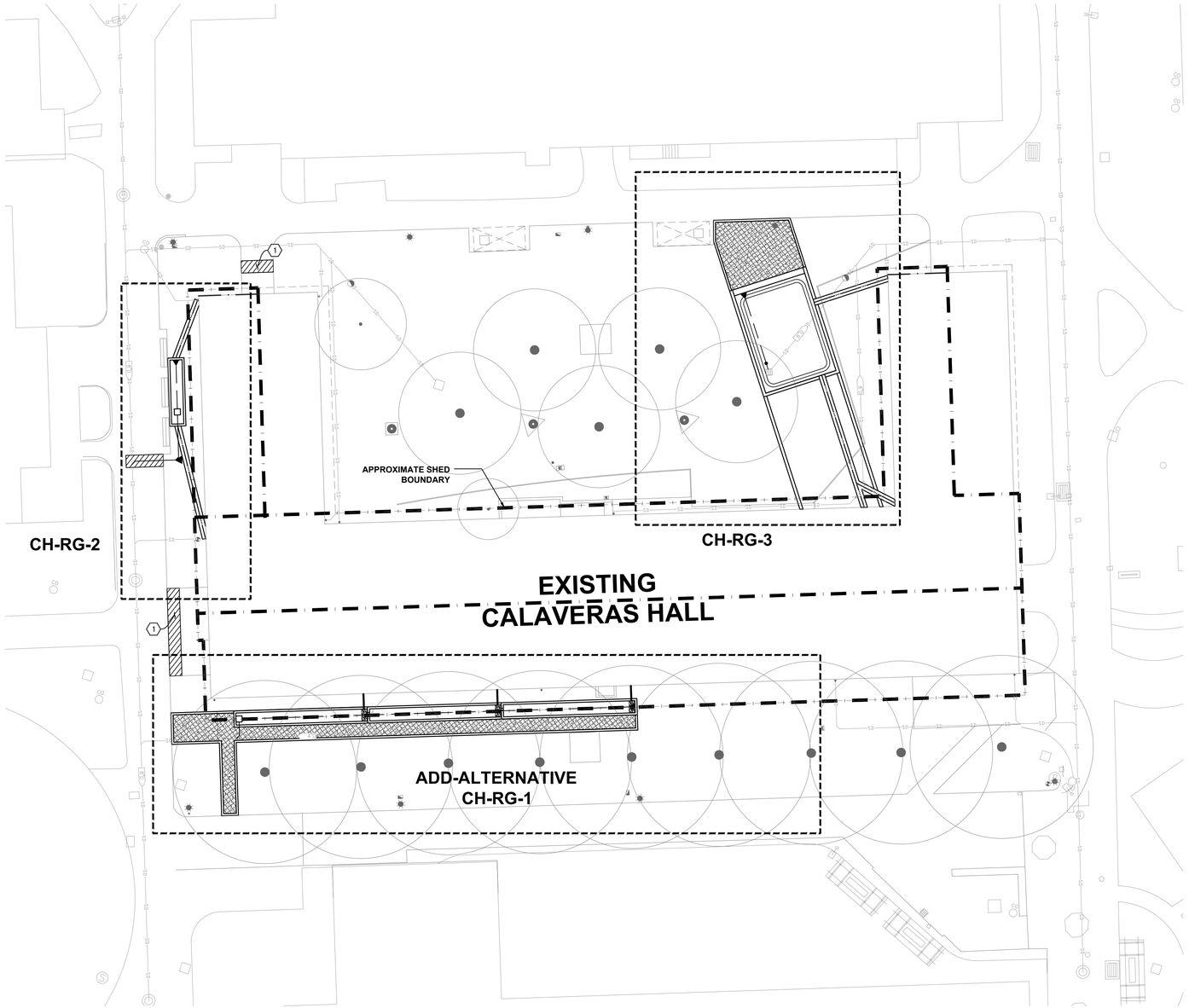

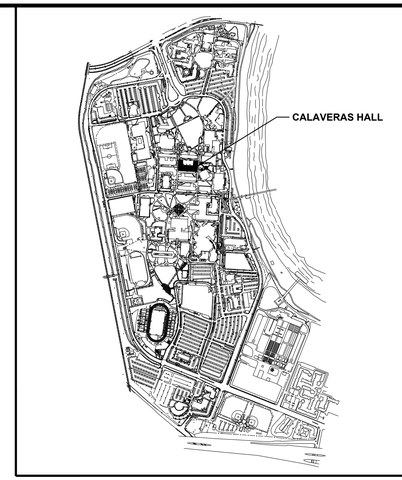

KEY MAP
NTS

KEYNOTES:

1. APPROXIMATE LOCATION OF PROPOSED IRRIGATION TRENCH. CONTRACTOR SHALL SAWCUT AND REMOVE EXISTING P.C.C. PAVEMENT TO NEAREST SCORE JOINT. REPLACE P.C.C. PAVEMENT TO MATCH EXISTING OR WITH 4" P.C.C. OVER 4" A.B., WHICHEVER IS LARGER. DOWEL NEW PAVEMENT TO EXISTING PAVEMENT BY PLACING NO. 4 BAR SNUGLY FIT OR EPOXIED 4" TO 6" INTO PAVEMENT EACH WAY, SPACED 24" ON CENTER. SEE LANDSCAPE PLANS FOR ACTUAL TRENCH LOCATION.

0 10 20 40 60
SCALE IN FEET

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DANIEL A. FENOCCHIO
No. C51484
CIVIL
STATE OF CALIFORNIA

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CSUS LID STORMWATER SYSTEM
CALAVERAS HALL SITE PLAN

CALIFORNIA STATE UNIVERSITY, SACRAMENTO CALIFORNIA

SHEET
CH-C1
OF
7

DATE: 4/24/2015

JOB NO: 1432.01

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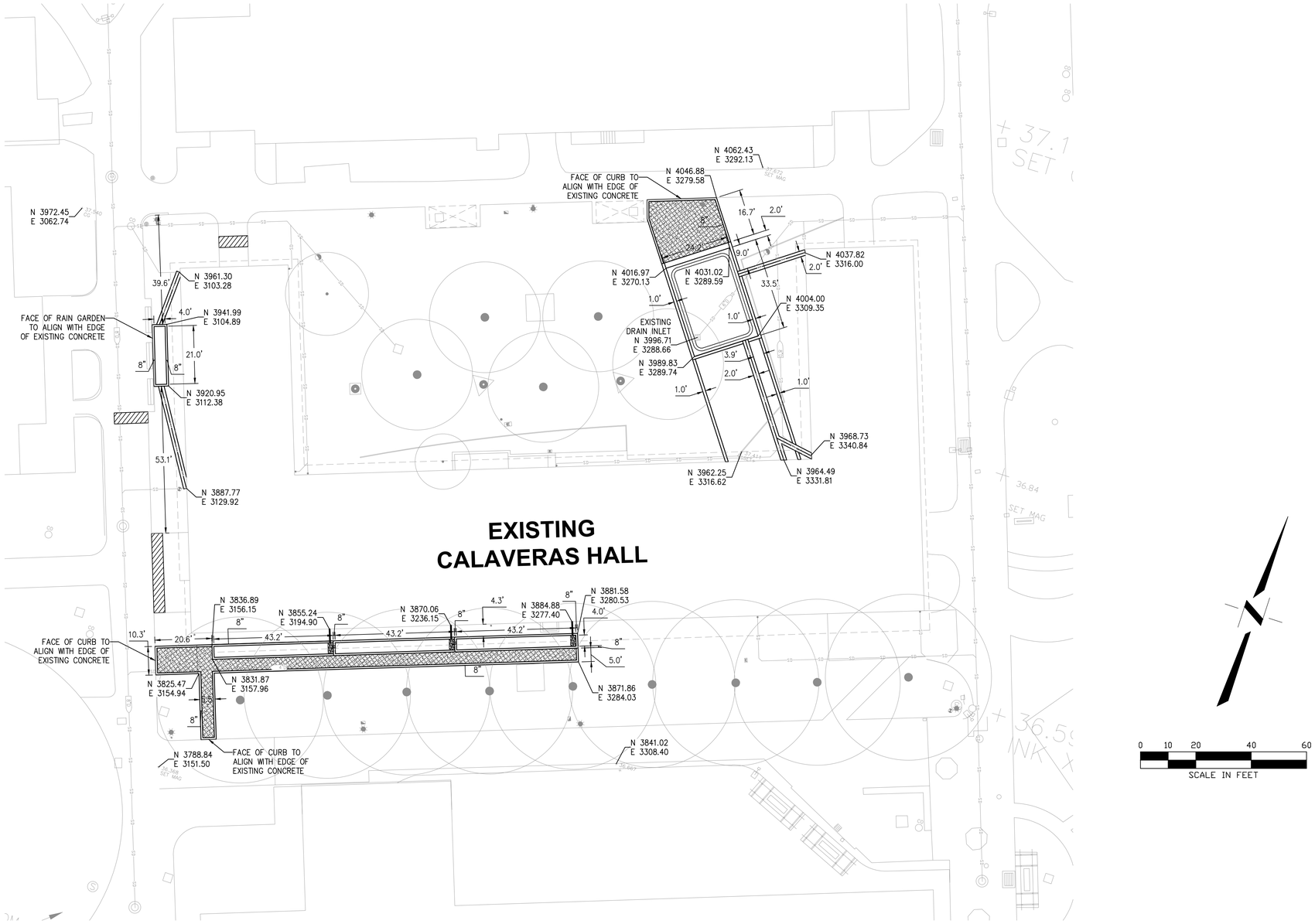

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CALAVERAS HALL
HORIZONTAL CONTROL PLAN

CALIFORNIA STATE UNIVERSITY, SACRAMENTO CALIFORNIA

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OF
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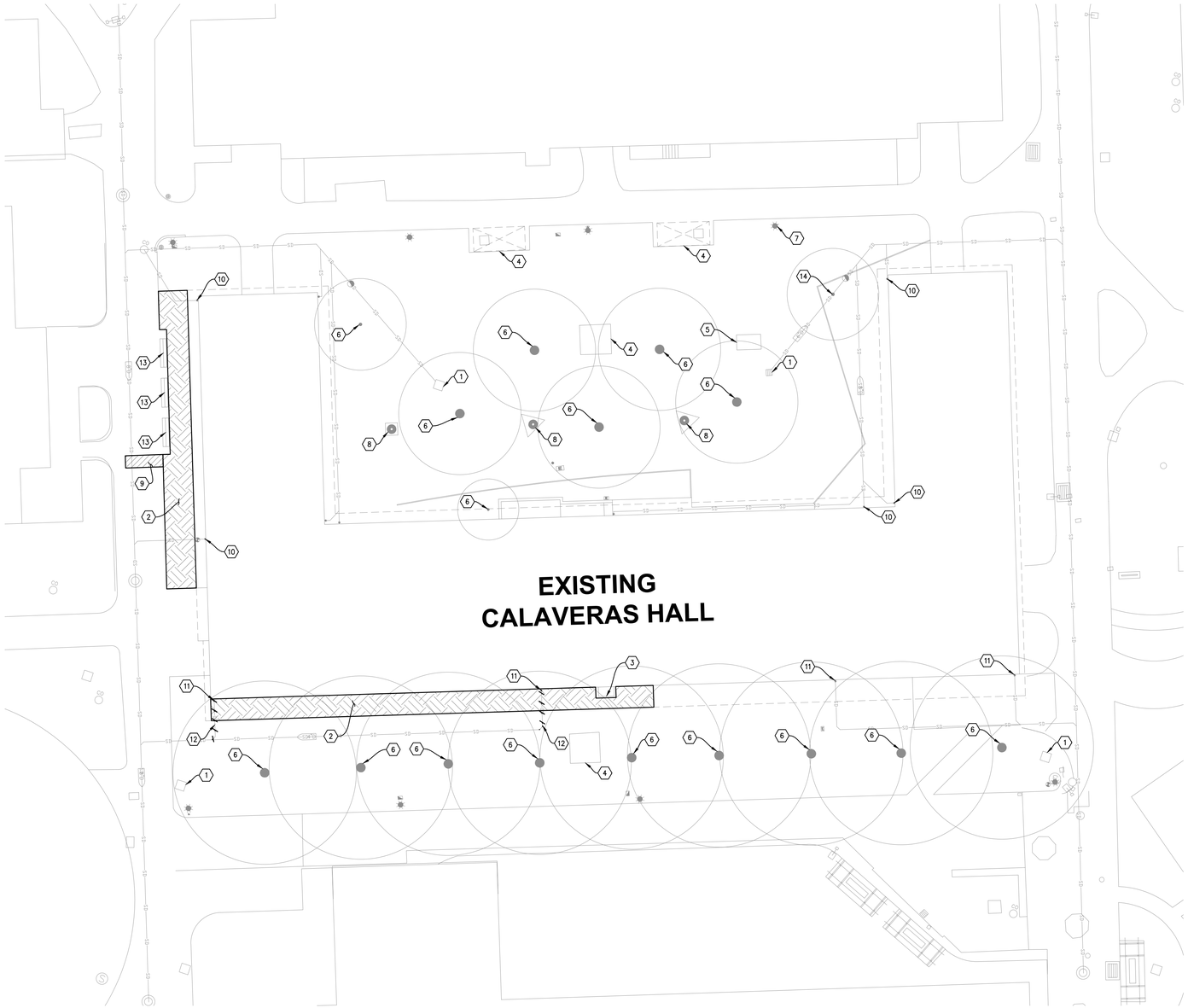

KEYNOTES:

1. EXISTING DRAIN INLET TO REMAIN. CONTRACTOR SHALL PROTECT DURING CONSTRUCTION.
2. REMOVE EXISTING VEGETATION TO MINIMUM LIMITS SHOWN.
3. PROTECT AND COVER EXISTING BASEMENT ACCESS.
4. PROTECT EXISTING CONCRETE PAD AND PICNIC/SEATING AREA.
5. REMOVE EXISTING CONCRETE PAD AND PICNIC TABLE/SEATING AREA.
6. PROTECT EXISTING TREE TO REMAIN. SEE SHEET T-3 FOR TREE PROTECTION NOTES.
7. PROTECT EXISTING LIGHT POLE TO REMAIN.
8. PROTECT EXISTING SATELLITE DISH TO REMAIN.
9. SAWCUT AND REMOVE EXISTING AC PAVEMENT TO MINIMUM LIMITS SHOWN.
10. DISCONNECT DOWNSPOUT PIPE FROM UNDERGROUND STORM DRAIN. CAP STORM DRAIN PIPE AT GRADE.
11. PLUG DOWNSPOUT CONNECTION AT GUTTER AND REMOVE EXISTING DOWNSPOUT PIPE.
12. REMOVE EXISTING 3" STORM DRAIN PIPE.
13. EXISTING BENCH TO REMAIN.
14. REMOVE EXISTING TREE.

NOTES:

1. SEE SHEET CH-C1 FOR IRRIGATION TRENCH IMPROVEMENTS.
2. INTENT OF DEMOLITION PLAN IS TO PROVIDE GENERAL SITE DEMOLITION REQUIREMENTS TO CONTRACTOR. PLAN IS NOT INTENDED TO PROVIDE DETAILED INFORMATION ON SITE REMOVAL, PROTECTION AND PHASING. CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING SITE VISITS TO DEVELOP A DETAILED DEMOLITION PLAN IN ACCORDANCE WITH THE PROPOSED SITE IMPROVEMENTS.
3. SITE DEMOLITION INCLUDES:
   - REMOVE EXISTING ASPHALT AND CONCRETE PAVEMENT.
   - REMOVE EXISTING STORM DRAIN PIPE AND DOWNSPOUT.
   - REMOVE EXISTING VEGETATION.
   - REMOVE EXISTING TREE INCLUDING ROOTS.
4. CONTRACTOR SHALL DISPOSE OF ALL MATERIALS PROPERLY OFFSITE.
5. LIMITS OF REMOVAL SHOWN ON THESE PLANS ARE APPROXIMATE. CONTRACTOR SHALL MODIFY LIMITS OF DEMOLITION AS NECESSARY TO PROVIDE FOR NEW CONSTRUCTION, BASED ON CONTRACTOR'S METHOD OF CONSTRUCTION.
6. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL FLAGGING FOR VEHICULAR INGRESS/EGRESS.
7. PROJECT VEHICULAR AND PEDESTRIAN ACCESS PLAN SHALL BE PREPARED BY CONTRACTOR.
8. THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UTILITIES SHOWN ON THESE PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZE, LOCATION AND DEPTH OF SUCH UNDERGROUND FACILITIES. HOWEVER, THE ENGINEER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND FACILITIES NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS WHICH ARE NOT SHOWN ON THESE PLANS. IF NO ELEVATION IS SHOWN ON THE PLANS THE CONTRACTOR SHALL ASSUME THE ELEVATION IS UNKNOWN.
9. SEE SHEET T-3 FOR TREE PROTECTION NOTES.

0 10 20 40 60
SCALE IN FEET

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SHEET
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OF
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DATE: 4/24/2015
JOB NO: 1432.01

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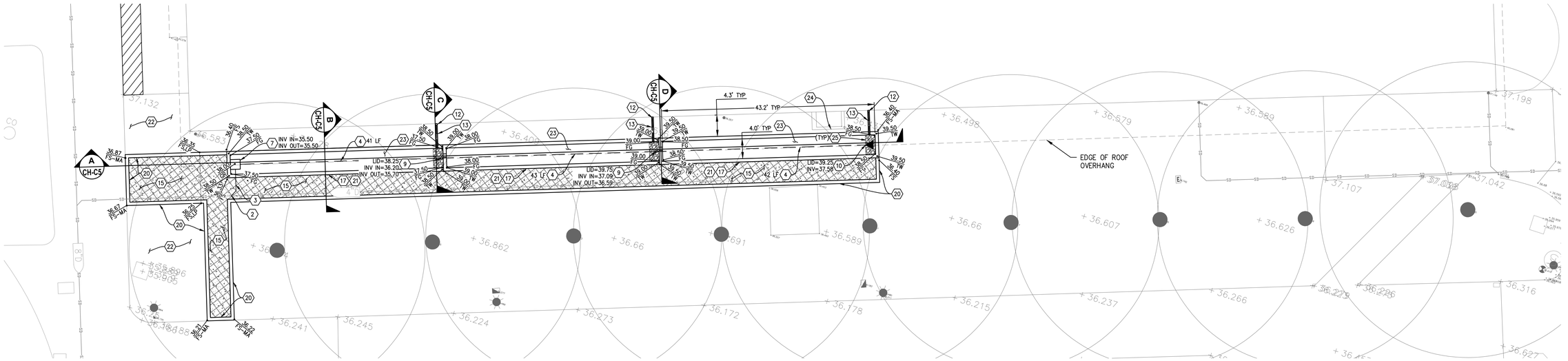

ADD-ALTERNATIVE
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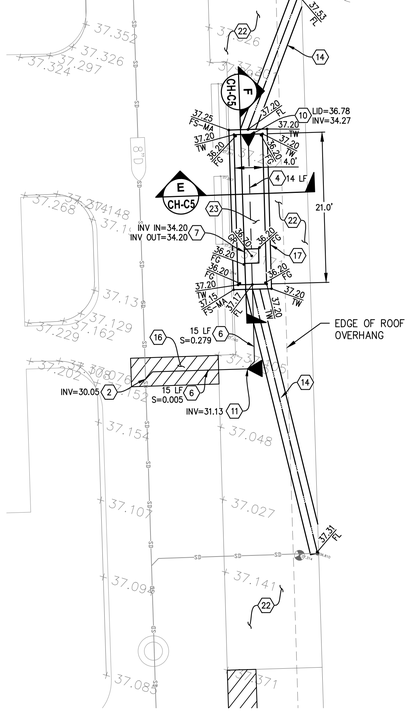
1"=10'



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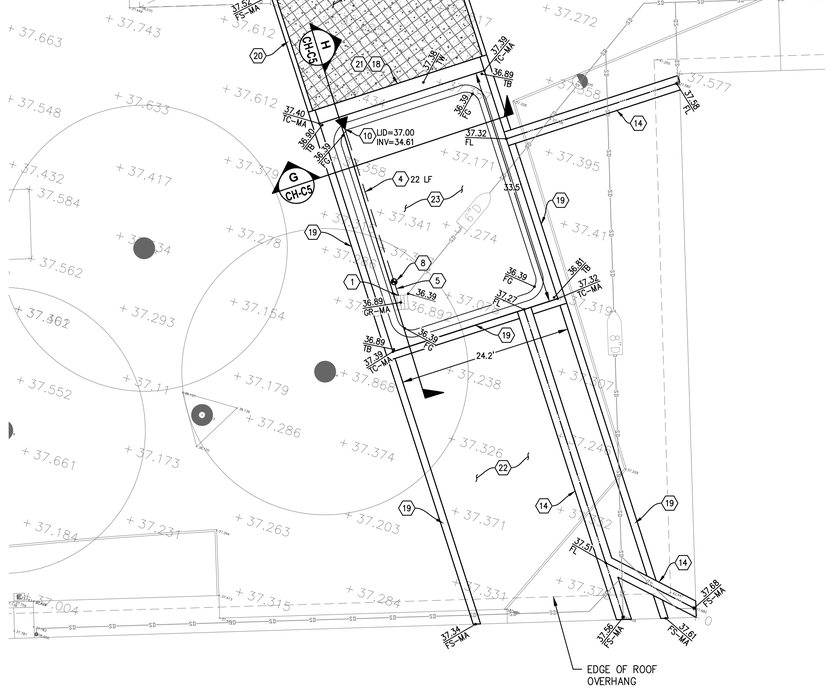

CH-RG-3
1"=10'

KEYNOTES:

1. CONNECT TO EXISTING STORM DRAIN MANHOLE. PROPOSED 4" PIPE TO MATCH CROWN OF EXISTING 6" PIPE, WITH 4" INVERT AT ELEVATION=34.49. CONTRACTOR TO VERIFY ELEVATIONS, SUBJECT TO FIELD CONFIRMATION.
2. CONNECT TO EXISTING STORM DRAIN PIPE. CONTRACTOR TO VERIFY ALIGNMENT AND ELEVATION OF EXISTING PIPE, SUBJECT TO FIELD CONFIRMATION. CONTACT DESIGN ENGINEER IF PLANS VARY FROM FIELD CONDITIONS.
3. INSTALL HDPE STORM DRAIN PIPE. SIZE OF LATERAL TO MATCH EXISTING DOWNSTREAM STORM DRAIN PIPE DIMENSION AS VERIFIED IN FIELD BY CONTRACTOR. STRAIGHT GRADE FROM PROPOSED INVERT AT DRAIN INLET TO EXISTING PIPE.
4. INSTALL 4" PERFORATED HDPE STORM DRAIN PIPE SURROUNDED IN 6" (MINIMUM) GRAVEL @ S=0.005. LENGTH PER PLAN.
5. INSTALL 4" HDPE STORM DRAIN PIPE. LENGTH=2 LF AND SLOPE @ 0.005.
6. INSTALL 6" HDPE STORM DRAIN PIPE. LENGTH AND SLOPE PER PLAN.
7. 18"X18" DRAIN INLET PER DETAIL 2 ON SHEET CH–C7.
8. INSTALL DRAIN VALVE PER DETAIL 5 ON SHEET CH–C7.
9. 4" CLEANOUT AND PIPE CONNECTION PER DETAIL 1 ON SHEET CH–C6.
10. 4" CLEANOUT PER DETAIL 1 ON SHEET CH–C7. LID AND INVERT ELEVATIONS PER PLAN.
11. 6" CLEANOUT PER DETAIL 1 ON SHEET CH–C7. LID AND INVERT ELEVATIONS PER PLAN.
12. 4" DOWNSPOUT.
13. 4"ø SEMICIRCULAR TROUGH DOWNSPOUT EXTENSION.
14. VALLEY GUTTER PER DETAIL 4 ON SHEET CH–C7.
15. INSTALL PERVIOUS CONCRETE WALKWAY. PLACE 4" PERVIOUS CONCRETE OVER 4" OPEN GRADED AGGREGATE BASE, OVER GEOTEXTILE FABRIC, OVER 12" MINIMUM COMPACTED SUBGRADE PER PROJECT SPECIFICATIONS. MAINTAIN 1.75% MAXIMUM CROSS SLOPE AND 4.5% MAXIMUM LONGITUDINAL SLOPE.
16. REPLACE AC PAVEMENT OVER STORM DRAIN PIPE TRENCH. SEE CITY OF SACRAMENTO DETAIL T–80 ON SHEET CH–C7.
17. REINFORCED PLANTER BOX PER DETAIL 6 ON SHEET CH–C7.
18. CONCRETE WALL. SEE LANDSCAPE PLANS FOR DETAILS.
19. 12" MOW STRIP. SEE LANDSCAPE PLANS FOR DETAILS.
20. FLUSH CURB PER DETAIL 3 ON SHEET CH–C7.
21. CONCRETE WALL FINISH PER LANDSCAPE PLANS.
22. NATIVE PLANTS. SEE LANDSCAPE PLANS FOR DETAILS.
23. RAIN GARDEN.
24. EXISTING BASEMENT VENT. CONTRACTOR TO VERIFY LOCATION. CONTACT DESIGN ENGINEER IF PLANS VARY FROM FIELD CONDITIONS.
25. 4" COBBLE. SEE SECTION A ON SHEET CH–C5 FOR DETAILS.

NOTES:

1. SEE CH–C1 FOR IRRIGATION TRENCH IMPROVEMENTS.

0 5 10 20 30
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REGISTERED PROFESSIONAL ENGINEER
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SHEET CH-C4
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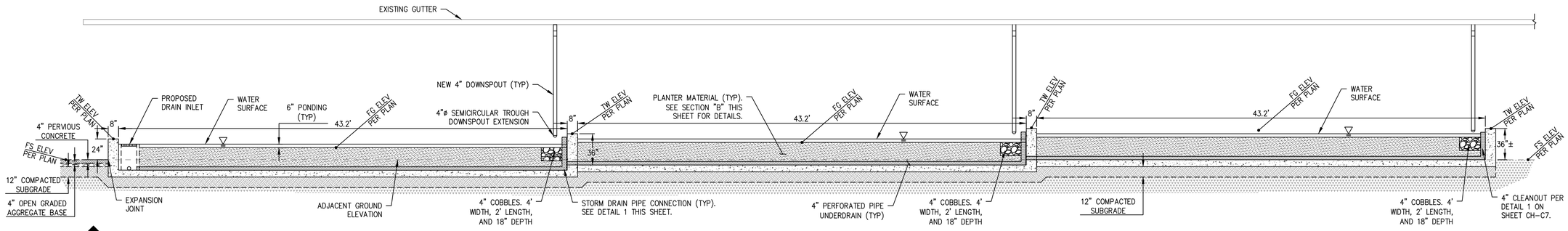
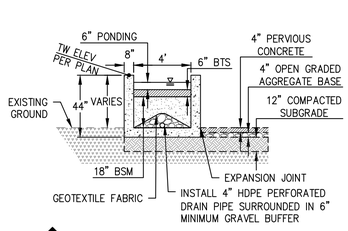
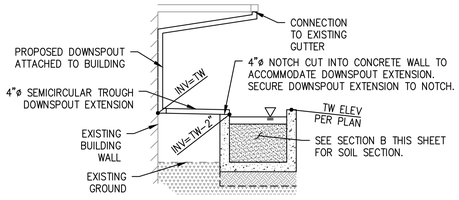


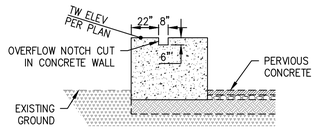
A CH-C4 **RAIN GARDEN 1 ADD-ALTERNATIVE** NTS



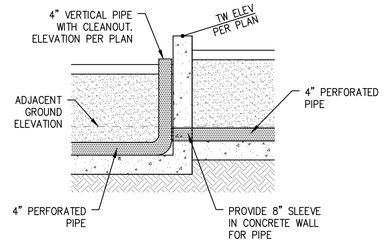
B CH-C4 **RAIN GARDEN 1 ADD-ALTERNATIVE** NTS



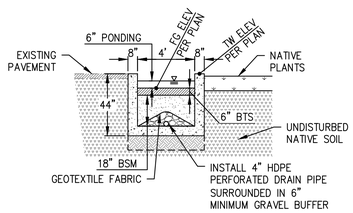
C CH-C4 **RAIN GARDEN 1 ADD-ALTERNATIVE** NTS



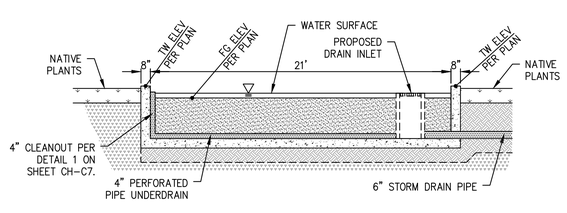
D CH-C4 **RAIN GARDEN 1 ADD-ALTERNATIVE** NTS



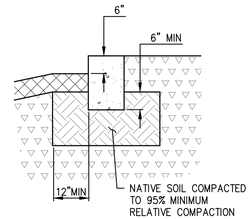
1 CH-C4 **STORM DRAIN PIPE CONNECTION AND CLEANOUT** NTS



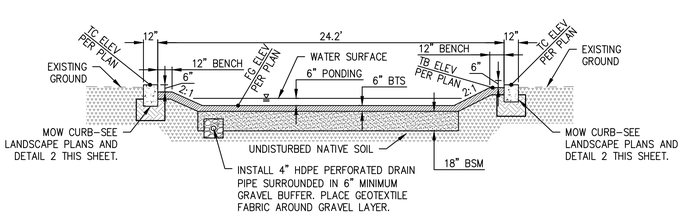
E CH-C4 **RAIN GARDEN 2** NTS



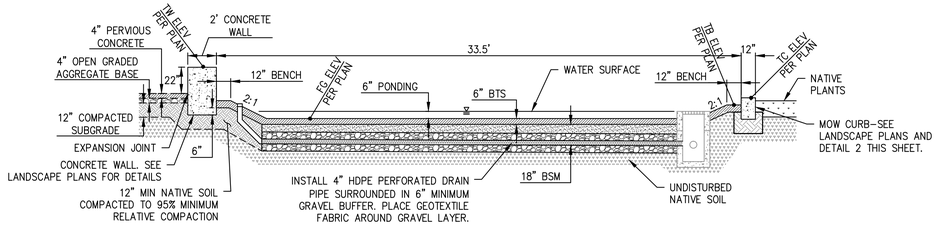
F CH-C4 **RAIN GARDEN 2** NTS



2 CH-C4 **MOW CURB** NTS



G CH-C4 **RAIN GARDEN 3** NTS



H CH-C4 **RAIN GARDEN 3** NTS

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CALIFORNIA

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OF 7
DATE: 4/24/2015
JOB NO: 1432.01

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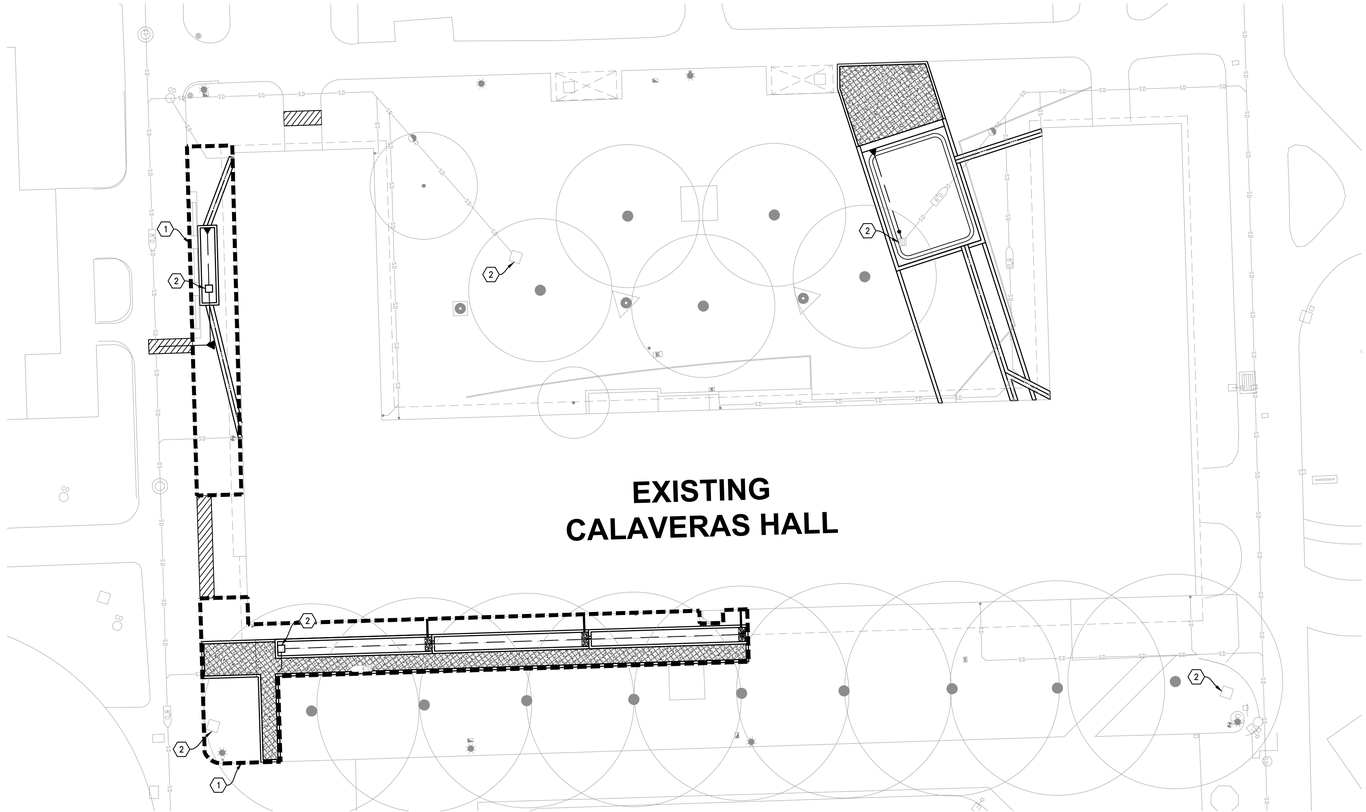

KEYNOTES

1. INSTALL FIBER ROLL PER CITY OF SACRAMENTO STANDARD DWG. NO. Q-40.
2. INSTALL STORM DRAIN INLET SEDIMENT CONTROL AND FILTER BAG PER CITY OF SACRAMENTO STANDARD DWG. NOs. Q-20 & Q-30.

NOTES

1. REFER TO SHEET T-3 FOR EROSION CONTROL NOTES.
2. CONTRACTOR SHALL PROVIDE CONCRETE WASHOUT AREA PER CITY OF SACRAMENTO STANDARD DWG. NO. Q-80. CONTRACTOR SHALL COORDINATE LOCATION WITH CSUS REPRESENTATIVE PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL COORDINATE WITH CSUS REPRESENTATIVE FOR MATERIAL STORAGE LOCATION PRIOR TO CONSTRUCTION.

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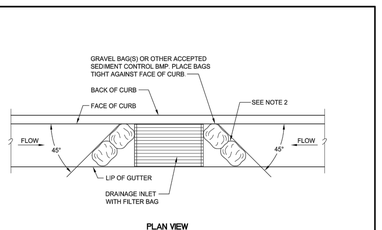
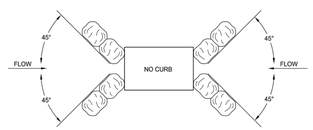
SCALE IN FEET



PLAN VIEW



NOTES:

1.- SEDIMENT TRAPPED UPSTREAM OF SEDIMENT CONTROL BMP SHALL BE REMOVED WEEKLY AND PRIOR TO A RAINFALL EVENT.

2.- PLACE BMP'S TIGHTLY TOGETHER AT JOINTS TO PREVENT OR MINIMIZE SEEPAGE AT JOINTS.

3.- INLET SEDIMENT CONTROL MUST BE INSPECTED WEEKLY AND AFTER EACH STORM, AND REPAIRED OR REPLACED AS NEEDED.

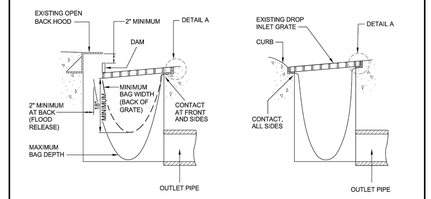
4.- INLET SEDIMENT CONTROL IS REQUIRED FOR ALL DI's IN ADDITION TO A STORM DRAIN INLET FILTER BAG.

REV.	DATE	DESCRIPTION
1		
2		
3		

CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES

INLET SEDIMENT CONTROL

APP'D BY: _____ NO SCALE
DATE: MAY 2007 DWG. NO. Q - 20



NOTES:

1.- THE MAXIMUM DRAINAGE AREA PER FILTER SHALL BE NO MORE THAN 2 ACRES.

2.- THE FILTER BAG SHALL BE MANUFACTURED FROM UV RESISTANT POLYPROPYLENE, NYLON, POLYESTER, OR ETHYLENE FABRIC WITH A MINIMUM TENSILE STRENGTH OF 50 LBS PER LINEAR INCH. THE EFFLUENT OPENING SIZE NOT GREATER THAN 20 SIEVE AND WITH A MINIMUM FLOW RATE OF 40 GALLONS/MINUTE/SQ FT.

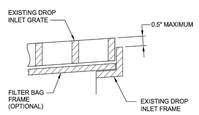
3.- THE FILTER BAG MAY BE SUSPENDED FROM OR HELD IN PLACE BY THE EXISTING INLET GRATE (OR OTHER APPROVED METHOD), PROVIDING NO MODIFICATION OR DAMAGE SHALL BE DONE TO THE INLET GRATE OR CURB. THE FILTER BAG SHALL NOT BE CAUSED TO REST MORE THAN 0.5" ABOVE THE INLET FRAME (SEE DETAIL A).

4.- THE FILTER BAG MAY EXTEND TO THE BOTTOM OF THE INLET BOX PROVIDED THE OUTLET PIPE IS UNOBSTRUCTED.

5.- FLOWS SHALL NOT BE ALLOWED TO BYPASS THE BAG. THE BAG OR ITS FRAME SHALL CATCH FLOWS AT ALL SIDES OF THE INLET, EXCEPT AS SHOWN FOR FLOOD RELEASE.

6.- INLET FILTER BAGS SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL DURING THE WET SEASON AND MONTHLY DURING THE DRY SEASON. SEDIMENT AND DEBRIS SHALL BE REMOVED BEFORE ACCUMULATIONS HAVE REACHED ONE THIRD THE DEPTH OF THE BAG. BAGS SHALL BE REPAIRED OR REPLACED AS SOON AS DAMAGE OCCURS.

7.- THIS DETAIL IS SCHEMATIC AND MUST BE ADJUSTED FOR DIFFERENT DI TYPES.



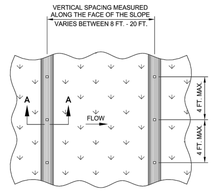
DETAIL A

REV.	DATE	DESCRIPTION
1		
2		
3		

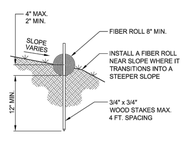
CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES

STORM DRAIN INLET FILTER BAG

APP'D BY: _____ NO SCALE
DATE: MAY 2007 DWG. NO. Q - 30



TYPICAL FIBER ROLL INSTALLATION



SECTION A - A

NOTES:

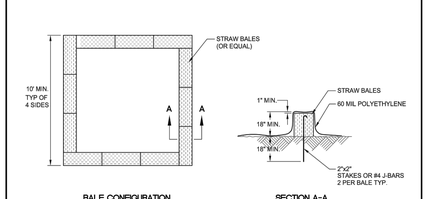
1- INSTALL FIBER ROLLS IN A ROW ALONG A LEVEL CONTOUR.
2 - AT ENDS OF A ROW TURN THE LAST TWO FEET UP SLOPE SLIGHTLY.
3 - FIBER ROLLS SHALL BE BUTTED TIGHTLY AT THE JOINTS.
4 - DO NOT OVERLAP JOINTS.
5 - FIBER ROLLS SHALL BE INSPECTED WEEKLY AND AFTER STORMS, AND REPAINTED OR REPLACED AS NEEDED.

REV.	DATE	DESCRIPTION
1		
2		
3		

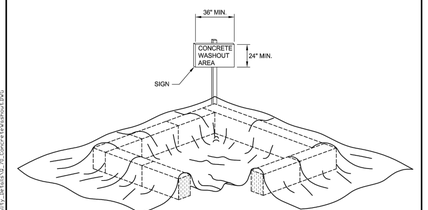
CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES

FIBER ROLLS

APP'D BY: _____ NO SCALE
DATE: MAY 2007 DWG. NO. Q - 40



BALE CONFIGURATION SECTION A-A



THIS SECTION REMOVED FOR GRAPHICAL REPRESENTATION ONLY. STRAW BALE PERIMETER SHALL BE CONTINUOUS

NOTES:

1 - FACE SIGN TOWARD NEAREST STREET OR ACCESS POINT
2 - CONCRETE WASHOUT SHALL BE LOCATED BEHIND CURB AND 50 FT. MINIMUM FROM DRAINAGE INLETS OR WATERCOURSES

REV.	DATE	DESCRIPTION
1		
2		
3		

CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES

CONCRETE WASHOUT

APP'D BY: _____ NO SCALE
DATE: MAY 2007 DWG. NO. Q - 80

NO.	DATE	REVISIONS	BY	APP'D.

DESIGNED BY NC
DRAWN BY NC
CHECKED BY DF
SCALE 1" = 20'

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CONSTRUCTION DOCUMENTS
CSUS LID STORMWATER SYSTEM
CALAVERAS HALL
EROSION CONTROL PLAN

CALIFORNIA STATE UNIVERSITY, SACRAMENTO CALIFORNIA

DATE SIGNED: _____
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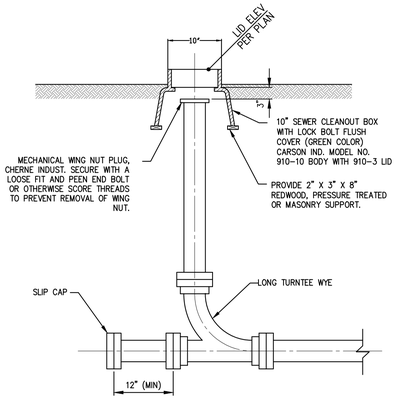
REGISTERED PROFESSIONAL ENGINEER
DANIEL A. PEROCCHI
No. C51484
CIVIL
STATE OF CALIFORNIA

SHEET
CH-C6
OF
7

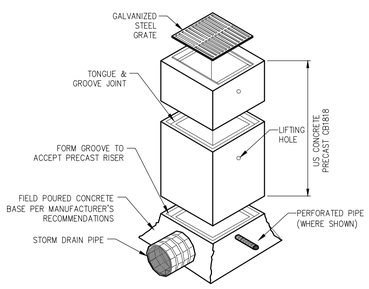
DATE: 4/24/2015

JOB NO: 1432.01

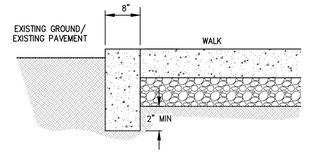
S:\Projects\1400\1432 CSUS - LID Storm Water System\AutoCAD\1432-01-CIVIL GDs\SHEETS\CH-C6-EROS.dwg - CALA 4/23/2015 - 11:24AM Plotted by: Lena



1 CH-C4 **CLEANOUT TO GRADE** NTS



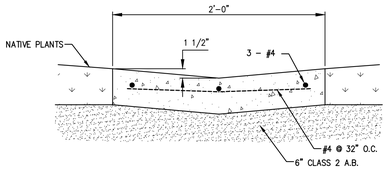
2 CH-C4 **STORM DRAIN INLET** NTS



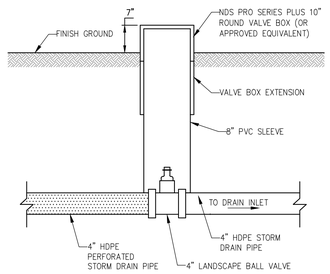
NOTE

1. EXPANSION JOINTS SHALL BE PLACED AT 10 FOOT (MAX) INTERVALS ALONG CURB CONSTRUCTION WITH SCORED CRACK CONTROL JOINTS AT 5 FOOT (MAX) INTERVALS. THE SCORING SHALL BE 1/4 INCH THICK AND 1 INCH DEEP.

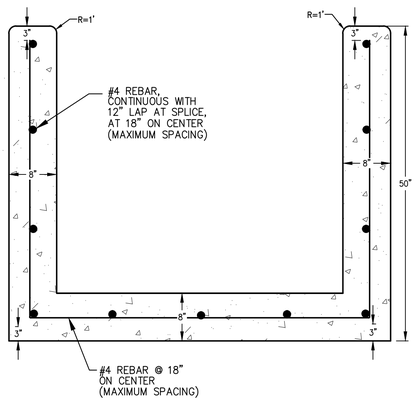
3 CH-C4 **FLUSH CURB** NTS



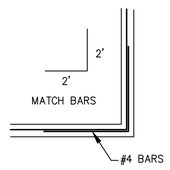
4 CH-C4 **VALLEY GUTTER DETAIL** NTS



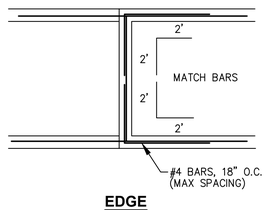
5 CH-C4 **DRAIN VALVE DETAIL** NTS



SECTION VIEW

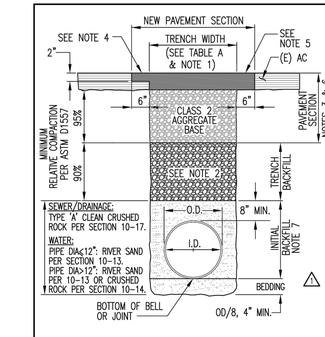


CORNER PLAN VIEW



EDGE PLAN VIEW

6 CH-C4 **PLANTER WALL REINFORCEMENT DETAIL** NTS



TYPICAL TRENCH SECTION

TABLE A			
	TRENCH WIDTHS		
PIPE TYPE	PIPE I.D.	MINIMUM DIMENSION	MAXIMUM DIMENSION(4)
RIGID(1)	≤12"	PIPE O.D. + 16"	PIPE O.D. + 24"
	>12"	PIPE O.D. + 20"	PIPE O.D. + 36"
FLEXIBLE(2)	ALL	PER ASTM D2321(3) OR THE PIPE MANUFACTURER'S RECOMMENDATIONS, WHICHEVER IS GREATER.	

(1) RIGID PIPE = RCP, VCP & DIP.
(2) FLEXIBLE PIPE = ALL PIPE OTHER THAN RIGID PIPE. ⚠
(3) ASTM D2321 STATES THAT THE MINIMUM TRENCH WIDTH SHALL BE EQUAL TO THE PIPE O.D. PLUS 16" OR THE PIPE O.D. TIMES 1.25 PLUS 12", WHICHEVER IS GREATER.
(4) IF THE MAXIMUM DIMENSION AT THE TOP OF THE PIPE IS EXCEEDED, CONTRACTOR SHALL PROVIDE STRONGER PIPE OR IMPROVED BEDDING AND BACKFILL CONDITIONS, AS APPROVED BY THE ENGINEER, TO MEET THE NEW LOADING.

NOTES: ⚠

1. EXCAVATION, BACKFILL AND RE-PAVING OF TRENCHES SHALL CONFORM TO THE STANDARD SPECIFICATIONS UNLESS OTHERWISE INDICATED BY THE PLANS, PERMIT, SPECIAL PROVISIONS, OR THE ENGINEER.
2. TRENCH BACKFILL SHALL CONSIST OF CLASS 2 AGGREGATE BASE (AB) OR JOB EXCAVATED, NATIVE SOIL. NO ADDITIONAL COMPENSATION SHALL BE PAID FOR STOCKPILING, DRYING, WETTING OR PROCESSING THE NATIVE SOIL OR AB TO MEET THE MINIMUM STABILITY AND RELATIVE COMPACTION CRITERIA.
3. UNLESS OTHERWISE INDICATED IN THE SPECIAL PROVISIONS, THE NEW PERMANENT PAVEMENT SHALL CONFORM TO THE TYPE AND THICKNESS OF THE PAVEMENT REMOVED. IN NO CASE SHALL THE NEW PAVEMENT SECTION BE LESS THAN FOUR INCHES (4") OF AC ON TWELVE INCHES (12") OF CLASS 2 AGGREGATE BASE (AB).
4. EXISTING AC > 4" THICK: GRIND EXISTING AC 2" DEEP AND 6" WIDER THAN TRENCH ON BOTH SIDES. PLACE NEW AC.
5. EXISTING AC ≤ 4" THICK: SAW CUT AND PLACE NEW AC 6" WIDER THAN TRENCH AS SHOWN ON BOTH SIDES.
6. NON-PAVEMENT AREAS: IN NON-PAVEMENT AREAS, THE PAVEMENT SECTION SHALL BE REPLACED WITH JOB EXCAVATED NATIVE SOIL OR OTHER APPROVED BACKFILL COMPACTED TO AT LEAST 90% RELATIVE COMPACTION PER ASTM D1557.
7. SHOVEL SLICE, TAMP, AND/OR VIBRATE MATERIAL UNDER AND AROUND THE PIPE TO A FIRM NON-YIELDING CONDITION TO SATISFACTION OF THE ENGINEER.

REV.	DATE	DESCRIPTION
⚠	4/11/12	Changed per Addendum 2
⚠		
⚠		

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CITY OF SACRAMENTO DEPARTMENT OF UTILITIES	TRENCH BACKFILL AND RESURFACING	APPR'D BY: _____ NO SCALE
		DATE: APRIL 2012 DWG. NO. T - 80

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SCALE NTS

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