THE RAINY SEASON, ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE WILL BE MAINTAINED SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF ENTERS THE STORM DRAIN SYSTEM. THESE PLANS SHALL REMAIN IN EFFECT UNTIL THE TRACT IMPROVEMENTS ARE ACCEPTED BY THE CITY, AND ALL SLOPES ARE STABILIZED FROM EROSION.
- STRAW AND TACKIFIER WILL BE APPLIED BY OCTOBER 1ST TO ALL DISTURBED AREAS. ALL EXPOSED SLOPES ADJACENT TO PUBLIC RIGHTS OF WAY SHALL ALSO RECEIVE STRAW AND TACKIFIER. STRAW AND TACKIFIER TO BE APPLIED PER MANUFACTURER'S SPECIFICATIONS AND SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE MINIMUM.
- ROUGH GRADED DITCHES SHALL BE LINED WITH EROSION CONTROL BLANKETS AND THEN HYDROSEEDED.
- THIS PLAN ASSUMES THE COMPLETION OF GRADING AND STORM DRAIN FACILITIES. IF FACILITIES ARE NOT COMPLETED, CONTACT THE CIVIL ENGINEER FOR PLAN REVISIONS.
- ALL BANKS AND ALL GRADED AREAS SHALL BE HYDROSEEDED TO CONTROL EROSION BY OCTOBER 1ST.

URBAN RUNOFF POLLUTION NOTES:

- STABILIZE ALL DENUDED AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 1 AND APRIL 1.
- REMOVE SPOILS PROMPTLY AND AVOID STOCKPILING OF FILL MATERIALS WHEN RAIN IS FORECAST. IF RAIN THREATENS, STOCK-PILED SOILS AND OTHER MATERIALS SHALL BE TARPED, AT THE REQUEST OF THE CITY ENGINEER.
- STORE, HANDLE AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES SO AS TO PREVENT THEIR ENTRY TO THE STORM DRAIN SYSTEM. CONTRACTOR MUST NOT ALLOW CONCRETE, WASHWATERS, SLURRIES, PAINT OR OTHER MATERIALS TO ENTER CATCH BASINS OR TO ENTER SITE RUNOFF.
- USE FILTRATION OR OTHER MEASURES TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
- NO CLEANING, FUELING OR MAINTAINING VEHICLES ON SITE SHALL BE PERMITTED IN ANY MANNER THAT ALLOWS DELETERIOUS MATERIALS TO ENTER CATCH BASINS OR TO ENTER SITE RUNOFF.
- USE OF PESTICIDES AND/OR FERTILIZERS SHALL BE APPLIED AND CONTROLLED TO PREVENT POLLUTION RUNOFF.
- IN THE EVENT GRADING OPERATIONS ARE SUSPENDED BY WEATHER CONDITIONS AND IF THE STORM DRAIN SYSTEM IS INCOMPLETE, INSTALL ADDITIONAL ROCK FILTERS AND OTHER FACILITIES AS DIRECTED BY CITY AND ENGINEER.
- CONTRACTOR TO RELOCATE CONCRETE WASHDOWN, VEHICLE STORAGE DELIVERY, AND NON HAZARDOUS WASTE AREAS AS NECESSARY TO FACILITATE THEIR OPERATION AND PROMOTE POLLUTION CONTROL.
- HYDROMULCH & TACKIFIER MAY BE ELIMINATED WITHIN BUILDING FOOT PRINT IF CONSTRUCTION IS IMMINENT.

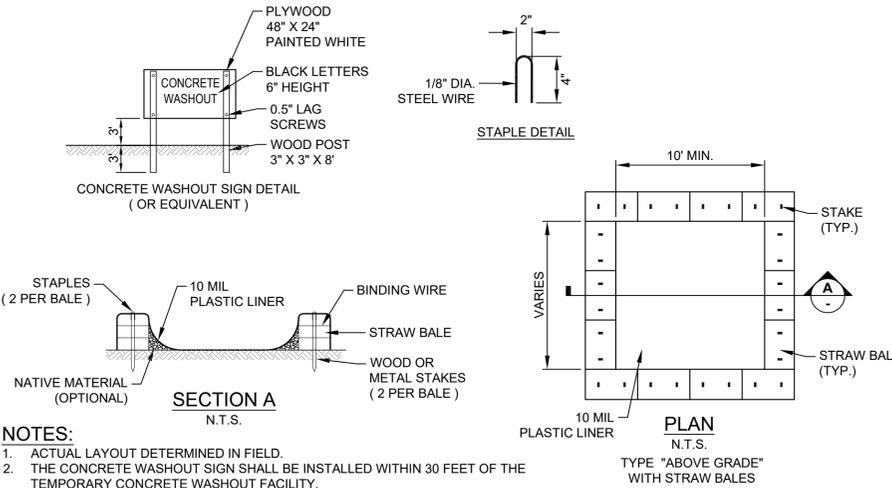
BMP IMPLEMENTATION SCHEDULE:

- ALL BMP'S TO BE INSTALLED PRIOR TO A QUALIFIED STORM EVENT..
- PERIMETER CONTROL, EXISTING INLET PROTECTION, AND CONSTRUCTION ENTRANCE SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF COST..
- ALL OTHER BMP'S SHALL BE INSTALLED AT COMPLETION OF CONSTRUCTION OF EACH INLET.



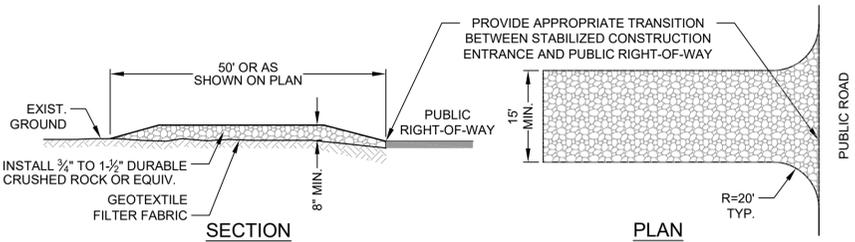
3 INLET PROTECTION DETAIL

SCALE: NTS



4 TEMPORARY CONCRETE WASHOUT DETAIL

SCALE: 1" = 1'



5 TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

SCALE: NTS

