

# GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO CURRENT CITY OF LIVERMORE STANDARD SPECIFICATIONS AND DETAIL DRAWINGS DATED MAY 9, 2005.
- TOPOGRAPHIC SURVEY WAS PREPARED BY DEBOLT CIVIL ENGINEERING. ELEVATIONS ARE BASED USING CITY OF LIVERMORE BENCHMARK. MONUMENT PIN AT THE INTERSECTION OF HEATHER LANE AND BLUEBELL DRIVE. ELEVATION: 510.42
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, 800/227-2600, 48 HOURS PRIOR TO ANY EXCAVATION.
- THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL UTILITIES 48 HOURS PRIOR TO ANY EXCAVATION SO THAT THEIR LINES CAN BE MARKED. UTILITIES TO BE NOTIFIED INCLUDE, BUT MAY NOT BE LIMITED TO:

P.G. & E., P.T. & T., VIACOM CABLE VISION, AND CALIFORNIA WATER SERVICE: 800/227-2600.  
STORM DRAINS, SANITARY SEWERS: 925/960-8100.

- ALL CONTRACTORS SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL EXISTING UTILITIES IN THE FIELD. LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.
- THE CONTRACTOR SHALL KEEP EXISTING STREETS FREE FROM DIRT AND DEBRIS DURING ALL PHASES OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY EXISTING IMPROVEMENTS WHICH ARE TO REMAIN, SUCH AS CURB, GUTTER, AND SIDEWALK, OR PAVEMENT DAMAGED BY HIM, HIS SUBCONTRACTORS, OR MATERIAL.
- CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERAL ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

### NOTIFICATION

- THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER 24 HOURS PRIOR TO REQUIRED INSPECTION (960-4500).
- DE BOLT CIVIL ENGINEERING SHALL BE NOTIFIED TWO WORKING DAYS IN ADVANCE OF WHEN FIELD STAKING IS TO BE REQUIRED (925/837-3780).

### CONFLICTS

- ANY DEVIATIONS OR CHANGES IN THESE PLANS WITHOUT OFFICIAL APPROVAL OF THE ENGINEER SHALL ABSOLVE THE ENGINEER OF ANY AND ALL RESPONSIBILITY OF SAID DEVIATION OR CHANGE.

### GENERAL

- AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE CITY OF LIVERMORE PERMIT CENTER, ENGINEERING DIVISION, LOCATED AT 1052 S. LIVERMORE AVENUE, PRIOR TO THE START OF ANY IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY.
- REPLACE ALL DEFECTIVE CURB, GUTTER, SIDEWALK, AND DRIVEWAY AS DIRECTED BY THE CITY ENGINEER.
- ALL UTILITY SERVICES SHALL BE UNDERGROUND.

### GRADING

- CONTRACTOR SHALL PROVIDE DUST CONTROL AT ALL TIMES. PRIOR TO OBTAINING WATER FROM FIRE HYDRANTS, CONTRACTOR MUST OBTAIN WATER METER FROM WATER COMPANY.
- WHERE UNSTABLE OR UNSUITABLE MATERIALS ARE ENCOUNTERED DURING SUBGRADE PREPARATION, THE AREA IN QUESTION SHALL BE OVER EXCAVATED AND REPLACED BY SELECT BACKFILL MATERIAL AS DIRECTED IN THE FIELD BY THE SOILS ENGINEER.
- A SOILS REPORT FOR THIS PROJECT HAS BEEN PREPARED BY HENRY JUSTIANO AND ASSOCIATES (GEOTECHNICAL ENGINEERING). ALL WORK SHALL BE DONE IN CONFORMANCE WITH THIS REPORT.
- THE PAD IS TO BE CONSTRUCTED LEVEL FRONT-TO-REAR AND SIDE-TO-SIDE, WITHIN A TOLERANCE OF 0.1 FOOT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DISPOSE OF ALL STRIPPINGS BY PLACING THEM IN THE LANDSCAPE AREAS AND EXCHANGING STRIPPINGS WITH UNCONTAMINATED MATERIAL IF REQUIRED. SOILS ENGINEER SHALL DIRECT CONTRACTOR TO POSSIBLE STRIPPING PLACEMENT LOCATIONS.
- DEVELOPER SHALL SCHEDULE CONTRACTING SO THAT GRADING, INSTALLATION OF DRAINAGE FACILITIES AND EROSION CONTROL PLANTING WILL BE COMPLETED PRIOR TO OCTOBER 1 OF ANY YEAR OF CONSTRUCTION. SILT AND EROSION CONTROL PLANS WILL BE REQUIRED FOR WORK DURING RAINY SEASON (OCTOBER 1 THROUGH APRIL 15). NO GRADING SHALL OCCUR BETWEEN OCTOBER 1 AND MARCH 15 EXCEPT AS MAY BE APPROVED BY THE CITY ENGINEER.
- IF PAVING AND STORM DRAIN IMPROVEMENTS ARE NOT COMPLETED BY OCTOBER 15, TEMPORARY SILT CONTROL AND DRAINAGE CONTROL FACILITIES SHALL BE INSTALLED TO CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND TO PROVIDE FOR THE SAFE DISCHARGE OF STORM WATERS INTO EXISTING STORM WATER FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED BY THE CITY OF LIVERMORE.

### TRENCHES

- ALL TRENCH EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH CITY STANDARD DETAIL G-1.
  - ALL TRENCHES OVER FIVE FEET IN DEPTH SHALL BE SHORED IN ACCORDANCE WITH CAL-OSHA "CONSTRUCTION SAFETY ORDERS" CURRENT EDITION. CONTRACTOR MUST HAVE VALID TRENCH SHORING PERMIT ISSUED BY CAL-OSHA.
  - ALL OFFSTREET SEWER, STORM, AND WATER MAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF LIVERMORE STANDARD DETAILS AND SPECIFICATIONS.
  - WHERE PROPOSED UNDERGROUND UTILITIES CROSS EXISTING UTILITIES, EXPOSE THE EXISTING UTILITY SUFFICIENTLY TO ALLOW THE NEW UTILITY TO BE PROPERLY CONSTRUCTED, MAINTAINING ADEQUATE COVER AND PROTECTION AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGES TO THE EXISTING UTILITY RESULTING FROM THE CONSTRUCTION PROCESS.
- THE CITY OF LIVERMORE INSPECTOR MAY REQUIRE FURTHER WORK TO BE DONE IF VISUAL INSPECTION INDICATES DURING CONSTRUCTION.
- NO JETTING OF TRENCHES WILL BE ALLOWED.

### STORM DRAINS

- CLASS III R.C.P. (OR EQUIVALENT ALTERNATE) SHALL BE INSTALLED FOR STORM DRAIN UNLESS OTHERWISE NOTED ON THE PLANS.
- NDS DRAINS (NATIONAL DRAINAGE SYSTEM) SHALL HAVE #1211 (BLACK) GRATES.
- NDS DRAINS SHALL HAVE 12"x12" GRATES WITH EXTENSIONS AS REQUIRED.
- UNLESS NOTED OTHERWISE, ALL CATCH BASINS SHALL BE SANTA ROSA MODEL 5K (30"x30") INLETS WITH HEAVY-DUTY TRAFFIC GRATES.
- ALL PIPE GRADES SHOWN AS FLOW LINE ELEVATIONS.
- PVC PIPES AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF ASTM D - 3034 (SDR 35).

### SIGNING AND STRIPING

- INSTALL PARKING STALL STRIPING, HANDICAP PARKING SIGNS, HANDICAP LEGENDS, AND MARKINGS PER ARCHITECT'S SITE PLAN.
- ### MISCELLANEOUS
- ROOF DOWNSPOUTS SHALL NOT BE CONNECTED TO UNDERGROUND STORM DRAINAGE SYSTEM. SEE PLUMBING PLAN FOR CONNECTION DETAILS.
  - LOCATE WALKWAYS, PATIO BREAK AREA, TRASH ENCLOSURE, ETC. PER THE ARCHITECT'S SITE PLAN. LOCATIONS SHOWN HERE ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.
  - SEE LANDSCAPE ARCHITECTS PLAN FOR LANDSCAPE MOUNDING, IRRIGATION, ETC.
  - SEE STRUCTURAL DRAWINGS FOR FOUNDATION AND RETAINING WALL DETAILS.
  - CONTRACTOR TO PROVIDE WATERPROOFING OF THE PROPOSED BUILDING IN ALL AREAS WHERE THE GROUND OUTSIDE THE STRUCTURE IS NOT 6 INCHES BELOW THE FINISH FLOOR.

### FIRE DEPARTMENT

- ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF LIVERMORE BUILDING DEPARTMENT AND CITY OF LIVERMORE ORDINANCE 1833 RELATIVE TO AUTOMATIC SPRINKLER AND FIRE ALARM SYSTEMS. ALL REQUIRED PERMITS SHOULD BE OBTAINED.
- AUTOMATIC FIRE SPRINKLERS SHOULD BE INSTALLED IN ALL OCCUPANCIES IN ACCORDANCE WITH LIVERMORE MUNICIPAL ORDINANCE 1833. INSTALLATIONS SHALL CONFORM TO NFPA PAMPHLET 13 AND LIVERMORE SPRINKLER STANDARD 9-3 (2002 EDITION).
- ALL COMMERCIAL, INDUSTRIAL, AND MULTI-FAMILY RESIDENTIAL OCCUPANCIES SHALL HAVE VALVE TAMPER AND WATER FLOW CONNECTED TO THE UNDERWRITERS LABORATORY (UL) LISTED CENTRAL STATION SERVICE. INSTALLATION SHALL COMPLY WITH NFPA 72-2006 EDITION. THE APPLICANT SHALL BE REQUIRED TO CONTRACT DIRECTLY WITH AN UNDERWRITERS LABORATORY CERTIFIED COMPANY TO PROVIDE FIRE ALARM INSTALLATION AND MONITORING. FIRE DEPARTMENT PLAN CHECK INCLUDES SPECIFICATIONS, MONITORING CERTIFICATES, INSTALLATION CERTIFICATE AND ALARM COMPANY U.L. CERTIFICATE. FIRE ALARM ANNUNCIATION SHALL BE AT LOCATION(S) APPROVED BY THE FIRE PREVENTION BUREAU. THE FIRE PREVENTION BUREAU WILL WITNESS ALL ACCEPTANCE TESTS.
- EXISTING FIRE ALARM SYSTEMS SHALL BE CONNECTED TO THE UNDERWRITERS LABORATORY (UL) LISTED CENTRAL STATION SERVICE. FIRE ALARM CHANGES SHALL BE SUBMITTED TO THE FIRE PROTECTION BUREAU FOR REVIEW AND APPROVAL PRIOR TO ANY MONITORING ALTERATIONS TO THE SYSTEM. SPECIFIC (UL) CERTIFICATES PERTAINING TO THE INSTALLATION AND MODIFICATION OF FIRE ALARM SYSTEMS WILL APPLY THE FIRE PREVENTION BUREAU WILL WITNESS ACCEPTANCE TESTS.
- PROVIDE A HAZARDOUS MATERIALS DECLARATION FOR THIS TENANT AND/OR USE. FORM SHALL BE SIGNED BY OWNER/MANAGER OF COMPANY OCCUPYING THE SUITE/SPACE/BUILDING. NO BUILDING PERMIT WILL BE ISSUED UNTIL THE HAZARDOUS MATERIALS DECLARATION IS PROVIDED. THE FORM IS AVAILABLE THROUGH THE BUILDING DEPARTMENT AT (925) 960-4410.
- SHOULD ANY OPERATION OR BUSINESS ACTIVITY INVOLVE THE USE, STORAGE OR HANDLING OF HAZARDOUS MATERIALS, THE FIRM SHALL BE RESPONSIBLE FOR CONTACTING THE FIRE DEPARTMENT PRIOR TO COMMENCING OPERATIONS. PLEASE CONTACT THE HAZARDOUS MATERIALS COORDINATOR AT (925) 454-2361.
- CITY OF LIVERMORE ORDINANCE 1833 REQUIRES THAT ALL NEW AND EXISTING OCCUPANCIES BE PROVIDED WITH AN APPROVED KEY BOX AS SPECIFIED BY THE FIRE DEPARTMENT. THE APPLICANT IS RESPONSIBLE FOR OBTAINING APPROVAL FOR LOCATION AND THE NUMBER OF BOXES FROM THE FIRE DEPARTMENT BUREAU. 2 MINIMUM WILL BE LOCATED IN FIELD BY PROJECT INSPECTOR.
- OCCUPANT SHALL BE RESPONSIBLE FOR PROVIDING TENANT SPACE BUILDING ACCESS KEYS FOR INSERTION INTO THE KNOX BOX PRIOR TO FINAL INSPECTION BY THE FIRE DEPARTMENT. KEYS SHALL HAVE PERMANENT MARKED TAGS IDENTIFYING ADDRESS AND/OR SPECIFIC DOORS/AREAS ACCESSIBLE WITH SAID KEY.
- THE PROPOSED BUILDING(S) MAY HAVE ADDITIONAL FIRE DEPARTMENT REQUIREMENTS THAT CAN ONLY BE ADDRESSED BY KNOWING THE DETAILS OF THE OCCUPANCY. THESE OCCUPANCY DETAILS SHALL BE SUBMITTED TO THE FIRE DEPARTMENT PRIOR TO SUBMITTAL OF CONSTRUCTION PLANS TO THE BUILDING DEPARTMENT. DETAILS SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
  - TYPE OF STORAGE
  - HEIGHT OF STORAGE
  - aisle SPACING
  - RACK OF BULK STORAGE
  - PALLETIZED STORAGE
  - TYPE OF OCCUPANCIES WITHIN AREAS OF BUILDING(S)
 BASED ON THE INFORMATION RECEIVED, THERE MAY BE ADDITIONAL REQUIREMENTS SUCH AS SMOKE AND HEAT VENTING, IN-RACK SPRINKLERS, INCREASES IN SPRINKLER DESIGN CRITERIA, DRAFT CURTAINS, ETC.
- APPROVED PLANS FOR THE HIGH-PILED COMBUSTIBLE STORAGE AREA SHALL BE PERMANENTLY MAINTAINED ON SITE AS REQUIRED BY CFC 8101.3.2. THE FIRE DEPARTMENT STANDARD #19 ADDRESSES THE REQUIREMENTS FOR HIGH-PILED STORAGE. PLEASE CALL (925) 454-2361.
- PROVIDE UL OR ICBO LISTING FOR THE PROPOSED HEAT AND SMOKE VENTS.
- AUTOMATIC FIRE SPRINKLER SYSTEM PROTECTION SHALL BE PROVIDED AND EXTEND BELOW THE SUSPENDED CEILING. CONTACT THE FIRE DEPARTMENT PRIOR TO INSERTION OF SUSPENDED CEILING TILES FOR AN INSPECTION OF MODIFICATIONS TO THE EXISTING FIRE SPRINKLER SYSTEM. A MINIMUM 48-HOUR NOTICE IS REQUIRED FOR THE FIRE DEPARTMENT WITNESSING OF ALL NECESSARY TESTS AND/OR INSPECTIONS. PLEASE CALL THE INSPECTION SCHEDULING LINE AT (925) 454-2307 TO SCHEDULE YOUR INSPECTION.
- WHERE ROOF INSULATION IS PRESENT IN A TENANT IMPROVEMENT, IT SHALL BE REFASTENED AS NECESSARY TO PRECLUDE OBSTRUCTION OF THE FIRE SPRINKLER SYSTEM.

- UNDERGROUND FIRE MAINS, FIRE HYDRANTS AND CONTROL VALVES SHALL BE INSTALLED IN CONFORMANCE WITH THE MOST RECENTLY ADOPTED EDITION OF NFPA PAMPHLET 24, "OUTSIDE PROTECTION".
  - UNDERGROUND PIPELINE CONTRACTOR SHALL SUBMIT A MINIMUM OF THREE (3) SETS OF INSTALLATION MAP DRAWINGS TO THE FIRE DEPARTMENT, FIRE PREVENTION BUREAU. THE PLANS SHALL HAVE THE CONTRACTOR'S WET STAMP INDICATING THE CALIFORNIA CONTRACTOR LICENSE TYPE, LICENSE NUMBER AND MUST BE SIGNED. NO UNDERGROUND PIPELINE INSPECTIONS WILL BE CONDUCTED PRIOR TO ISSUANCE OF APPROVED PLANS.
  - ALL UNDERGROUND FIRE PROTECTION WORK SHALL REQUIRE A CALIFORNIA CONTRACTOR'S LICENSE TYPE AS FOLLOWS: C-16, C-34, C-36 OR A.
  - ALL FIELD-TESTING AND INSPECTION OF PIPING JOINTS SHALL BE CONDUCTED PRIOR TO COVERING OF ANY PIPELINE.
- THE FIRE PREVENTION BUREAU REVIEW BUILDING/CIVIL DRAWINGS FOR CONCEPTUAL ON-SITE FIRE MAINS AND FIRE HYDRANT LOCATIONS ONLY. PLAN CHECK COMMENTS AND APPROVALS DO NOT INCLUDE:
  - INSTALLATION OF THE ON-SITE FIRE MAINS AND FIRE HYDRANTS. SPECIFIC INSTALLATION DRAWINGS SUBMITTED BY THE LICENSED UNDERGROUND FIRE PROTECTION CONTRACTOR SHALL BE SUBMITTED TO THE FIRE PREVENTION BUREAU FOR APPROVAL.
  - BACKFLOW PREVENTION OR CONNECTIONS TO THE CITY OR CALIFORNIA WATER SERVICE PUBLIC MAINS.
  - CONNECTIONS TO PUBLIC WATER MAINS AND ASSOCIATED BACKFLOW SHALL BE SUBMITTED TO THE CITY PUBLIC WORKS DEPARTMENT FOR REVIEW AND APPROVAL. THE PUBLIC WORKS INSPECTION DIVISION DOES ALL CONNECTION INSPECTIONS. THE PUBLIC WORKS INSPECTION NUMBER IS (925) 960-4500.
- ONE-INCH ELECTRICAL CONDUIT SHALL BE PROVIDED TO EACH FIRE PROTECTION SYSTEM CONTROL VALVE INCLUDING ALL VALVE(S) AT THE WATER CONNECTIONS.
- DEAD-END WATER SERVICE FIRE MAINS SHALL NOT EXCEED 500 FEET IN LENGTH AND/OR HAVE MORE THAN FIVE FIRE DEPARTMENT APPLIANCES\* SHALL BE LOOPED AROUND THE SITE OR BUILDING AND HAVE A MINIMUM OF TWO POINTS OF WATER SUPPLY OR STREET CONNECTION. ZONE VALVES SHALL BE INSTALLED AS RECOMMENDED UNDER NFPA, PAMPHLET 24, CURRENT EDITION.

\*NOTE: FIRE DEPARTMENT APPLIANCES ARE CLASSIFIED AS SPRINKLER SYSTEM RISERS, FIRE HYDRANTS AND/OR STANDPIPES.

- FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO CITY OF LIVERMORE PUBLIC WORKS STANDARD #W-1 IN SUCH A NUMBER AND LOCATION AS APPROVED BY THE FIRE CHIEF OR FIRE MARSHAL. FIRE HYDRANT LOCATIONS SHALL BE KNOWN ON THE PLANS SUBMITTED FOR A BUILDING PERMIT.
- IN INDUSTRIAL AND COMMERCIAL DEVELOPMENTS, FIRE HYDRANTS SHALL BE INSTALLED AT SPACING NOT GREATER THAN 300 FEET. IN RESIDENTIAL DEVELOPMENT(S) HYDRANT SPACING SHALL BE AT 400 FEET.
- ON SITE ACCESS WAYS AND INTERNAL DRIVES SHALL BE DESIGNATED AS FIRE LANES AND IDENTIFIED AS SUCH BY RED CURB STRIPING AND POSTED WITH SIGNS AT LOCATIONS APPROVED BY THE FIRE DEPARTMENT. SIGNS SHALL BE ACCORDING TO STATE STANDARDS AND READ "NO PARKING-FIRE LANE" AND MUST BE SHOWN ON THE PLANS. THE FOLLOWING SCHEDULE SHALL APPLY:

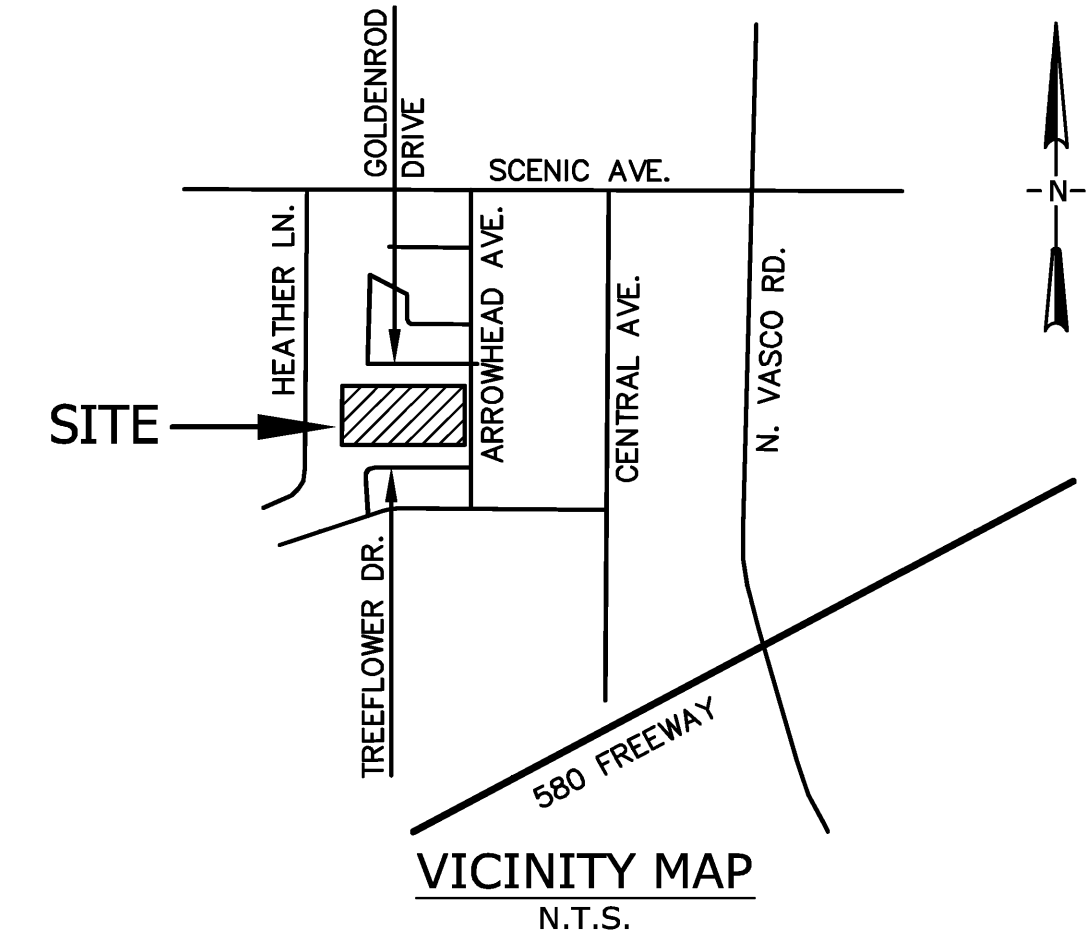
WIDTH	REQUIREMENTS
36 FEET OR GREATER	NO REQUIREMENTS
BETWEEN 28 AND 36 FEET	POST ONE SIDE
BETWEEN 20 AND 28 FEET	POST BOTH SIDES

WHERE FIRE DEPARTMENT VEHICLES ACCESS THROUGH OR AROUND A SITE INVOLVES CHANGES IN DIRECTION OR CURVES, MINIMUM TURNING RADIUS SHOULD BE AS FOLLOWS. INSIDE RADIUS OF 45 FEET AND OUTSIDE RADIUS OF 55 FEET SHALL BE PROVIDED TO FACILITATE FIRE TRUCK TURNING RADIUS OR ENTRY AND EXIT FROM SITE.

- DEAD-END ACCESS WAYS AND INTERNAL DRIVES SHALL NOT EXCEED 500 FEET IN LENGTH AND SHALL TERMINATE IN TURNAROUND NO LESS THAN 80 FEET IN DIAMETER OR HAMMER-HEAD (TEE). REFER TO PUBLIC WORKS STANDARD DETAIL #ST-1.
- ADDRESS NUMBERS SHALL BE INSTALLED ON THE FRONT OR PRIMARY ENTRANCE FOR ALL BUILDINGS. MINIMUM BUILDING ADDRESS CHARACTER SIZE SHALL BE 12" HIGH BY 1-1/2" STROKE. WHERE MULTIPLE ACCESS IS PROVIDED, ADDRESS OR TENANT SPACE NUMBER SHALL BE PROVIDED ON EACH ACCESS AND/OR WAREHOUSE DOOR AND CHARACTER SIZE SHALL BE NO LESS THAN 6" HIGH BY 1" STROKE.
- EXIT DOORS SHALL BE EQUIPPED WITH APPROVED PANIC HARDWARE AND IDENTIFIED BY APPROVED EXIT SIGNS, WHERE REQUIRED. SHOW LOCATION ON THE PLANS WITH LEGEND IDENTIFICATION.
- RANGE HOLDS, DUCTS, GRILLS, AND FRYERS IN COMMERCIAL KITCHENS SHALL BE EQUIPPED WITH AN APPROVED AUTOMATIC WET CHEMICAL SYSTEM. TWO SETS OF PLANS AND SPECIFICATIONS SHALL BE SUBMITTED TO THE FIRE DEPARTMENT FOR REVIEW AND APPROVAL. SYSTEMS SHALL BE EQUIPPED WITH AUTOMATIC GAS AND ELECTRIC SHUT-OFF. THE LATEST EDITION OF NFPA, PAMPHLET 96 TITLED "STANDARD FOR INSTALLATION OF EQUIPMENT FOR REMOVAL OF SMOKE AND GREASE LADEN VAPORS FROM COMMERCIAL COOKING EQUIPMENT" SHALL BE CONSIDERED AS A GUIDE TO RECOMMEND GOOD PRACTICE. FIRE EXTINGUISHERS PROVIDED IN COMMERCIAL KITCHENS SHALL HAVE A 2A10BC RATING. SHOW LOCATION OF FIRE EXTINGUISHERS ON PLANS. ALL SPECIALIZED FIRE PROTECTION SYSTEMS SHALL BE MONITORED FOR ACTIVATION/DISCHARGE AND SYSTEM STATUS TO A UL LISTED CENTRAL STATION SERVICE.
- PORTABLE FIRE EXTINGUISHER(S) SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE 2007 CALIFORNIA FIRE CODE. MINIMUM APPROVED SIZE FOR ALL PORTABLE FIRE EXTINGUISHERS SHALL BE 2A 10BC.
- TEMPORARY OFFICE CONSTRUCTION/MODULAR BUILDINGS SHALL HAVE THE FOLLOWING REQUIREMENTS:
  - PROVIDE ONE 2A 10BC FIRE EXTINGUISHER IN A READILY ACCESSIBLE LOCATION ADJACENT TO THE PRIMARY EXIT TO THE UNIT(S)/MODULAR(S). SHOW LOCATIONS ON PLANS.
  - PROVIDE A MINIMUM OF ONE BATTERY OPERATED SMOKE DETECTOR. WHEN THE UNIT IS BROKEN UP INTO MULTIPLE SPACES SUCH AS OFFICE(S) AND STORAGE AREA(S), A SMOKE DETECTOR SHALL BE INSTALLED IN EACH AREA.
- PROVIDE PLANNING DEPARTMENT SITE PLAN APPROVAL/CONDITIONAL USE PERMIT APPROVAL NUMBERS FOR THIS PROJECT.
- THE DEVELOPER SHALL PROVIDE PRESSURE REDUCERS, PRESSURE REDUCTION VALVES (PRV'S), BACKFLOW PREVENTION DEVICES & APPURTENANCES ON THE POTABLE AND RECLAIMED WATER SERVICES AS DIRECTED BY THE CITY ENGINEER. ALL WATERLINE VALVES MUST NOTATE "EDPM" ON THE VALVE BODY.

- INDUSTRIAL AND COMMERCIAL DEVELOPMENT. THE FOLLOWING ITEMS WILL BE PROVIDED PRIOR TO ANY CONSTRUCTION ABOVE THE FOUNDATION OR SLAB. NOTE: PERIODIC INSPECTIONS WILL BE MADE FOR COMPLIANCE.
  - EMERGENCY VEHICLE ACCESS SHALL BE PROVIDED TO THE SITE. IF PUBLIC WORKS IMPROVEMENTS ARE PART OF THE PROJECT TO ACCESS THE SITE, AN EMERGENCY VEHICLE ACCESS PLAN SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.
  - SITE ACCESS SHALL BE PROVIDED PRIOR TO ANY CONSTRUCTION ABOVE THE FOUNDATION OR SLAB. BASED ON THE SITE PLAN APPROVAL THE ACCESS SHALL BE INSTALLED.
  - WHERE MULTIPLE BUILDINGS ARE UNDER CONSTRUCTION, ACCESS SHALL BE PROVIDED AROUND ALL BUILDINGS AS SPECIFIED ON THE SITE PLAN APPROVAL OR EXHIBIT B.
  - EMERGENCY VEHICLE ACCESS SHALL BE A MINIMUM OF 20 FEET IN WIDTH. A CLEAR HEIGHT FREE OF OBSTRUCTIONS (POWER, CABLE, TELEPHONE LINES, TREE LIMBS, ETC.) SHALL BE PROVIDED. THIS CLEARANCE SHALL BE A MINIMUM OF 13 FEET-6 INCHES.
  - IF PERMANENT ACCESS OR SITE PAVING IS NOT PROVIDED, THE CARRYING CAPACITY OF THE EMERGENCY ACCESS SHALL BE 69,000 POUNDS UNDER ALL WEATHER CONDITIONS.
  - SITE STAGING AREA(S) SHALL BE PROVIDED FOR MATERIALS AND EQUIPMENT. ALL STAGING AREAS SHALL BE OUTSIDE OF THE EMERGENCY VEHICLE ACCESS ROUTE SHOWN ON THE APPROVED PLANS.
  - WHERE ON-SITE FIRE HYDRANT(S) ARE REQUIRED, THEY SHALL BE INSTALLED, FLUSHED AND ALL VALVES OPEN PRIOR TO ANY CONSTRUCTION ABOVE THE FOUNDATION OR SLAB. THIS INCLUDES CONCRETE TILT-UP AND MASONRY BUILDINGS. TEMPORARY ABOVE GROUND WATER STORAGE TANKS ARE NOT PERMITTED AS ALTERNATIVE WATER SUPPLY SOURCES FOR COMMERCIAL AND INDUSTRIAL DEVELOPMENT.
  - ON-SITE FIRE HYDRANT(S) SHALL NOT BE OBSTRUCTED AND SHALL BE SUFFICIENTLY ABOVE GRADE TO HAVE ALL HYDRANT VALVES AND OUTLETS ACCESSIBLE FOR EMERGENCY USE.
  - PRIOR TO REQUEST FOR FINAL INSPECTION, ALL ACCESS ROADS, ON-SITE ACCESS AND FIRE HYDRANTS SHALL BE PROVIDED. ALL FIRE HYDRANTS SHALL BE ACCEPTANCE INSPECTED AND TESTED TO APPLICABLE CITY PUBLIC WORKS STANDARDS.
  - WHERE A PROJECT IS PHASED AS PART OF THE DEVELOPMENT APPROVED BY THE CITY, SPECIFIC ACCESS, WATER SUPPLY AND FIRE HYDRANT INSTALLATIONS SHALL BE REQUIRED AS PART OF EACH PHASE. AS NEEDED A PHASING PLAN WITH THESE IMPROVEMENTS WILL BE REQUIRED.
  - ANY INDUSTRIAL/COMMERCIAL DEVELOPMENT WHERE RECYCLED WATER IS PROVIDED FOR FIRE PROTECTION SHALL MEET CITY WATER RESOURCES DIVISION INSTALLATION STANDARDS AND SHALL BE IN SERVICE PRIOR TO ANY CONSTRUCTION ABOVE THE SLAB OR FOUNDATION.
  - WHERE ON-SITE GRADING/UTILITY PLANS ARE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO BUILDING CONSTRUCTION DRAWINGS, EMERGENCY VEHICLE ACCESS ROUTES, FIRE HYDRANT LOCATIONS, MATERIAL STAGING AREAS, ETC. SHALL BE PROVIDED.
  - QUESTIONS SHALL BE DIRECTED TO THE FIRE PREVENTION BUREAU FIRE MARSHAL OR ASSISTANT FIRE MARSHAL AT (925) 454-2330.
- AN OPERATION & MAINTENANCE AGREEMENT FOR SITE STORMWATER TREATMENT MEASURES AND HYDROGRAPH MODIFICATION MEASURES IS REQUIRED PRIOR TO THE ISSUANCE OF FINAL OCCUPANCY. THE APPLICANT MUST EXECUTE AND RECORD WITH THE CITY AN "OPERATION AND MAINTENANCE AGREEMENT" FOR THE SITE'S PERMANENT STORMWATER TREATMENT MEASURES AND HYDROGRAPH MODIFICATION MEASURES.

- THE PLAN SHOULD INCLUDE AND/OR ADDRESS THE FOLLOWING AT A MINIMUM:
- IDENTIFY AND PROVIDE THE CONTACT INFORMATION FOR THE OWNER/PARTY WHO SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE SITE MEASURES.
  - PROVIDE A DETAILED DESCRIPTION AND SCHEDULE OF THE MAINTENANCE ACTIVITIES TO BE PERFORMED.
  - AN 11 X17 GENERAL SITE PLAN IDENTIFYING THE SPECIFIC STORMWATER TREATMENT MEASURES AND THEIR LOCATION.



SHEET INDEX	
SHEET NO.	DESCRIPTION
1.	GENERAL NOTES
2.	SECTIONS and DETAILS
3.	GRADING and DRAINAGE PLAN
4.	UTILITY PLAN
5.	ARROWHEAD AVENUE IMPROVEMENT PLAN
6.	STORM WATER CONTROL PLAN
7.	EROSION CONTROL PLAN / NOTES and DETAILS

# GENERAL NOTES GRADING and DRAINAGE PLAN

# HINDU COMMUNITY and CULTURAL CENTER 1232 ARROWHEAD AVENUE LIVERMORE ALAMEDA COUNTY CALIFORNIA

JAMES E. DIGGINS R.C.E. 27818  
RENEWAL DATE: 03/31/12

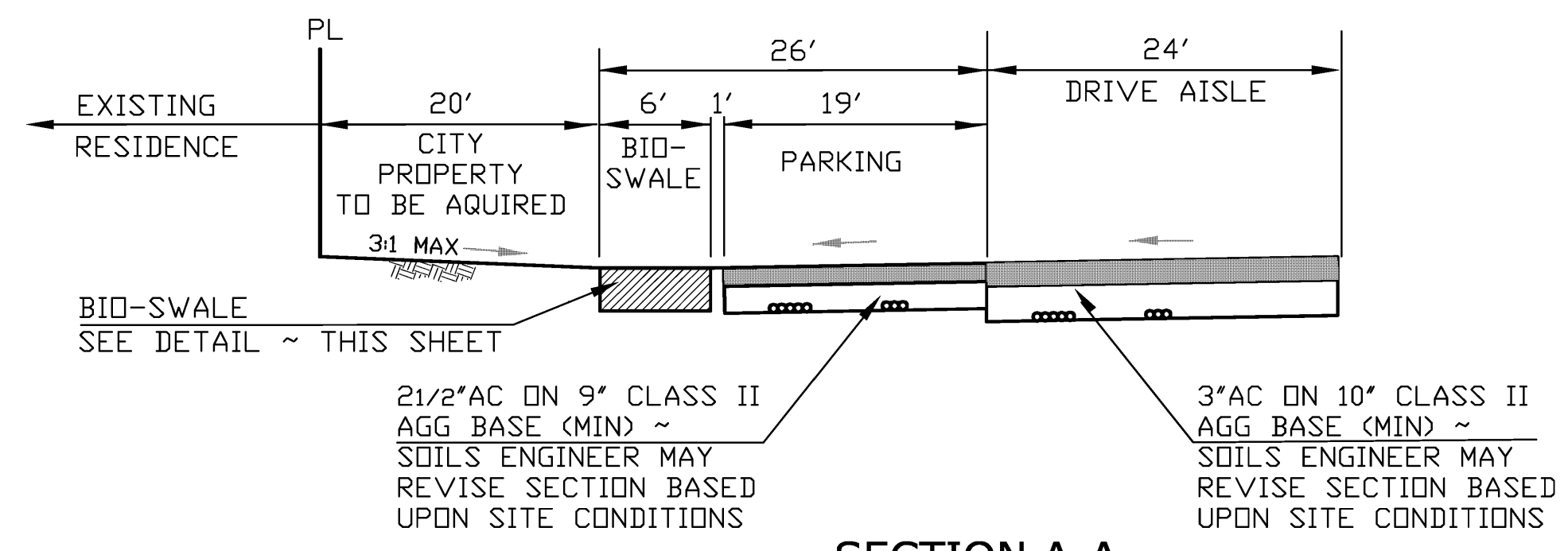
#	REVISIONS	DATE



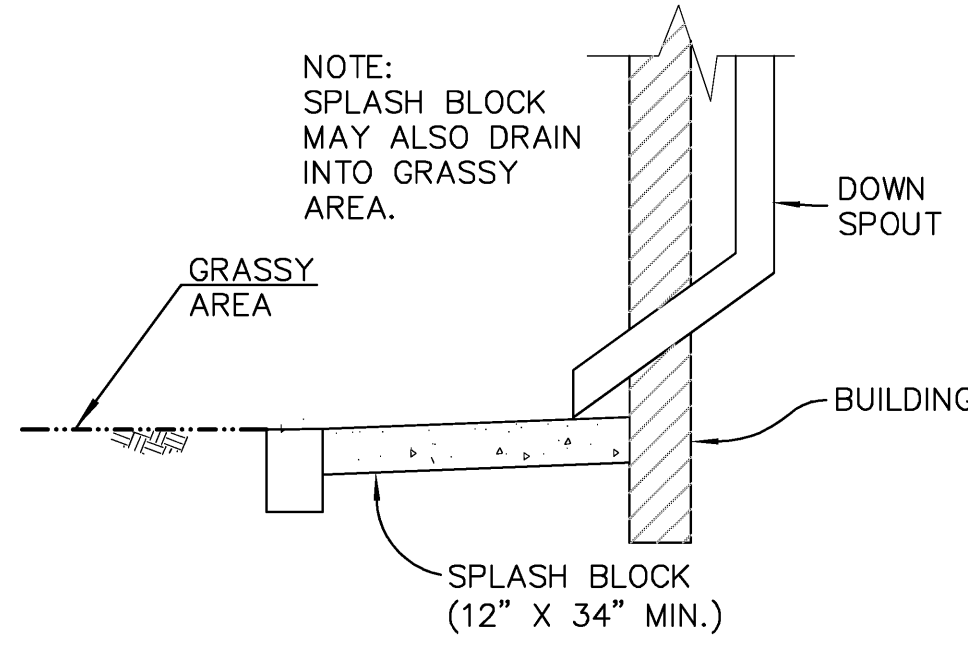
DeBolt Civil Engineering  
811 San Ramon Valley Boulevard  
Danville, California 94526  
Tel: 925/837-3780  
Fax: 925/837-4378

Date: 10/7/10  
Scale: NONE  
By: JED / RJ  
Job No.: 06309

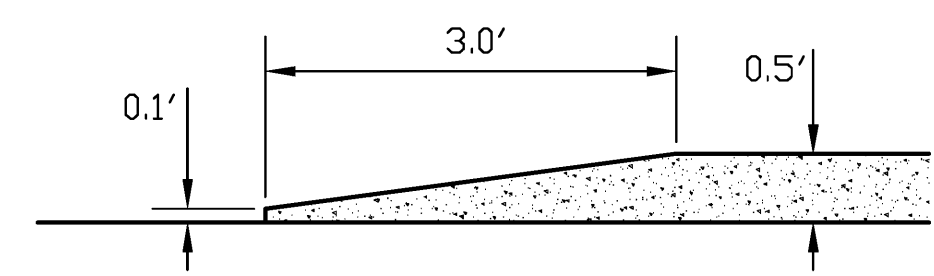
CE-1



**SECTION A-A**  
N.T.S.

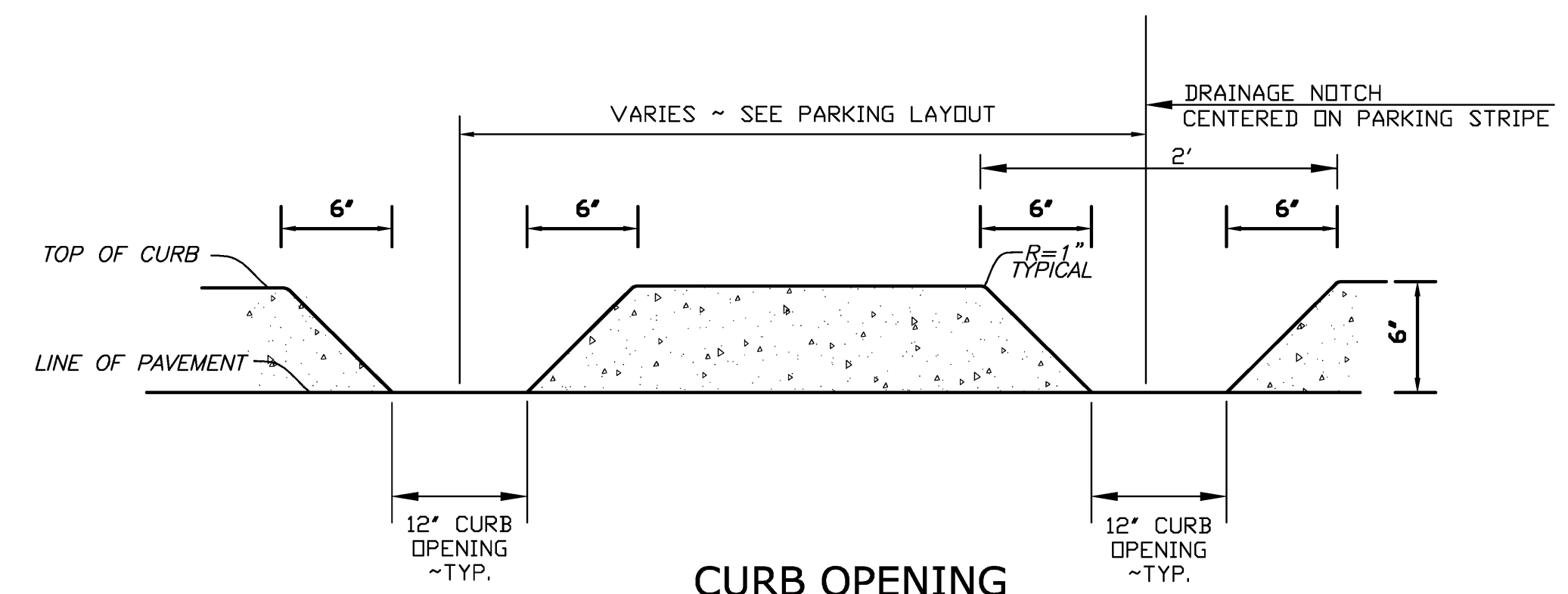


**DOWN SPOUT DETAIL**  
NTS

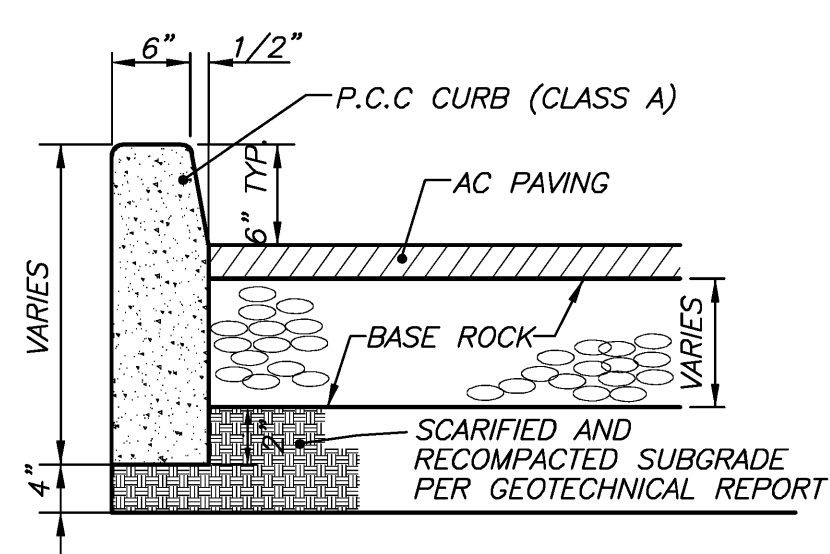


**CURB TRANSITION DETAIL**  
N.T.S.

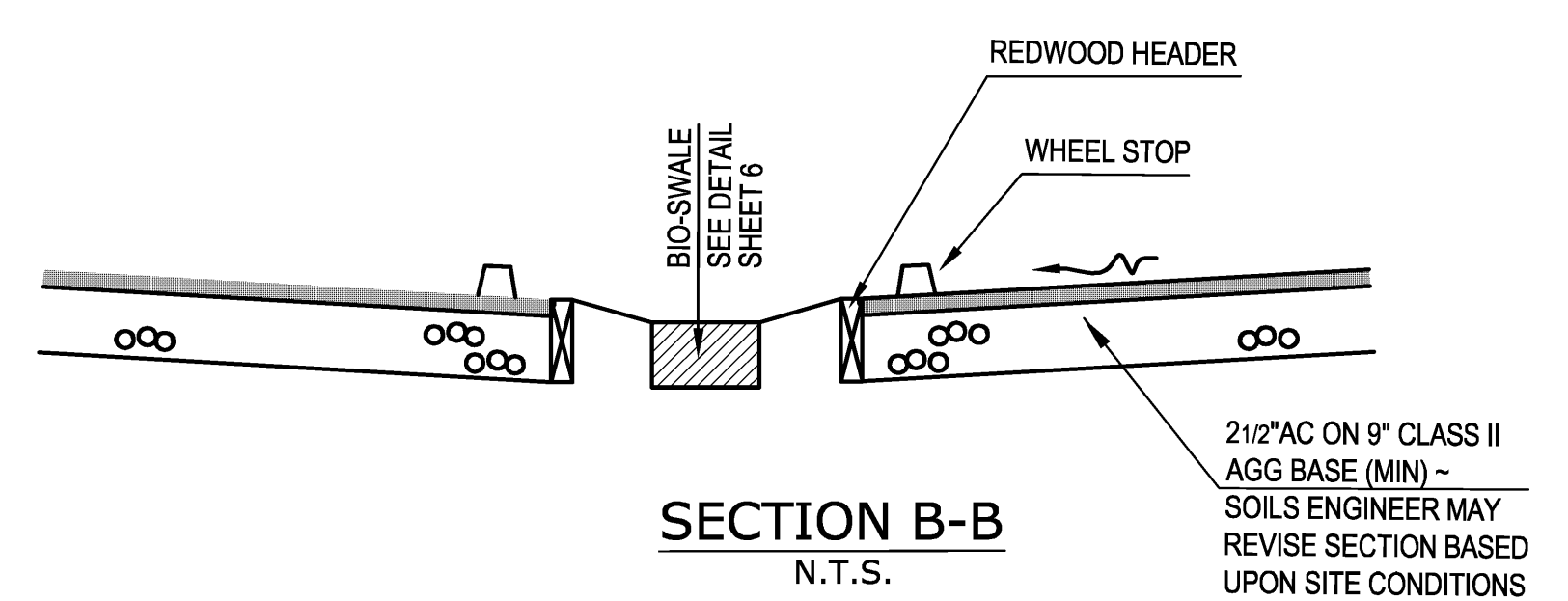
- NOTES:**
- 1) PERVIOUS PAVERS WILL BE USED IN PARKING STALLS IF SOILS CAN PERFORM NECESSARY PERCOLATION.
  - 2) WHEEL STOPS WILL BE USED IN PARKING STALLS TO ALLOW RUNOFF TO FLOW TO BIO-SWALES.
  - 3) SEE LANDSCAPE PLAN FOR SIDEWALK LOCATIONS. LOCATIONS SHOWN ARE FOR GENERAL INFORMATION ONLY.



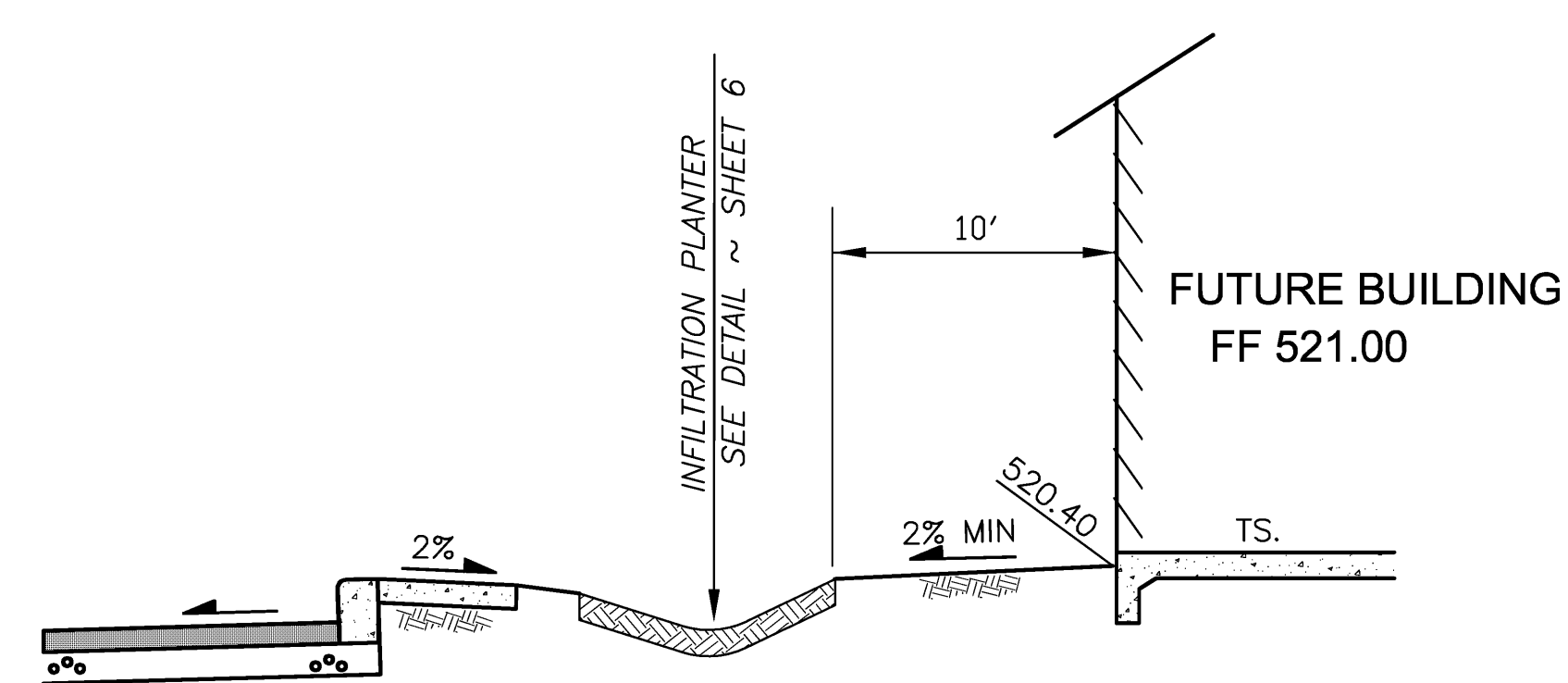
**CURB OPENING**  
N.T.S.



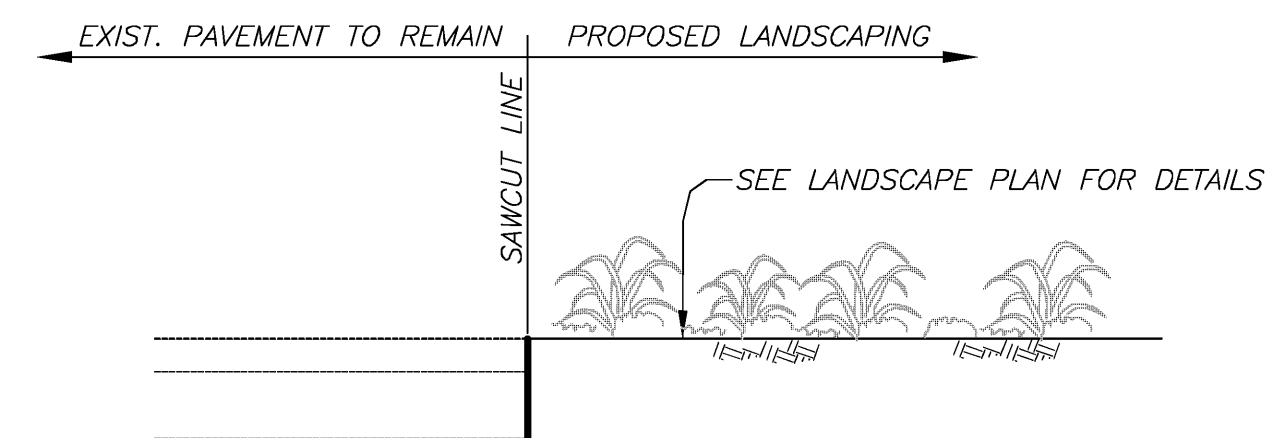
**CURB DETAIL**  
N.T.S.



**SECTION B-B**  
N.T.S.



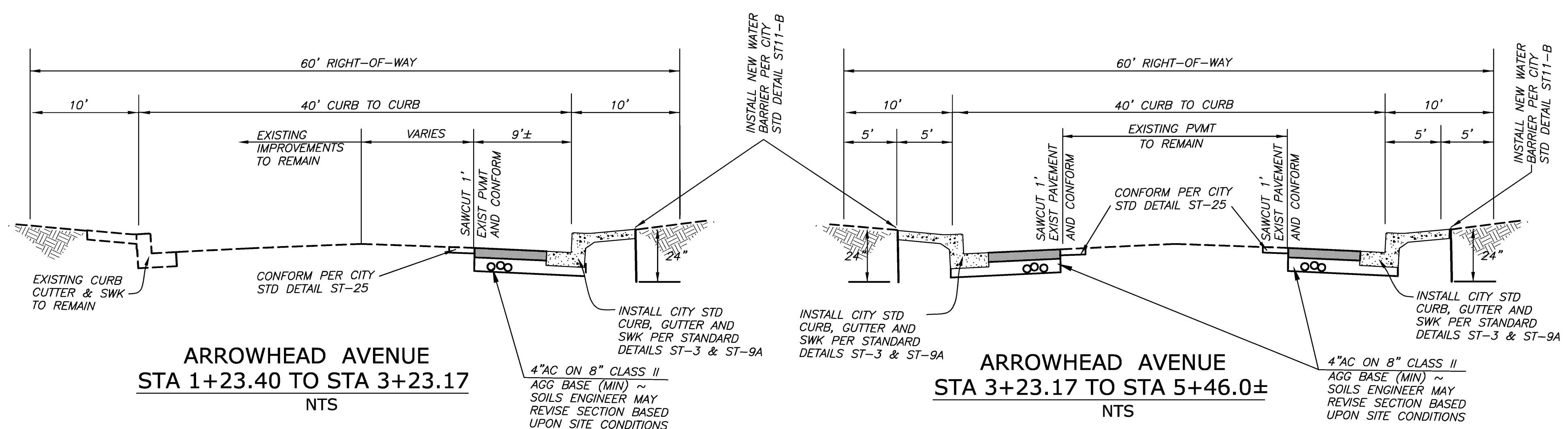
**TYPICAL SECTION**  
N.T.S.



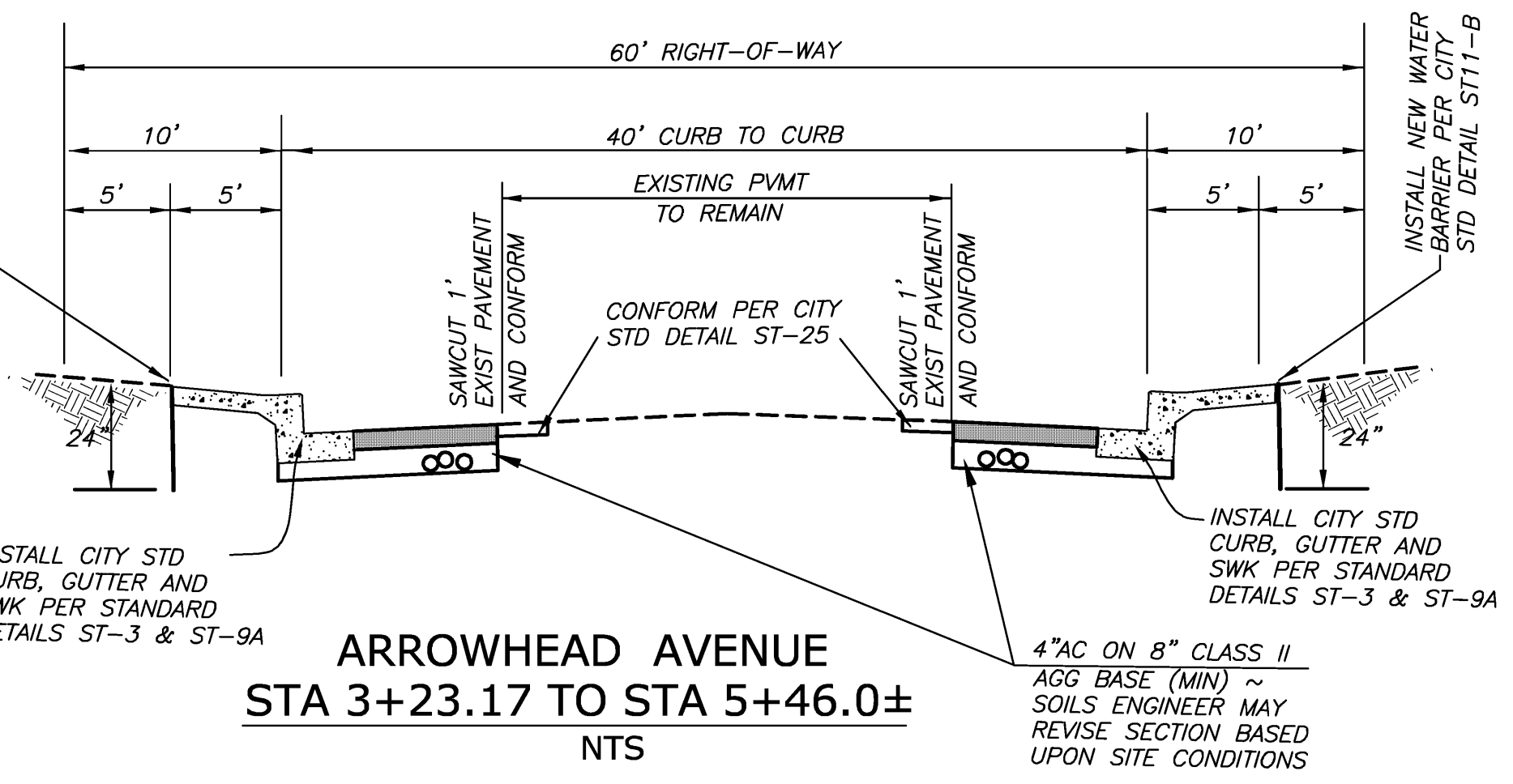
**SAWCUT DETAIL**  
N.T.S.

**LEGEND AND ABBREVIATIONS**

PROPOSED	EXISTING	DESCRIPTION
		CONTOURS (1' INTERVALS)
		SPOT ELEVATION
		LOT LINE
		EASEMENT LINE
		BUILDING FOOTPRINT
		CURB & GUTTER
		CONCRETE CURB
		RETAINING WALL
		CURB, GUTTER & SIDEWALK
		STORM DRAIN LINE
		SANITARY SEWER LINE
		WATER LINE
		STREET SIGN
		DOWNSPOUT
		FIRE HYDRANT
		EARTH SWALE
		DIRECTION OF FLOW
		FINISHED FLOOR
		PAVEMENT
		TOP OF CURB
		GRADE BREAK
		GRATE
		INVERT
		FLOW LINE
		BASE OF WALL
		TOP OF WALL
		POINT OF CONNECTION



**ARROWHEAD AVENUE**  
STA 1+23.40 TO STA 3+23.17  
NTS



**ARROWHEAD AVENUE**  
STA 3+23.17 TO STA 5+46.0±  
NTS

**PARKING SPACE SUMMARY**

<b>EXISTING</b>	
STANDARD	79
ACCESSIBLE	4
TOTAL	83
<b>PROPOSED</b>	
STANDARD	214
ACCESSIBLE	12
CAR/VAN POOL	12
FUEL EFFICIENT	12
TOTAL	250
ENTIRE PROJECT	333

**SECTIONS and DETAILS**  
**GRADING and DRAINAGE PLAN**

**HINDU COMMUNITY and CULTURAL CENTER**  
**1232 ARROWHEAD AVENUE**  
LIVERMORE ALAMEDA COUNTY CALIFORNIA

JAMES E. DIGGINS R.C.E. 27818  
RENEWAL DATE: 03/31/12

#	REVISIONS	DATE

**DeBolt Civil Engineering**  
811 San Ramon Valley Boulevard  
Danville, California 94526  
Tel: 925/837-3780  
Fax: 925/837-4378

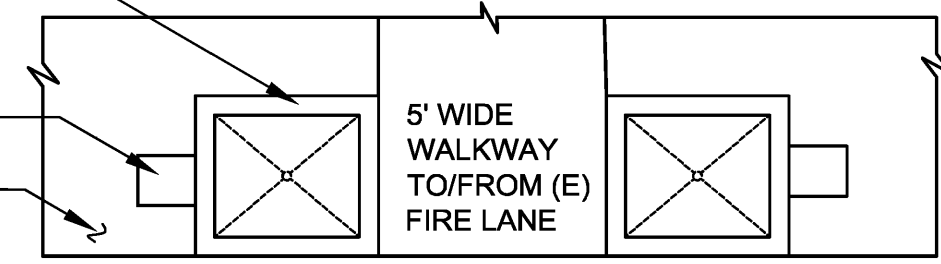
Date: 10/7/10  
Scale: AS SHOWN  
By: JED / kd  
Job No.: 06309



**LEGEND**

- SIDEWALK / PATIO
- BIO-SWALE / PLANTERS
- TW / BW TOP WALL / BOTTOM WALL
- P PAVEMENT
- FF FINISH FLOOR
- TC TOP OF CURB

- (E) FOOT WASH WATER TAPS (OUTDOOR SINKS) TO REMAIN (TYP)
- (E) DRAIN TO BE REMOVED (TYP)
- (N) DRY WELL (TYP)
- LANDSCAPE

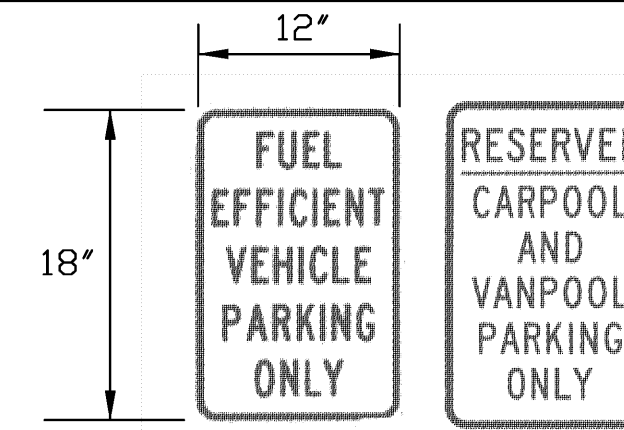


**FOOT WASH DETAIL**  
N.T.S.

**EARTHWORK QUANTITIES**

ITEMS	CUT (CY'S)	FILL (CY'S)
PADS	0	1,040
PARKING	4,300	400
LANDSCAPE	1,200	500
CITY PARCEL	1,000	0
SHRINKAGE	0	760
EXPORT	0	3,800
<b>TOTAL</b>	<b>6,500</b>	<b>6,500</b>

THESE ARE ESTIMATED VALUES. THE ACTUAL AMOUNT OF EARTH MOVED MAY VARY DEPENDING UPON COMPACTION, CONSOLIDATION, STRIPPING REQUIREMENTS, AND CONTRACTOR'S METHOD OF OPERATION.

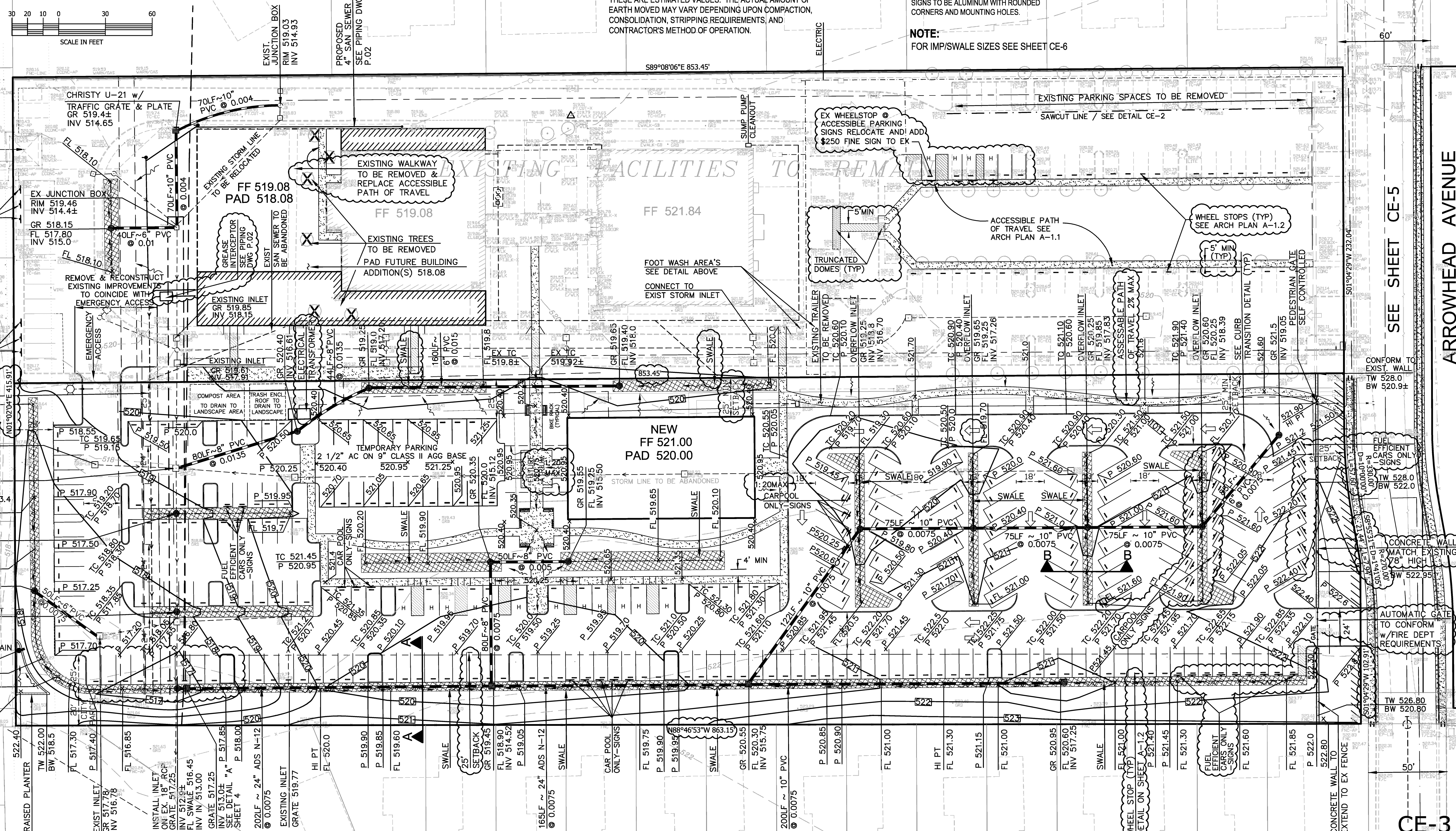


SIGNS TO BE ALUMINUM WITH ROUNDED CORNERS AND MOUNTING HOLES.

**NOTE:**  
FOR IMP/SWALE SIZES SEE SHEET CE-6

**AREA SUMMARY**

(EX) SITE SQUARE FOOTAGE	343,682 sq ft
(EX) LANDSCAPE SQUARE FOOTAGE	78,000 sq ft
NEW LANDSCAPE SQUARE FOOTAGE INSTALLED	73,276 sq ft
(EX) HARDSCAPE SQUARE FOOTAGE REMOVED	5,500 sq ft
(EX) LANDSCAPE SQUARE FOOTAGE REMOVED	NONE
NEW HARDSCAPE INSTALLED	98,000 sq ft
<b>TOTAL IMPERVIOUS AREA</b>	<b>191,800 sq ft</b>



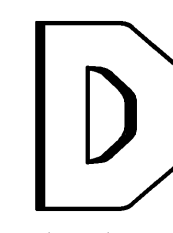
**GRADING and DRAINAGE PLAN**

**HINDU COMMUNITY and CULTURAL CENTER**  
1232 ARROWHEAD AVENUE

LIVERMORE ALAMEDA COUNTY CALIFORNIA

JAMES E. DIGGINS RENEWAL DATE: 03/31/12 R.C.E. 27818

#	REVISIONS	DATE



**DeBolt Civil Engineering**  
811 San Ramon Valley Boulevard  
Danville, California 94526  
Tel: 925/837-3780  
Fax: 925/837-4378

Date: 10/7/10  
Scale: 1" = 30'  
By: JED / ki  
Job No.: 06309

SEE SHEET CE-5

ARROWHEAD AVENUE

CE-3

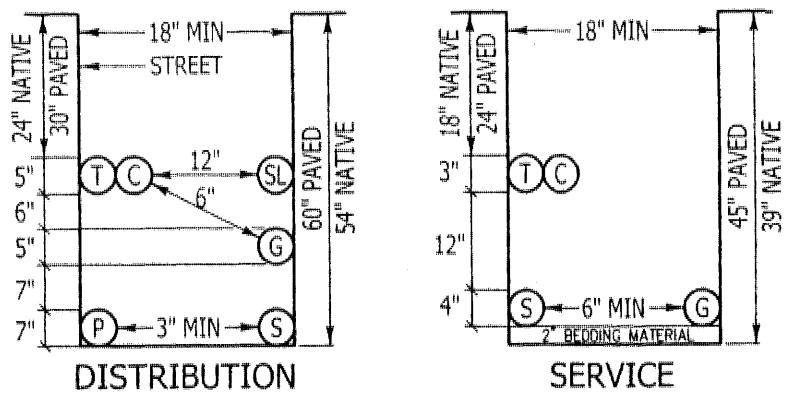


**NOTES**

1. FIRE SPRINKLER ENGINEER WILL SPECIFY THE SIZE AND TYPE OF PIPE.
2. NEW WATER METER AND BACKFLOW SHALL BE INSTALLED PER CITY STANDARD DETAILS W-2 AND W-23.
3. FIRE LINE BACKFLOW TO BE INSTALLED PER CITY STANDARD DETAILS W-10a, W-10b AND W-10c.
4. DOMESTIC WATER SERVICE MANIFOLD TO BE CONNECTED TO NEW 8" FIRE SERVICE LATERAL PER CITY STD DETAIL W-16.
5. A DOUBLE DETECTOR CHECK AND FIRE DEPARTMENT CONNECTION SHALL BE INSTALLED ON FIRE SPRINKLER LINE AS SHOWN.
6. CONTRACTOR TO CONFIRM ALL LOCATIONS AND INVERTS OF EXISTING FACILITIES PRIOR TO CONSTRUCTION.
7. COORDINATE SEWER FACILITIES WITH PLUMBING DRAWING.

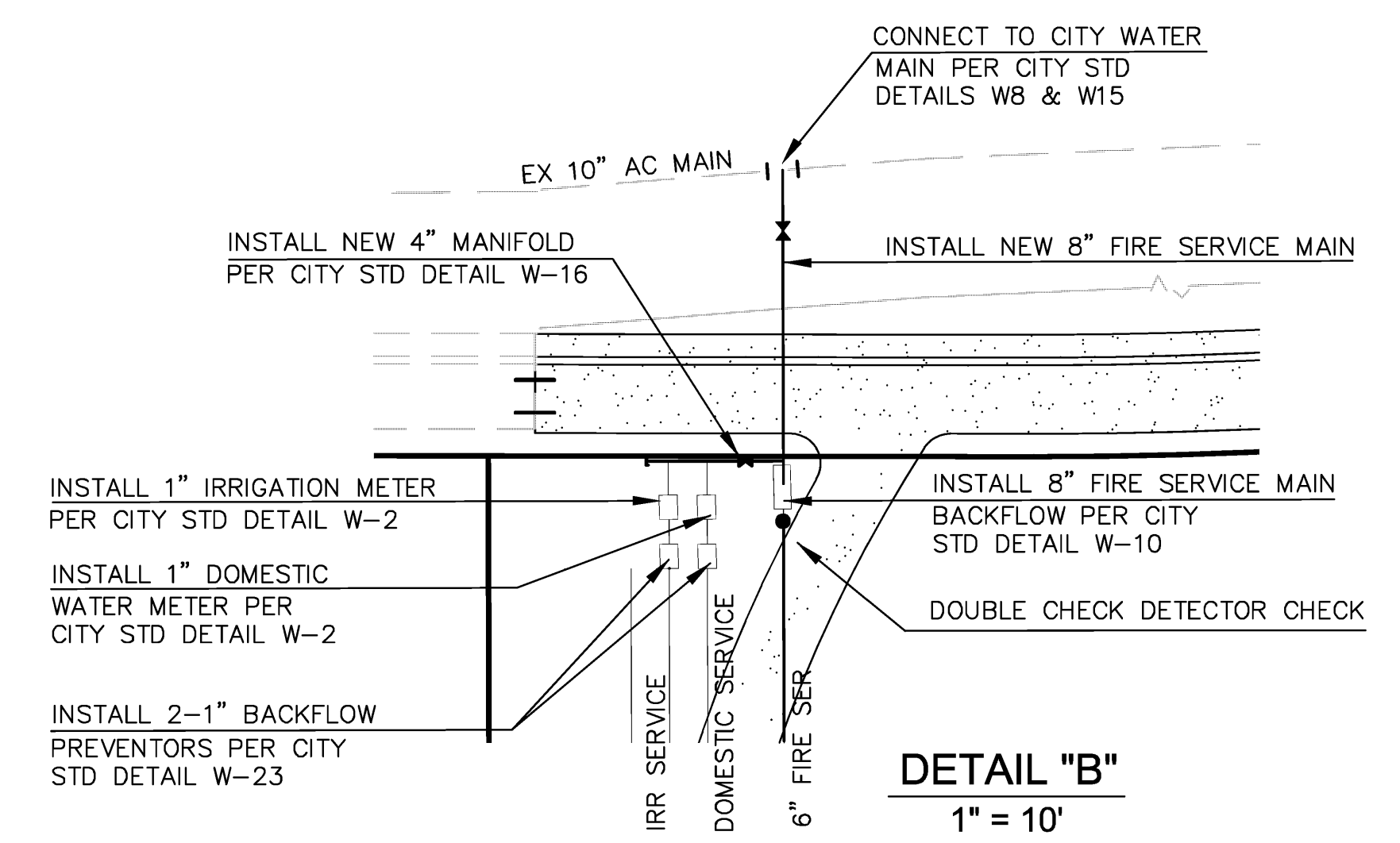
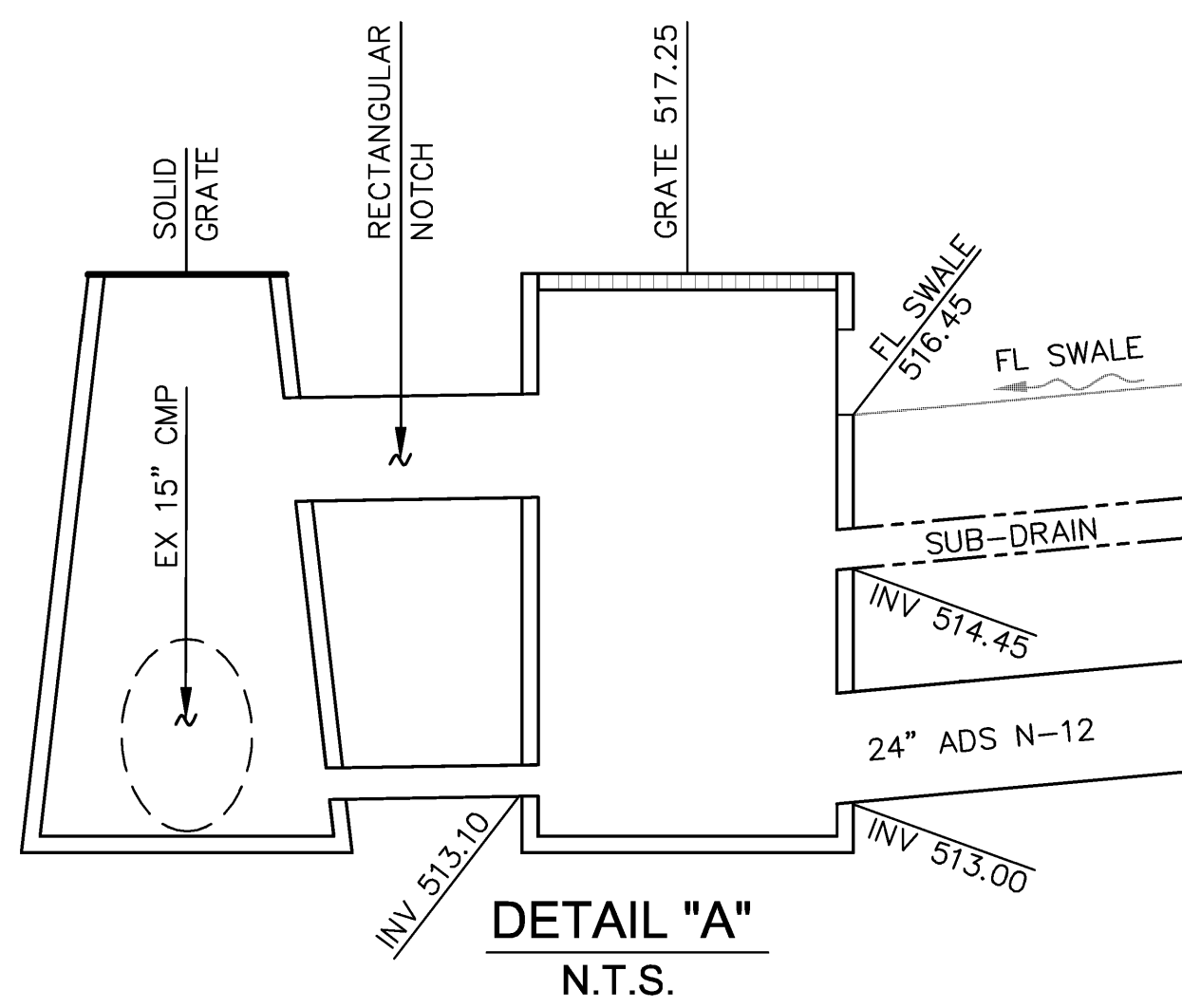
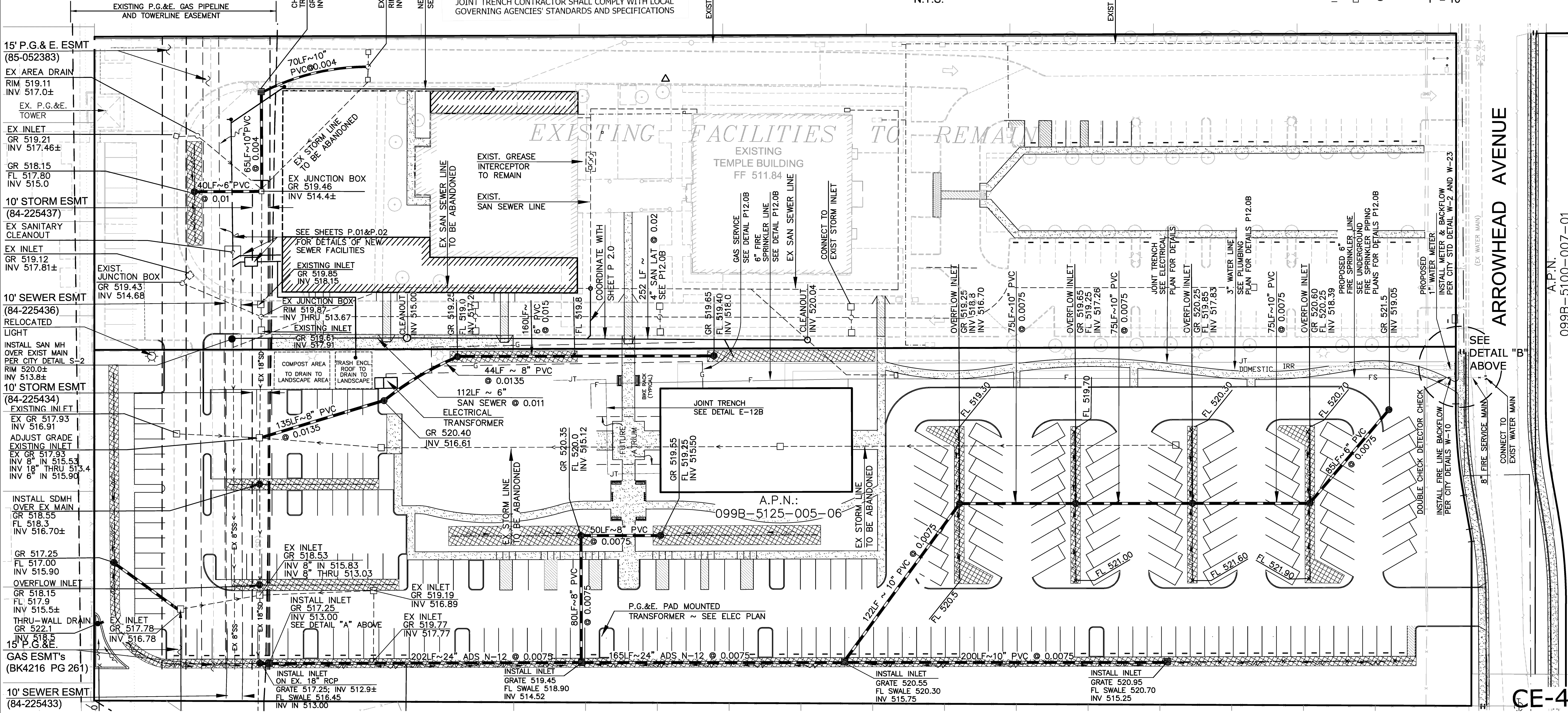
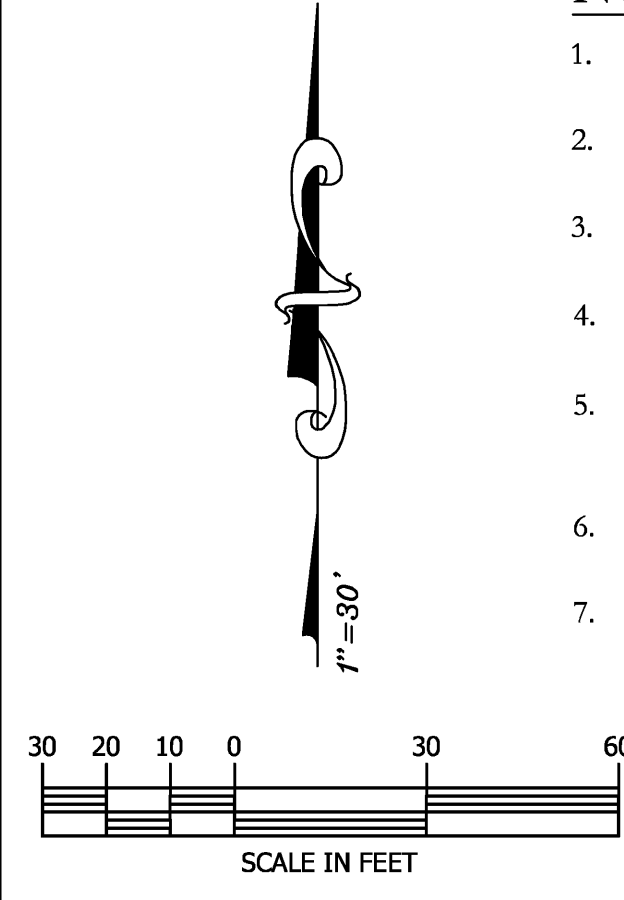
**MINIMUM SEPARATION REQUIREMENTS**

LBL	UTILITY TYPE	G	T	OB	C	S	P
G	GAS	-	12"	12"	12"	6"	12"
T	TELEPHONE (DUCT)	12"	-	1"	1"	12"	12"
T	TELEPHONE (DIRECT BURY)	12"	1"	-	1"	12"	12"
C	CATV	12"	1"	1"	-	12"	12"
S	ELECTRIC SECONDARY	6"	12"	12"	12"	-	3"
P	ELECTRIC PRIMARY	12"	12"	12"	12"	3"	-
SL	STREET LIGHT - NON PG&E	6"	12"	12"	12"	1"	3"



**MINIMUM BACKFILL REQUIREMENTS**

JOINT TRENCH CONTRACTOR SHALL COMPLY WITH LOCAL GOVERNING AGENCIES' STANDARDS AND SPECIFICATIONS



ARROWHEAD AVENUE

A.P.N.: 099B-5100-007-01

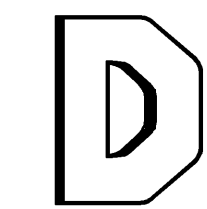
CE-4

**UTILITY PLAN**

**HINDU COMMUNITY and CULTURAL CENTER**  
 1232 ARROWHEAD AVENUE  
 LIVERMORE ALAMEDA COUNTY CALIFORNIA

JAMES E. DIGGINS R.C.E. 27818  
 RENEWAL DATE: 03/31/12

#	REVISIONS	DATE



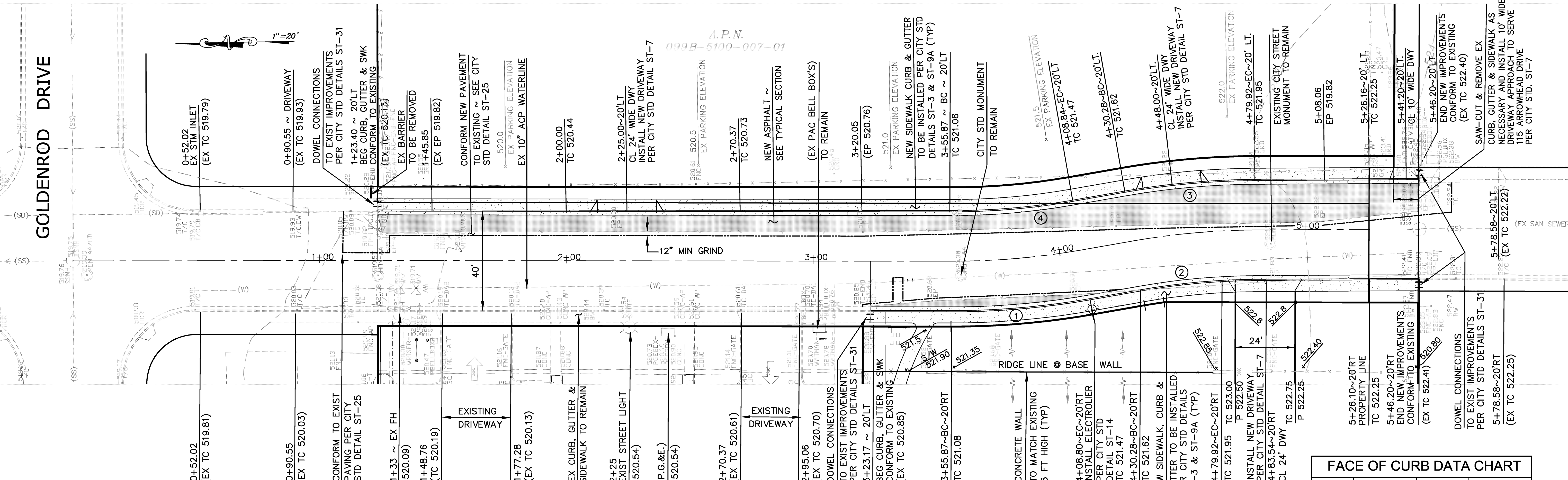
**DeBolt Civil Engineering**  
 811 San Ramon Valley Boulevard  
 Danville, California 94526  
 Tel: 925/837-3780  
 Fax: 925/837-4378

Date: 10/7/10  
 Scale: 1" = 30'  
 By: JED / kd  
 Job No.: 06309



**GOLDENROD DRIVE**

A.P.N.  
099B-5100-007-01

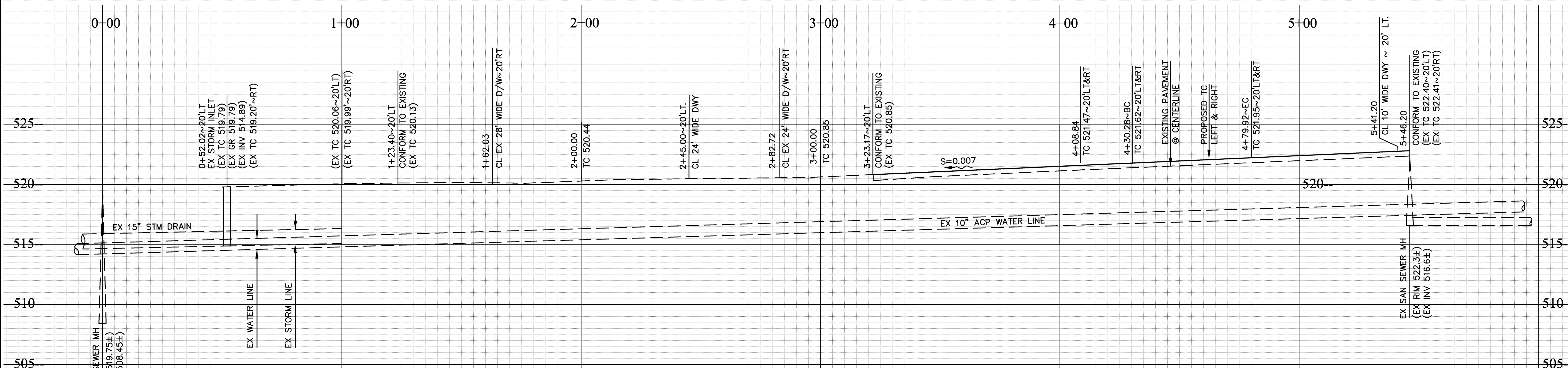


**NOTE:**  
ARROWHEAD AVENUE SHALL HAVE A 1 1/2" MIN OVERLAY ACROSS THE ENTIRE STREET FROM STA 1+23 TO STA 5+47

**ARROWHEAD AVENUE**  
1" = 20'

**FACE OF CURB DATA CHART**

#	RADIUS	DELTA	LENGTH
1	323.50	D=10°00'00"	L=56.46'
2	276.50	D= 9°35'32"	L=46.29'
3	316.50	D= 9°35'32"	L=52.99'
4	283.50	D=10°00'00"	L=49.48'



**PROFILE**  
1"=20' HOR & 1"=4' VER

CE-5

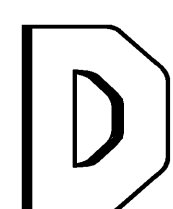
**ARROWHEAD AVENUE IMPROVEMENT PLAN**

**HINDU COMMUNITY and CULTURAL CENTER**  
1232 ARROWHEAD AVENUE

LIVERMORE ALAMEDA COUNTY CALIFORNIA

JAMES E. DIGGINS RENEWAL DATE: 03/31/12 R.C.E. 27818

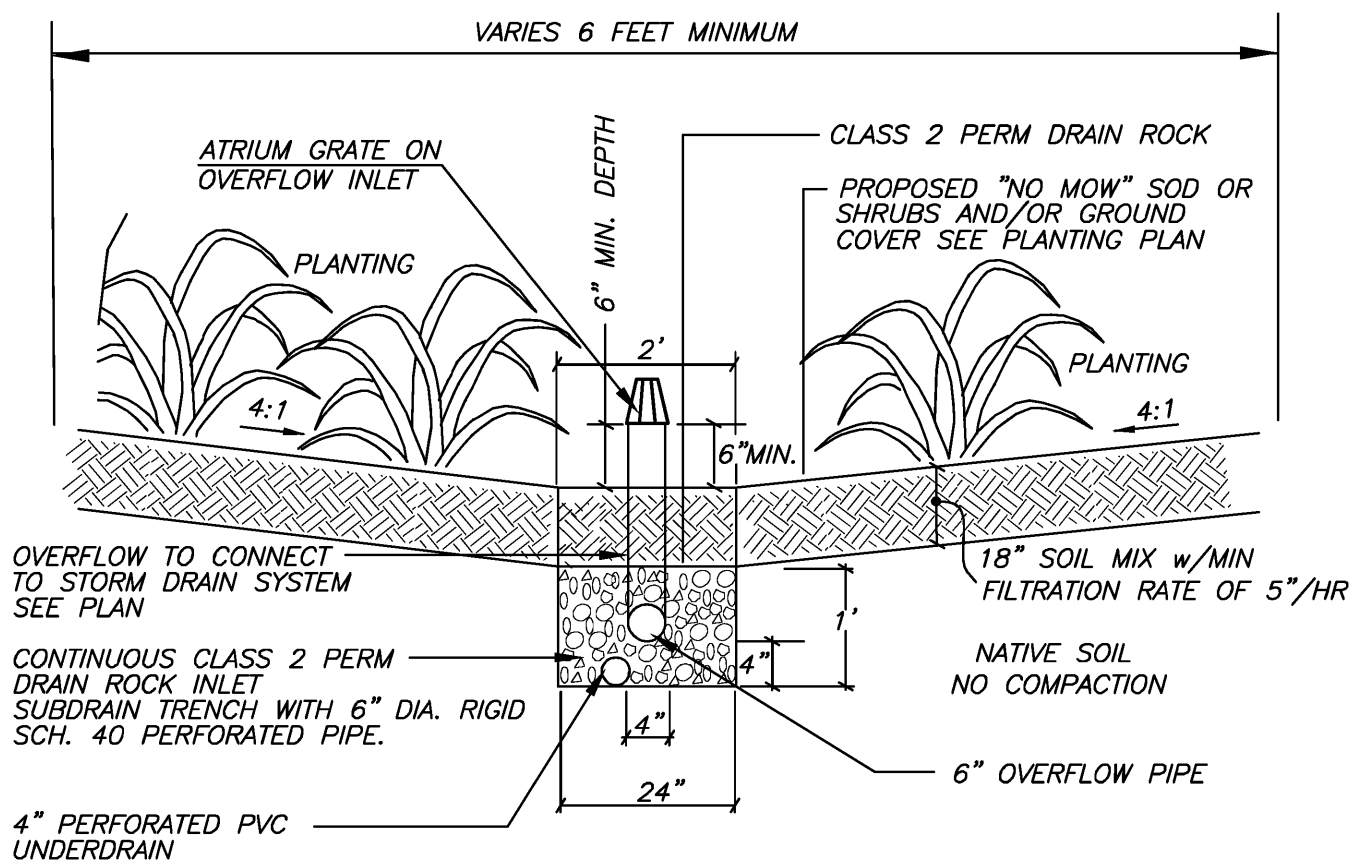
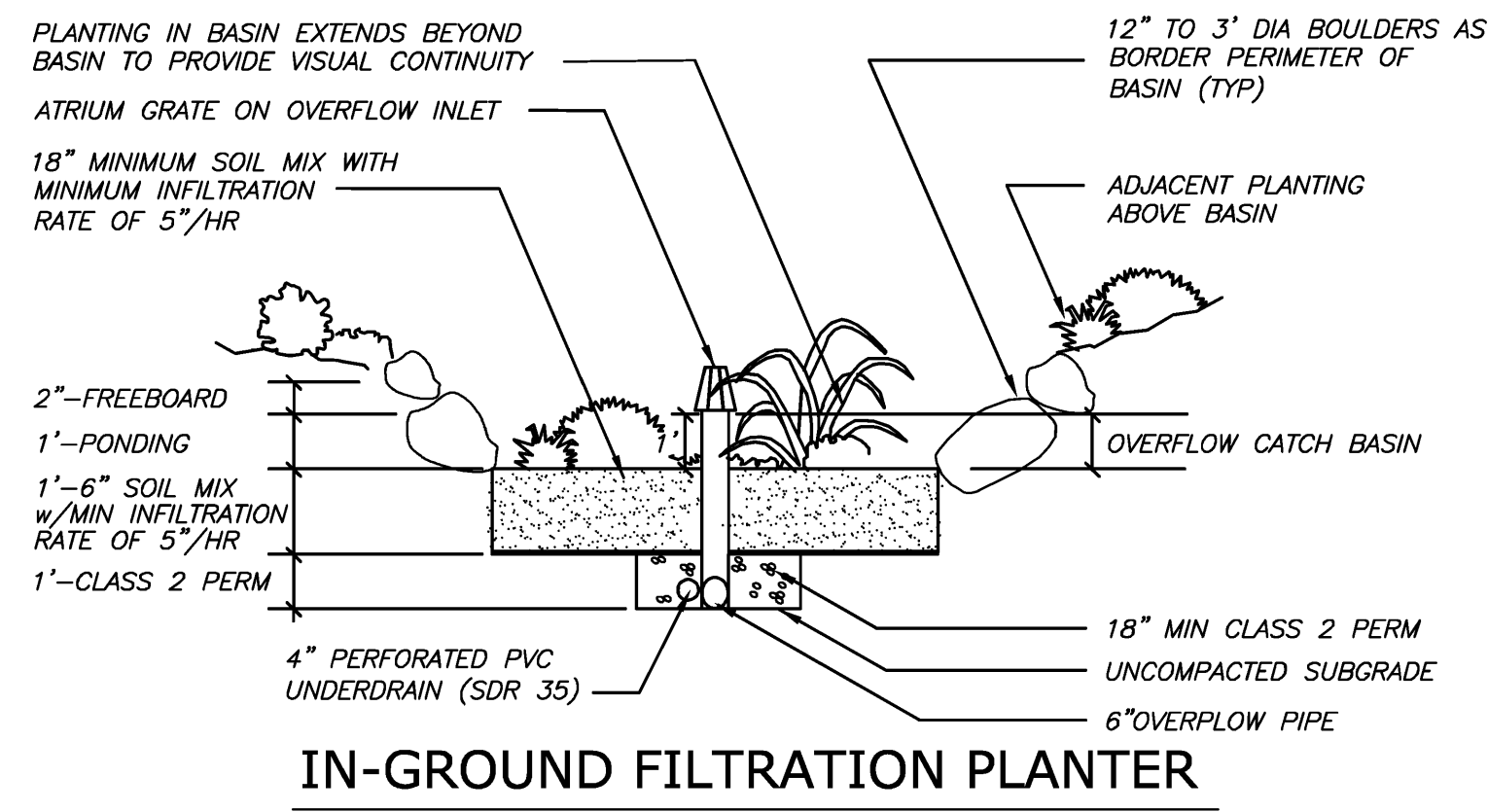
#	REVISIONS	DATE



**DeBolt Civil Engineering**  
811 San Ramon Valley Boulevard  
Danville, California 94526  
Tel: 925/837-3780  
Fax: 925/837-4378

Date: 10/7/10  
Scale: 1" = 20'  
By: JED/kl  
Job No.: 06309





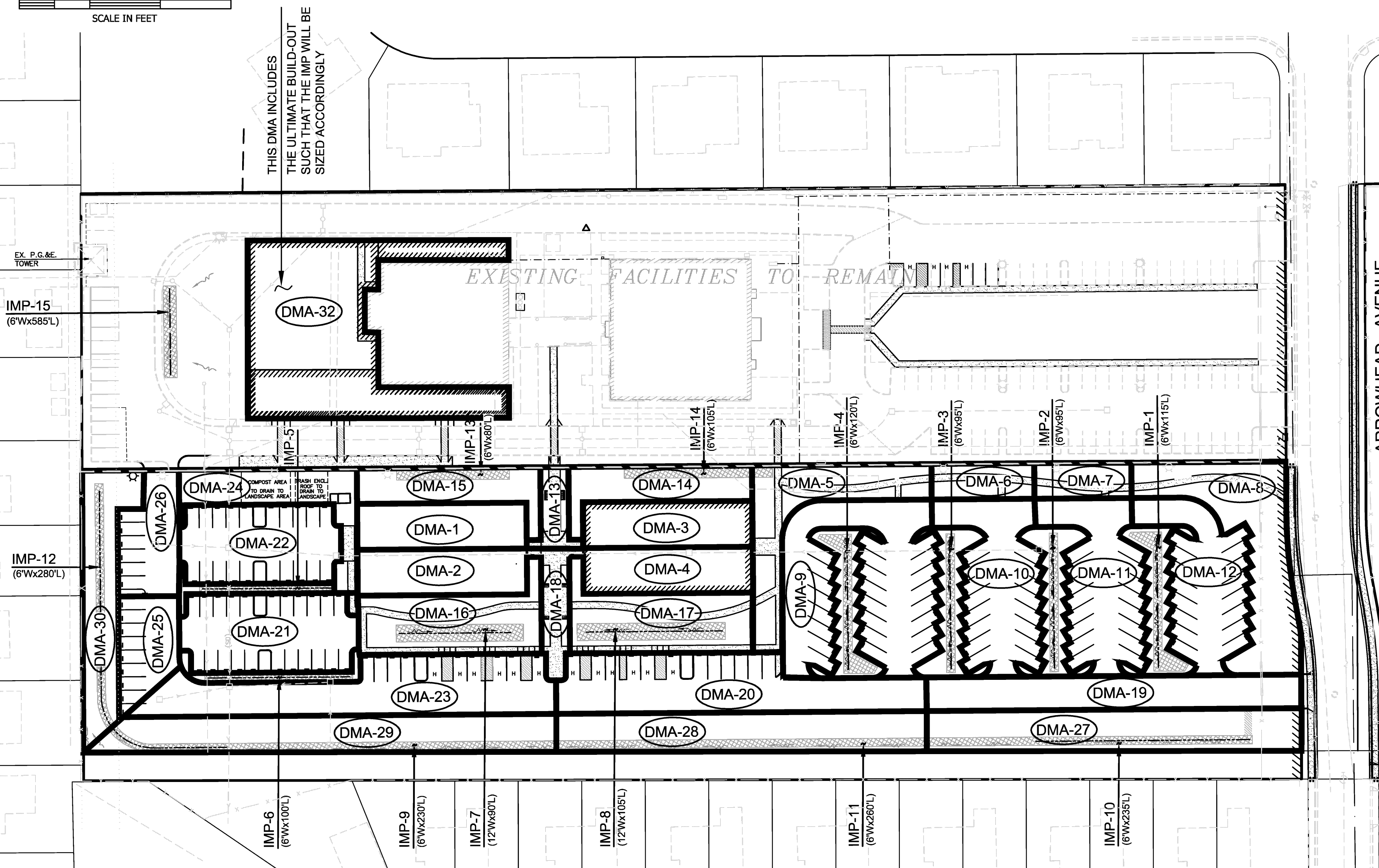
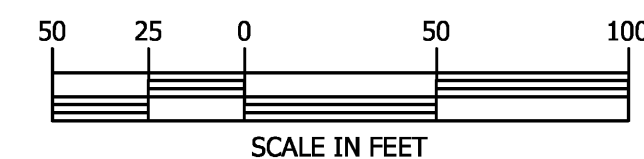
**NOTES:**

- 1) SEE LANDSCAPE PLAN FOR LOCATION OF TREES RELATIVE TO TREATMENT AREAS.
- 2) LONGITUDINAL SLOPE OF BIO-SWALE SHALL BE 0.5% - 5%
- 3) BIO-SWALES SHOULD HAVE A FLAT 'U' SHAPE RATHER THAN A 'V' DITCH SHAPE.
- 4) BIO-SWALES SHALL CONFORM WITH CITY STANDARD L-21A AND L-21B.

IMP	WIDTH	LENGTH	FLOW CONTACT TIME
1	6 FT	115 LF	
2	6 FT	95 LF	
3	6 FT	95 LF	
4	6 FT	120 LF	
5	6 FT	90 LF	
6	6 FT	100 LF	
7	12 FT	90 LF	
8	12 FT	105 LF	
9	6 FT	230 LF	
10	6 FT	235 LF	
11	6 FT	260 LF	
12	6 FT	280 LF	
13	6 FT	80 LF	
14	6 FT	105 LF	
15	6 FT	585 SF	

**LEGEND**

- BIO-SWALE / PLANTERS
- CATCH BASINS
- STORM DRAIN LINE
- DENOTES AREA (DMA) DRAINAGE MANAGEMENT AREA
- INTEGRATED MANAGEMENT PRACTICE



DMA	AREA	SURFACE
DMA-1	3,900 SF±	ROOF
DMA-2	3,900 SF±	ROOF
DMA-3	3,900 SF±	ROOF
DMA-4	3,900 SF±	ROOF
DMA-5	4,610 SF±	LANDSCAPE
DMA-6	1,830 SF±	LANDSCAPE
DMA-7	1,730 SF±	LANDSCAPE
DMA-8	7,600 SF±	LANDSCAPE
DMA-9	12,500 SF±	PAVEMENT
DMA-10	6,800 SF±	PAVEMENT
DMA-11	6,690 SF±	PAVEMENT
DMA-12	6,380 SF±	PAVEMENT
DMA-13	1,275 SF±	CONCRETE
DMA-14	3,520 SF±	LANDSCAPE
DMA-15	3,520 SF±	LANDSCAPE
DMA-16	5,710 SF±	LANDSCAPE
DMA-17	5,590 SF±	LANDSCAPE
DMA-18	1,860 SF±	CONCRETE
DMA-19	6,325 SF±	PAVEMENT
DMA-20	8,700 SF±	PAVEMENT
DMA-21	6,710 SF±	PAVEMENT
DMA-22	6,140 SF±	PAVEMENT
DMA-23	8,010 SF±	PAVEMENT
DMA-24	4,130 SF±	LANDSCAPE
DMA-25	4,590 SF±	PAVEMENT
DMA-26	3,220 SF±	PAVEMENT
DMA-27	6,625 SF±	FUTURE PAVEMENT
DMA-28	6,625 SF±	FUTURE PAVEMENT
DMA-29	5,750 SF±	FUTURE PAVEMENT
DMA-30	2,000 SF±	FUTURE PAVEMENT
DMA-31	5,000 SF±	LANDSCAPE
DMA-32	14,311 SF±	ROOF

**IV. Areas Draining to IMPs**

IMP Name	IMP Type	Soil Group	DMA Name	Area (sq ft)	Post Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	IMP Sizing Factor	Rain Adjustment Factor	Minimum Area or Volume	Proposed Area or Volume
<b>IMP Name: IMP1</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP1											
DMA8				7,600	Landscap	0.10	760				
DMA12				6,380	Concrete or Asphalt	1.00	6,380				
Total								7,140		286	696
Area									0.040	1,000	
<b>IMP Name: IMP2</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP2											
DMA7				1,730	Landscap	0.10	173				
DMA11				6,690	Concrete or Asphalt	1.00	6,690				
Total								6,863		275	570
Area									0.040	1,000	
<b>IMP Name: IMP3</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP3											
DMA8				7,600	Landscap	0.10	760				
DMA10				6,800	Concrete or Asphalt	1.00	6,800				
Total								7,560		279	570
Area									0.040	1,000	
<b>IMP Name: IMP4</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP4											
DMA5				4,610	Landscap	0.10	461				
DMA9				12,500	Concrete or Asphalt	1.00	12,500				
Total								12,961		518	725
Area									0.040	1,000	
<b>IMP Name: IMP5</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP5											
DMA22				6,140	Concrete or Asphalt	1.00	6,140				
DMA24				4,130	Landscap	0.10	413				
Total								6,553		282	540
Area									0.040	1,000	
<b>IMP Name: IMP6</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP6											
DMA1				6,710	Concrete or Asphalt	1.00	6,710				
Total								6,710		268	660
Area									0.040	1,000	
<b>IMP Name: IMP7</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP7											
DMA2				3,600	Conventional Roof	1.00	3,600				
DMA18				5,710	Landscap	0.10	571				
Total								4,171		179	1,080
Area									0.040	1,000	
<b>IMP Name: IMP8</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP8											
DMA4				3,900	Conventional Roof	1.00	3,900				
DMA17				5,590	Landscap	0.10	559				
DMA18				1,860	Concrete or Asphalt	1.00	1,860				
Total								6,319		253	1,260
Area									0.040	1,000	
<b>IMP Name: IMP9</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP9											
DMA23				6,010	Concrete or Asphalt	1.00	6,010				
DMA29				6,750	Concrete or Asphalt	1.00	6,750				
Total								12,760		550	1,380
Area									0.040	1,000	
<b>IMP Name: IMP10</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP10											
DMA19				6,325	Concrete or Asphalt	1.00	6,325				
DMA27				6,625	Concrete or Asphalt	1.00	6,625				
Total								12,950		518	1,410
Area									0.040	1,000	
<b>IMP Name: IMP11</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP11											
DMA20				8,700	Concrete or Asphalt	1.00	8,700				
DMA28				6,625	Concrete or Asphalt	1.00	6,625				
Total								15,325		613	1,580
Area									0.040	1,000	
<b>IMP Name: IMP12</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP12											
DMA25				4,590	Concrete or Asphalt	1.00	4,590				
DMA26				3,220	Concrete or Asphalt	1.00	3,220				
DMA30				2,000	Concrete or Asphalt	1.00	2,000				
Total								9,810		392	1,880
Area									0.040	1,000	
<b>IMP Name: IMP13</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP13											
DMA1				3,900	Conventional Roof	1.00	3,900				
Total								3,900		156	460
Area									0.040	1,000	
<b>IMP Name: IMP14</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP14											
DMA3				3,900	Conventional Roof	1.00	3,900				
DMA14				3,520	Landscap	0.10	352				
Total								4,252		170	630
Area									0.040	1,000	
<b>IMP Name: IMP15</b>											
IMP Type: Bioretention Facility											
Soil Group: IMP15											
DMA13				1,275	Concrete or Asphalt	1.00	1,275				
DMA15				3,520	Landscap	0.10	352				
DMA31				5,000	Concrete or Asphalt	1.00	5,000				
DMA32				14,311	Conventional Roof	1.00	14,311				
Total								20,938		838	3,570
Area									0.040	1,000	

**STORM WATER CONTROL PLAN**

**HINDU COMMUNITY and CULTURAL CENTER**  
1232 ARROWHEAD AVENUE

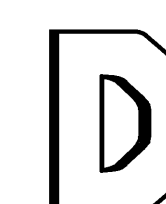
LIVERMORE

ALAMEDA COUNTY

CALIFORNIA

JAMES E. DIGGINS R.C.E. 27818  
RENEWAL DATE: 03/31/12

#	REVISIONS	DATE






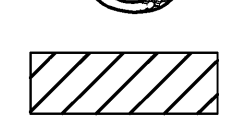
**DeBolt Civil Engineering**  
811 San Ramon Valley Boulevard  
Danville, California 94526  
Tel: 925/837-3780  
Fax: 925/837-4378

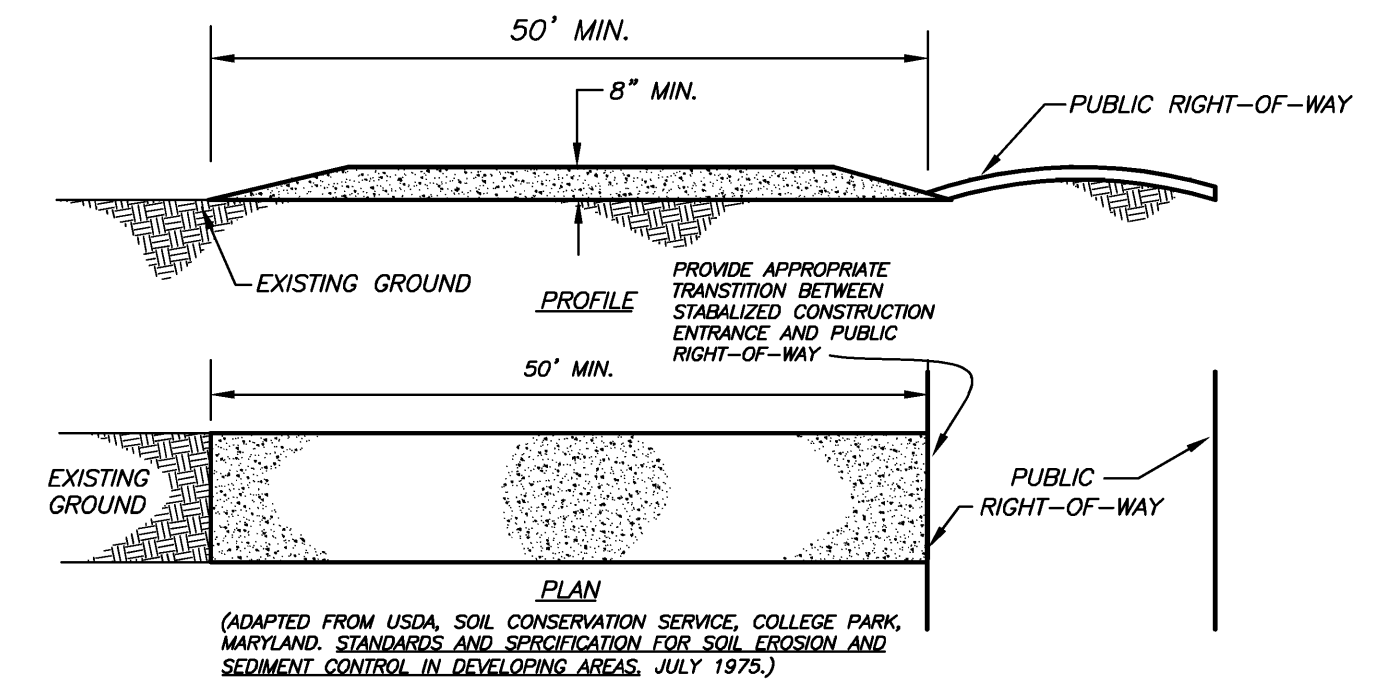
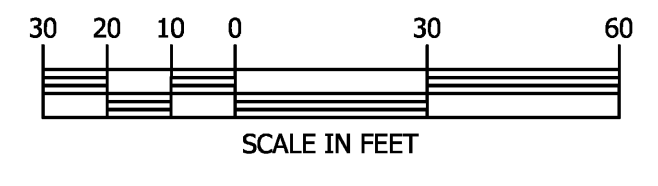
**CE-6**

Date: 10/7/10  
Scale: 1" = 50'  
By: JED / kj  
Job No.: 06309



**LEGEND**

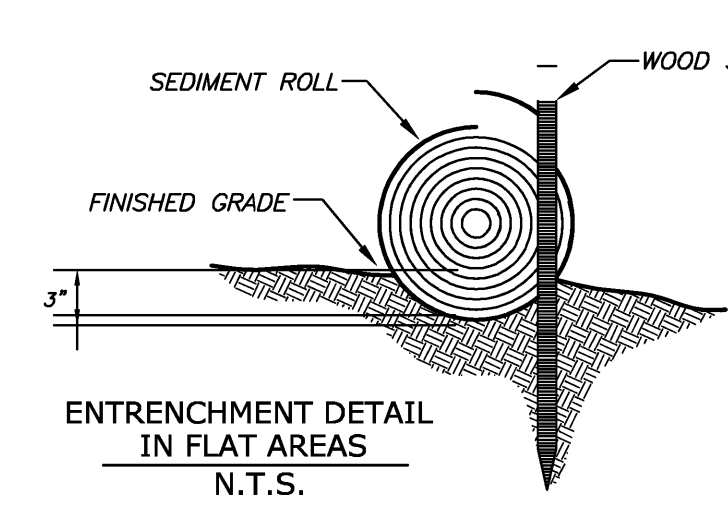
-  STRAW WATTLE
-  STRAW WATTLE FENCING
-  CRUSHED ROCK BETWEEN STRAW WATTLE
-  STABILIZED CONSTRUCTION ENTRANCE



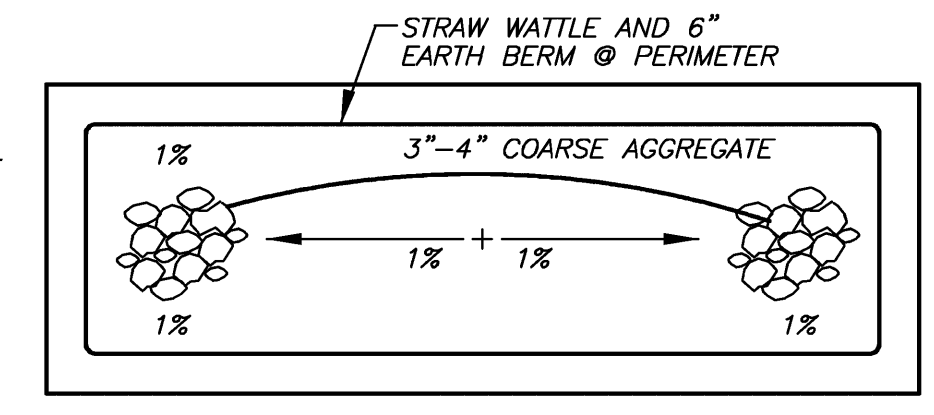
**STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
N.T.S.

**EROSION CONTROL NOTES:**

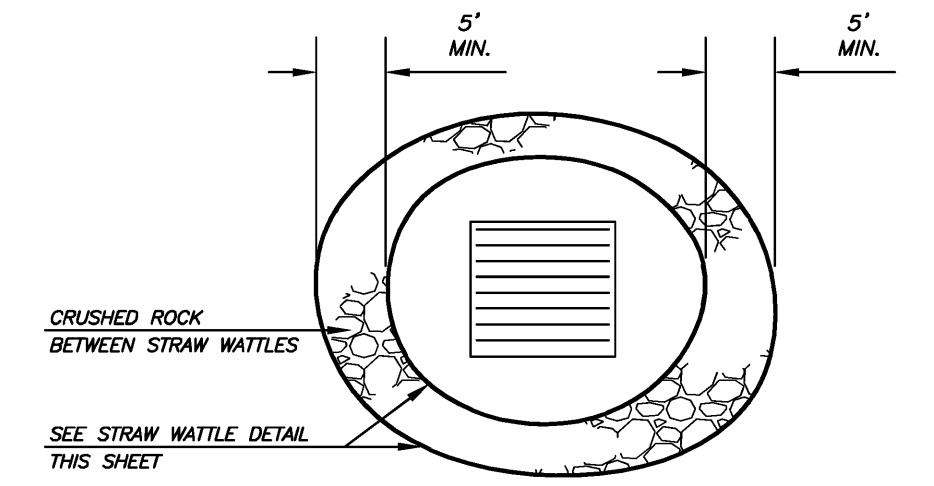
1. THE EROSION CONTROL MEASURES ARE TO BE OPERABLE DURING THE RAINY SEASON, OCTOBER FIRST TO APRIL FIFTEENTH. EROSION CONTROL PLANTING IS TO BE COMPLETED BY OCTOBER FIRST. NO GRADING OR UTILITY TRENCHING SHALL OCCUR BETWEEN OCTOBER FIRST AND MAY 1 UNLESS AUTHORIZED BY THE COUNTY GRADING DEPARTMENT.
2. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE DIRECTOR OF THE COUNTY GRADING DEPARTMENT.
3. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM.
4. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON.
5. A CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT ANY POINT OF EGRESS FROM THE SITE TO ROADWAY. A CONSTRUCTION ENTRANCE SHOULD BE COMPOSED OF COARSE DRAIN ROCK (3" MINIMUM DIAMETER) AT LEAST EIGHT INCHES THICK BY FIFTY (50) FEET LONG FOR THE FULL WIDTH AND SHALL BE MAINTAINED UNTIL THE SITE IS PAVED.
6. TEMPORARY EROSION CONTROL DEVICES WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED ONLY WHEN THE PROJECT EROSION CONTROL SPECIALIST DIRECTS THE DEVELOPER/OWNER PER THE REQUIREMENTS OF THE NPDES (GENERAL PERMIT/SWPPP).
7. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND REMOVED DAILY AND AS DIRECTED BY THE EROSION CONTROL SPECIALIST AND REQUIRED BY THE NPDES (GENERAL PERMIT/SWPPP). NOTE: REMOVE 40% CHANCE OF RAIN FROM ALL NOTES. INSTALLATION OF ADEQUATE BMPs AND COMPLIANCE TO THE GENERAL PERMIT IS REQUIRED IN THE EVENT OF ANY CHANGE FOR RAIN (SMALL, MEDIUM, OR HEAVY). THE DISCHARGER IS REQUIRED TO COMPLY TO THE GENERAL PERMIT.
8. AFTER SEWER LATERAL AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDING SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHALL BE EXERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OF A CROWNED STREET.
9. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL DEVICES SHOWN ON THESE PLANS SHALL ALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FORECAST OF RAIN PROBABILITY EXCEEDS 40%. THESE DEVICES MUST BE MAINTAINED DURING THE RAINY SEASON (OCTOBER 1 TO MAY 1).
10. STRAW WATTLES AND SANDBAGS SHALL BE STOCKPILED AS SHOWN ON THE PLAN AND PUT INTO PLACE WHEN THE FORECAST FOR RAIN EXCEEDS 40% OR WHEN DIRECTED BY THE INSPECTOR OR EROSION CONTROL SPECIALIST.
11. SANDBAGS REFERRED TO IN THE PRECEDING ITEMS MUST BE FULLY APPROVED SANDBAG FILL MATERIALS ARE SAND, DECOMPOSED GRANITE, AND/OR GRAVEL OR OTHER MATERIALS APPROVED BY THE INSPECTOR OR EROSION CONTROL SPECIALIST.
12. THE DOWNSTREAM STORM SYSTEM SHOULD BE INSPECTED TO VERIFY THAT THE SYSTEM IS CLEAR OF OBSTRUCTIONS AND FUNCTIONING PROPERLY.
13. AS PART OF THE EROSION CONTROL MEASURES, THE UNDERGROUND STORM DRAIN FACILITIES SHOULD BE INSTALLED COMPLETE AS SHOWN ON THESE PLANS.
14. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THESE PLANS IN THE FIELD, SUBJECT TO APPROVAL OF THE EROSION CONTROL SPECIALIST AND IN COMPLIANCE TO THE GENERAL PERMIT REQUIREMENTS.
15. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF THE NPDES (GENERAL PERMIT) AND INSTALLATION OF BMPs IS UNDER THE DIRECTION OF THE DISCHARGERS EROSION CONTROL SPECIALIST.
16. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES IN COMPLIANCE WITH THE NPDES (GENERAL PERMIT) AND INSTALLATION OF BMPs IS UNDER THE DIRECTION OF THE DISCHARGERS EROSION CONTROL SPECIALIST.
17. CONSTRUCTION OPERATION - DUST SHALL BE CONTROLLED AT ALL TIMES. WASTEWATER GENERATED DURING CONSTRUCTION SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM. THIS INCLUDES WASTE FROM PAINTING, SAWCUTTING, CONCRETE WORK, ETC. THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO ELIMINATE DISCHARGES TO THE STORM DRAIN SYSTEM AND, IF NECESSARY, PROVIDE AN AREA FOR ON-SITE WASHING ACTIVITIES DURING CONSTRUCTION. MATERIALS THAT COULD CONTAMINATE STORM RUNOFF SHALL BE STORED IN AREAS THAT ARE DESIGNED TO PREVENT EXPOSURE TO RAINFALL AND TO NOT ALLOW STORM WATER TO RUN ONTO THE AREAS.



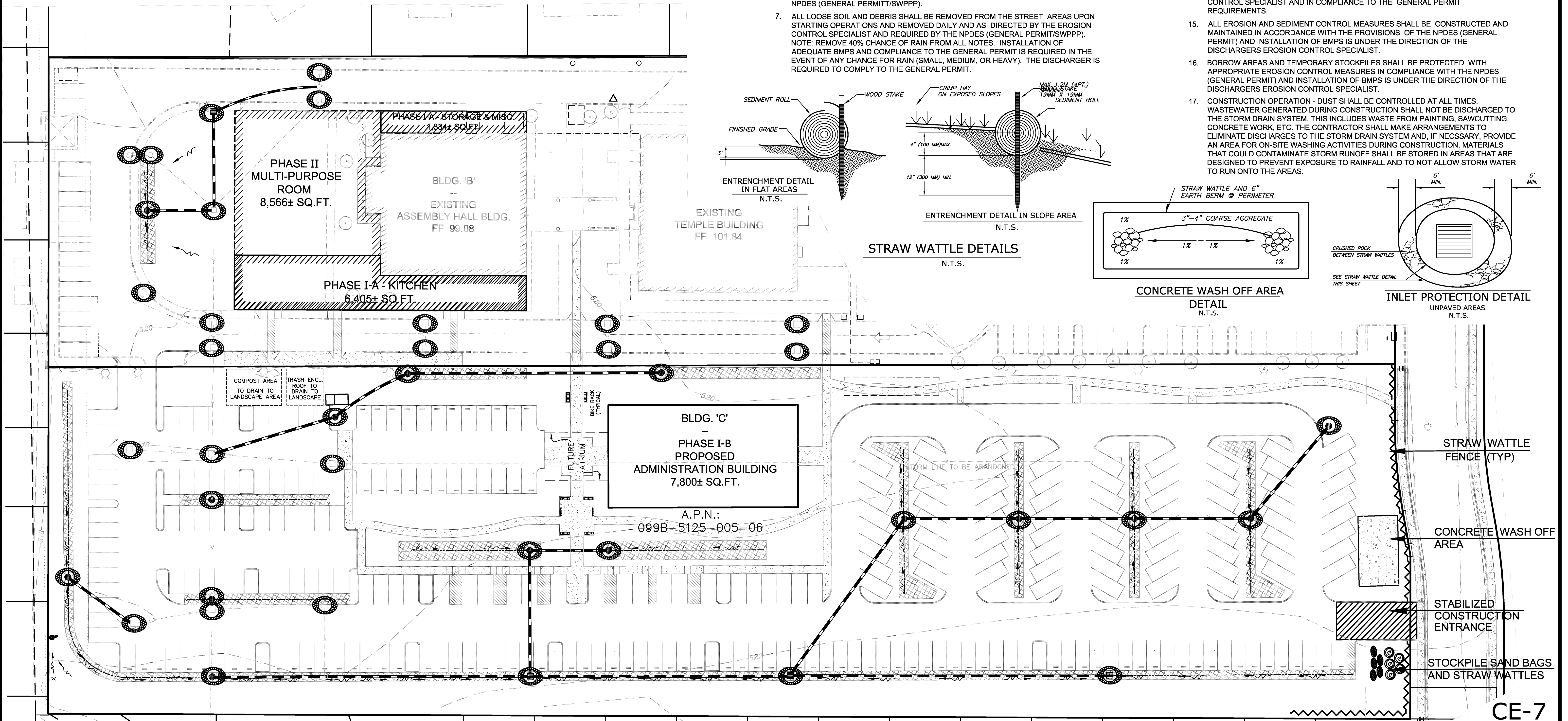
**STRAW WATTLE DETAILS**  
N.T.S.



**CONCRETE WASH OFF AREA DETAIL**  
N.T.S.



**INLET PROTECTION DETAIL**  
N.T.S.



**CE-7**

**NOTES and DETAILS  
EROSION CONTROL PLAN**

**HINDU COMMUNITY and CULTURAL CENTER**  
1232 ARROWHEAD AVENUE  
LIVERMORE ALAMEDA COUNTY CALIFORNIA

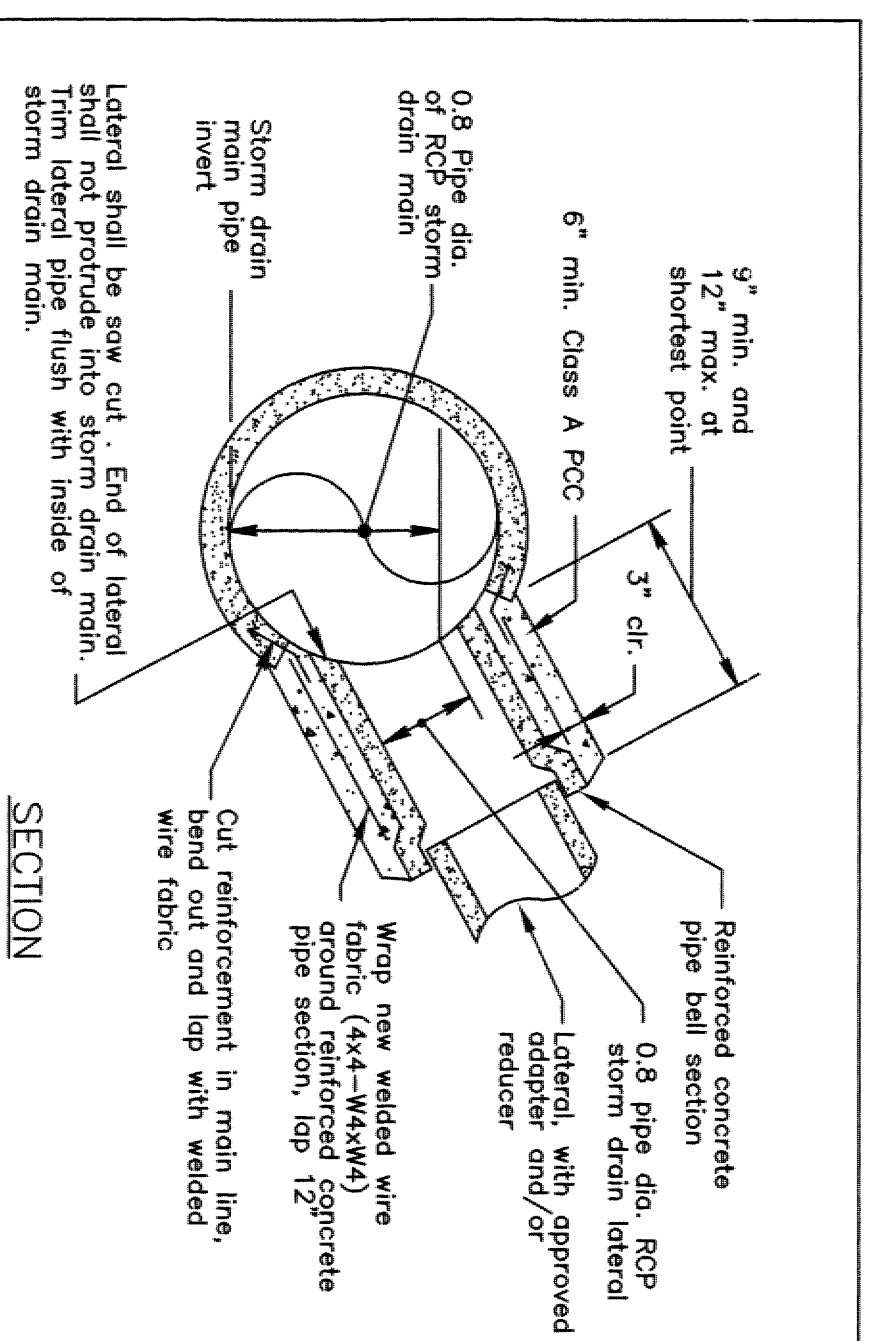
JAMES E. DIGGINS R.C.E. 27818  
RENEWAL DATE: 03/31/12

#	REVISIONS	DATE

**DeBolt Civil Engineering**  
811 San Ramon Valley Boulevard  
Danville, California 94526  
Tel: 925/837-3780  
Fax: 925/837-4378

Date: 8/9/10  
Scale: 1" = 30'  
By: JED / kl  
Job No.: 06309



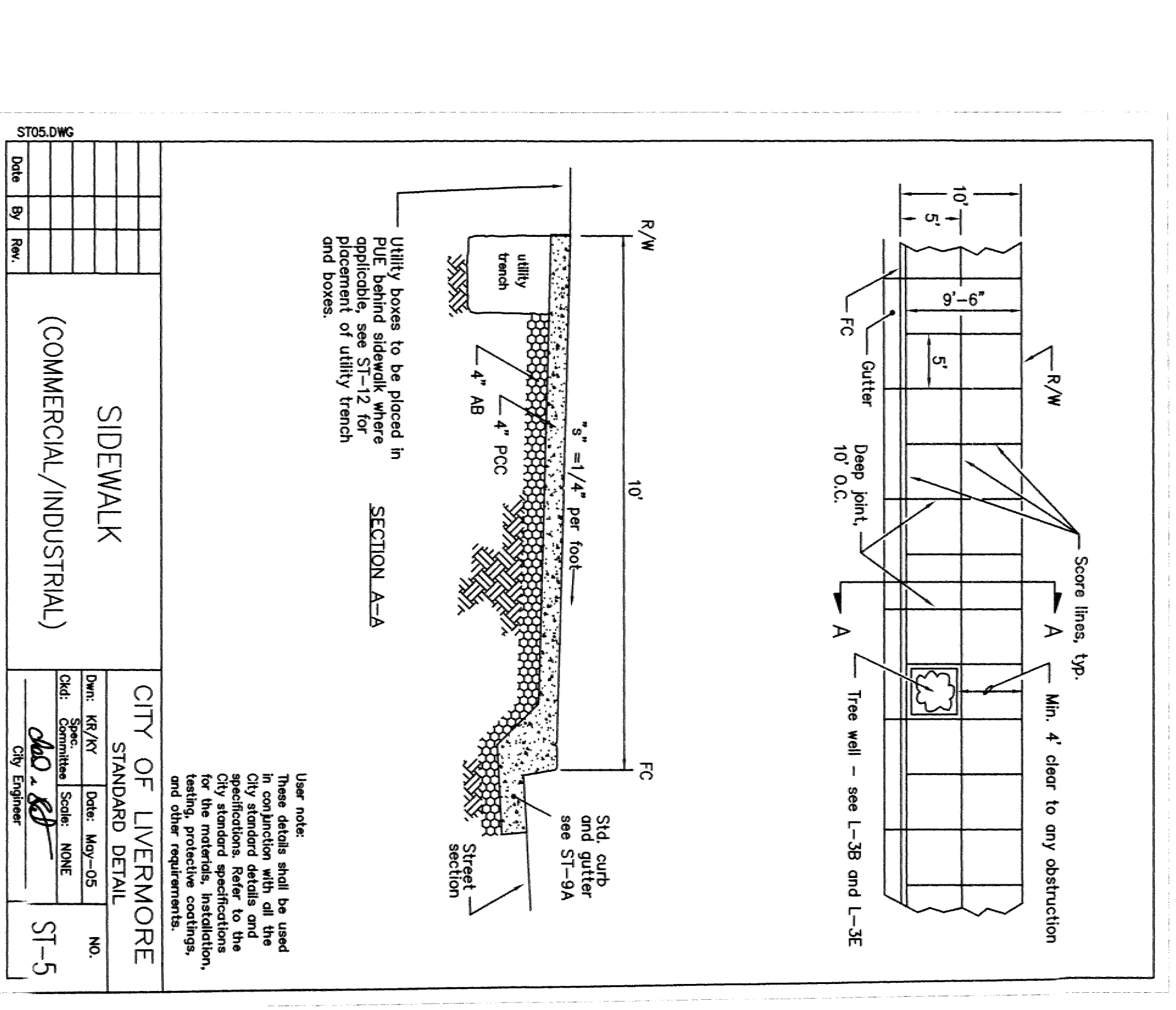
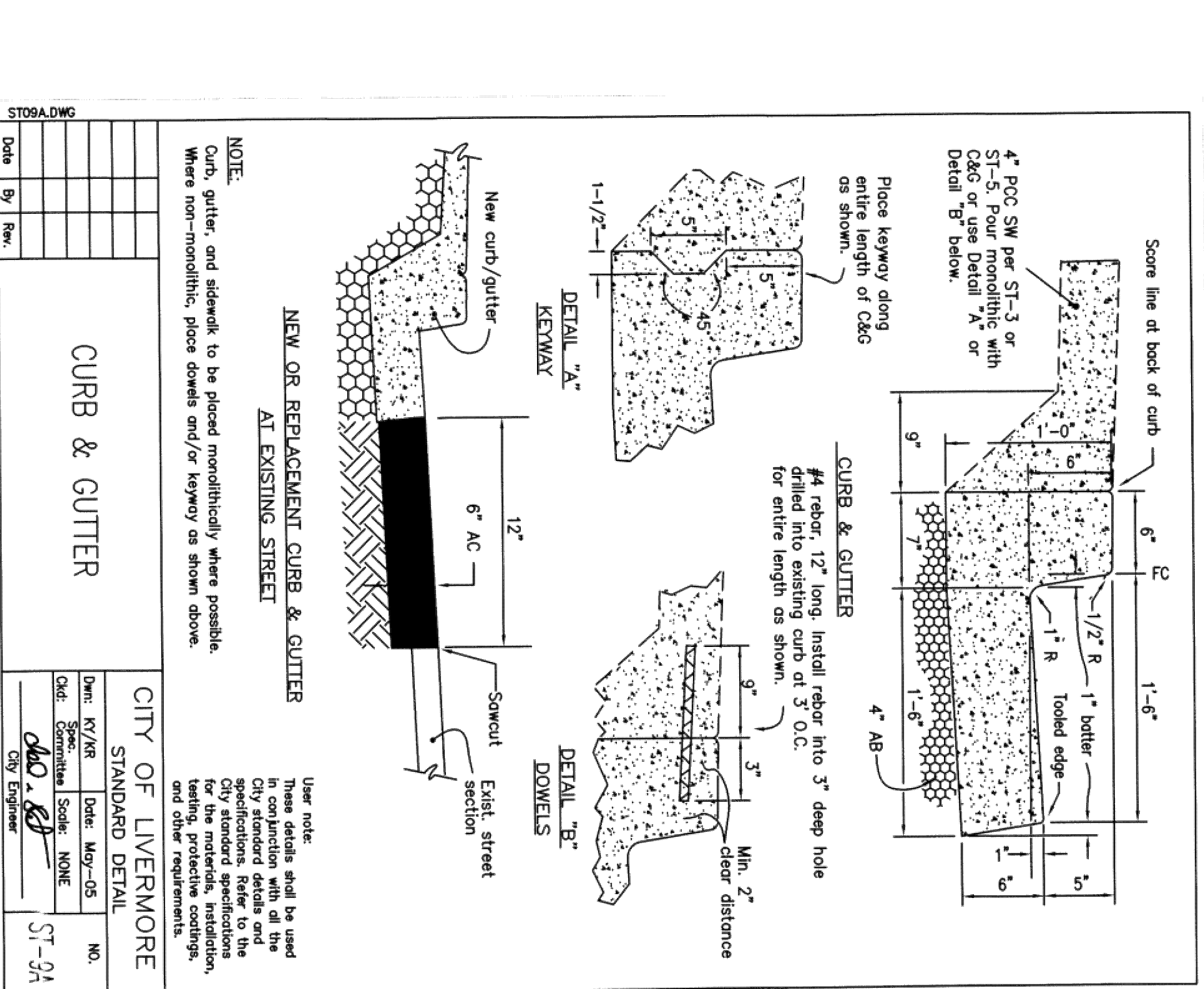
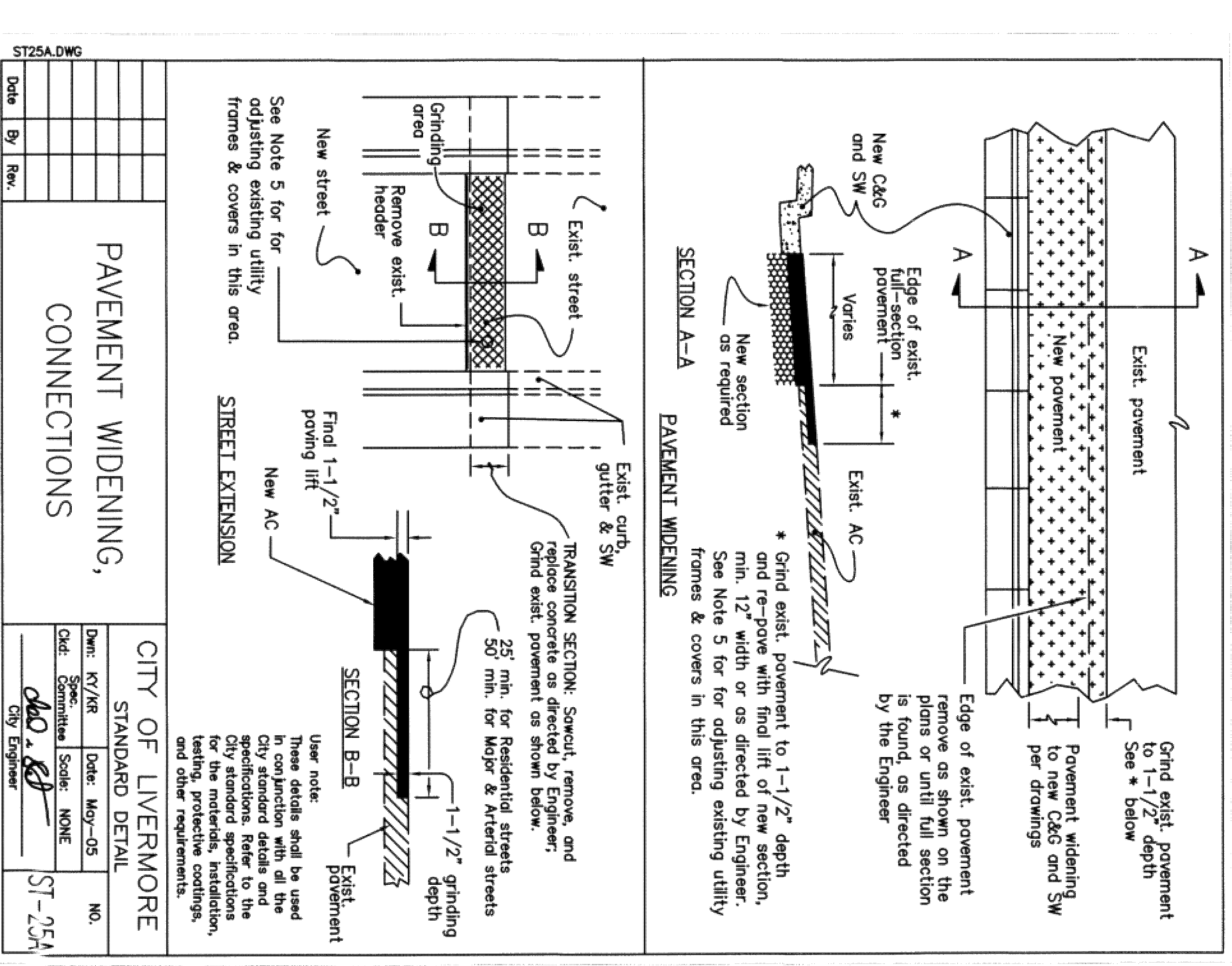
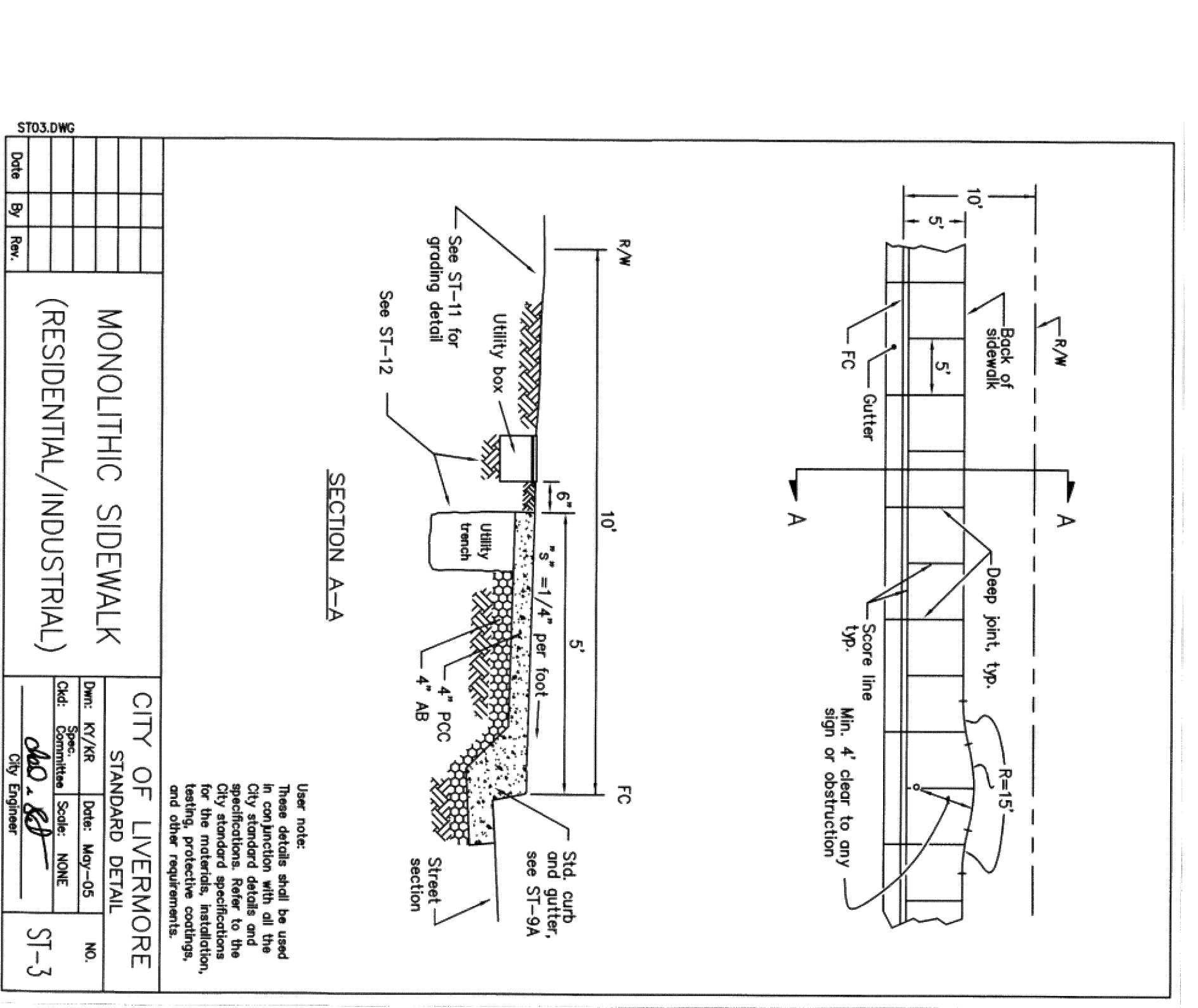
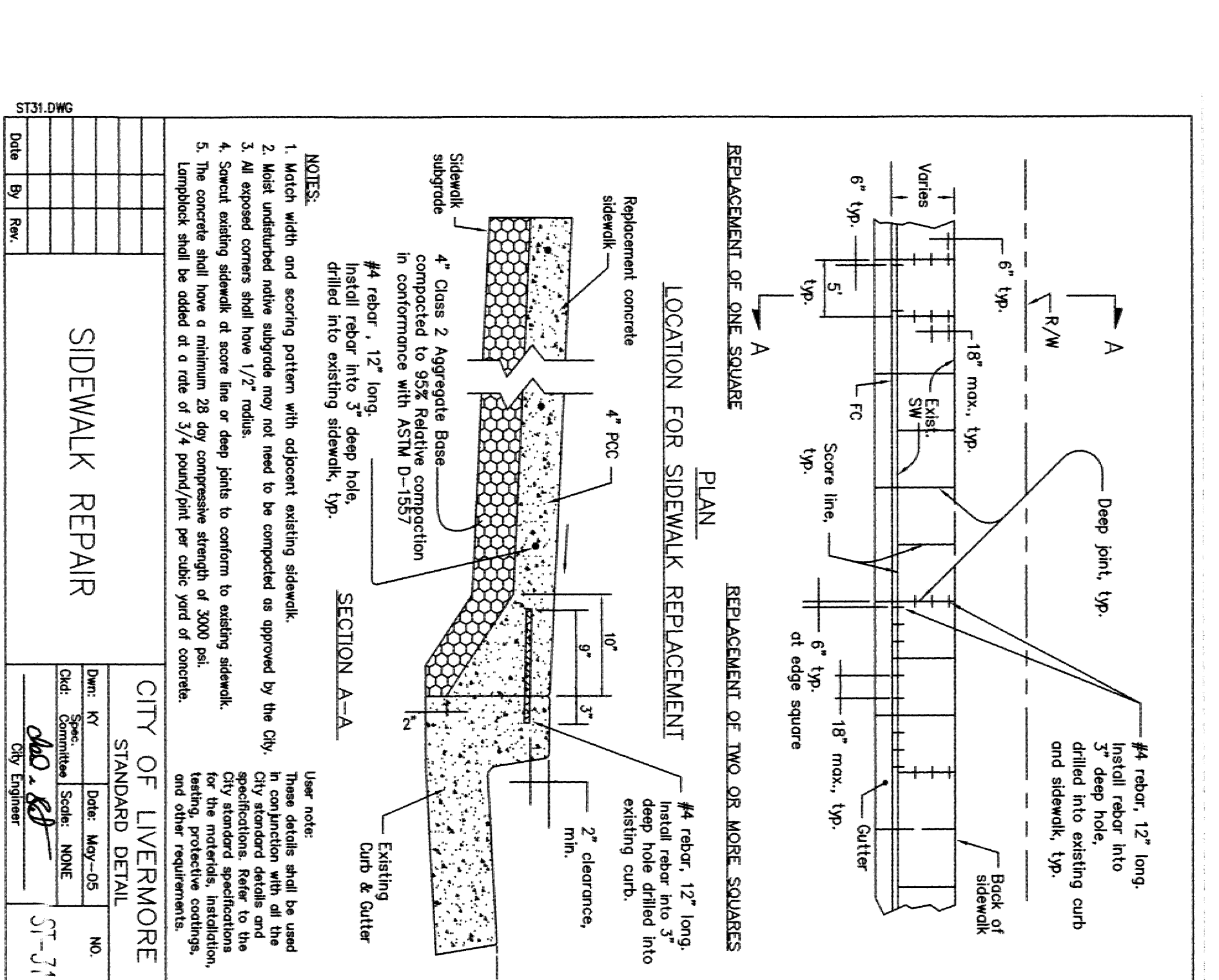
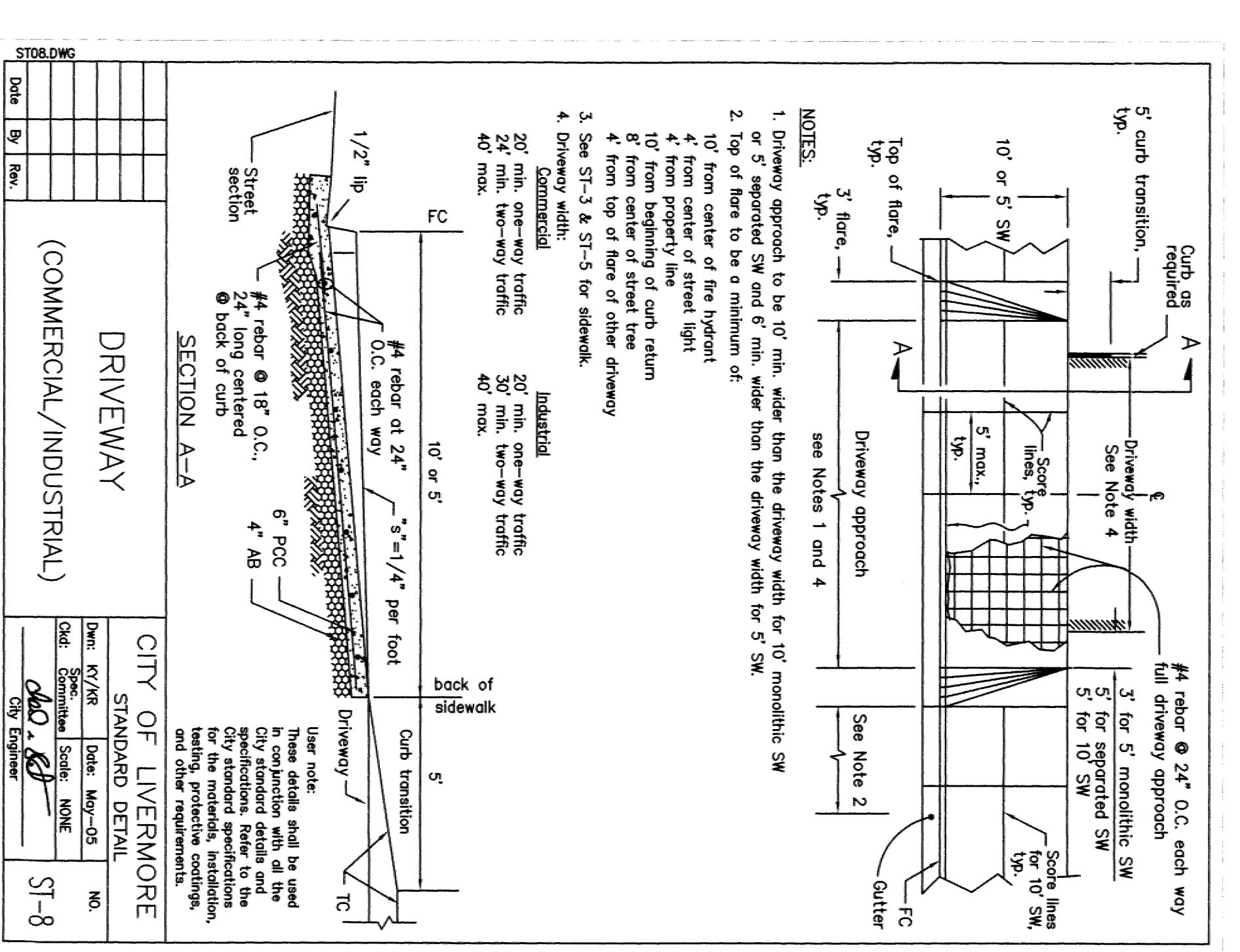
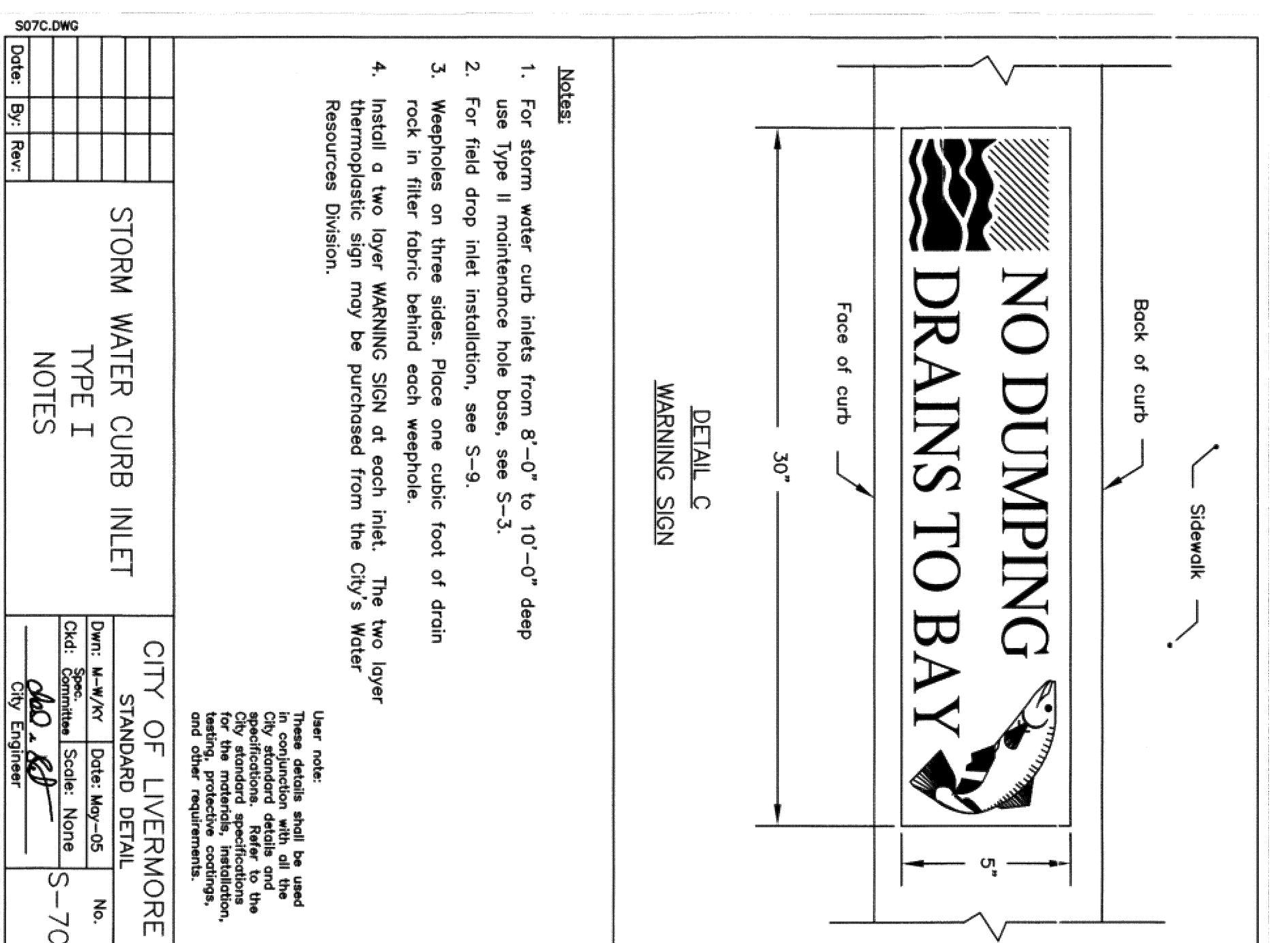


ST004.DWG  
Date: \_\_\_\_\_ By: \_\_\_\_\_ Rev: \_\_\_\_\_

### CITY OF LIVERMORE STANDARD DETAIL

NO. S-10  
Date: Mar-05  
Drawn: M-W  
Checked: \_\_\_\_\_  
Scale: NONE  
City Engineer: \_\_\_\_\_

#### STORM DRAIN LATERAL CONNECTION TO EXISTING REINFORCED CONCRETE PIPE STORM DRAIN MAIN



CITY OF LIVERMORE  
STANDARD DETAILS

HINDU COMMUNITY and CULTURAL CENTER  
1232 ARROWHEAD AVENUE  
ALAMEDA COUNTY

CITY OF LIVERMORE STANDARD DETAIL  
NO. ST-8  
Date: Mar-05  
Drawn: K/V/R  
Checked: \_\_\_\_\_  
Scale: NONE  
City Engineer: \_\_\_\_\_

REVISIONS

#	DATE	DESCRIPTION

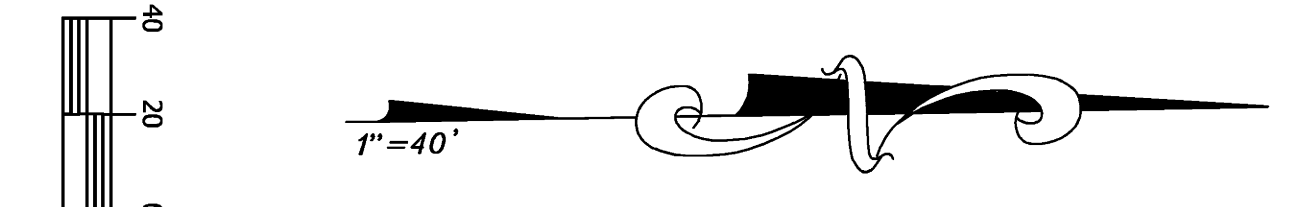
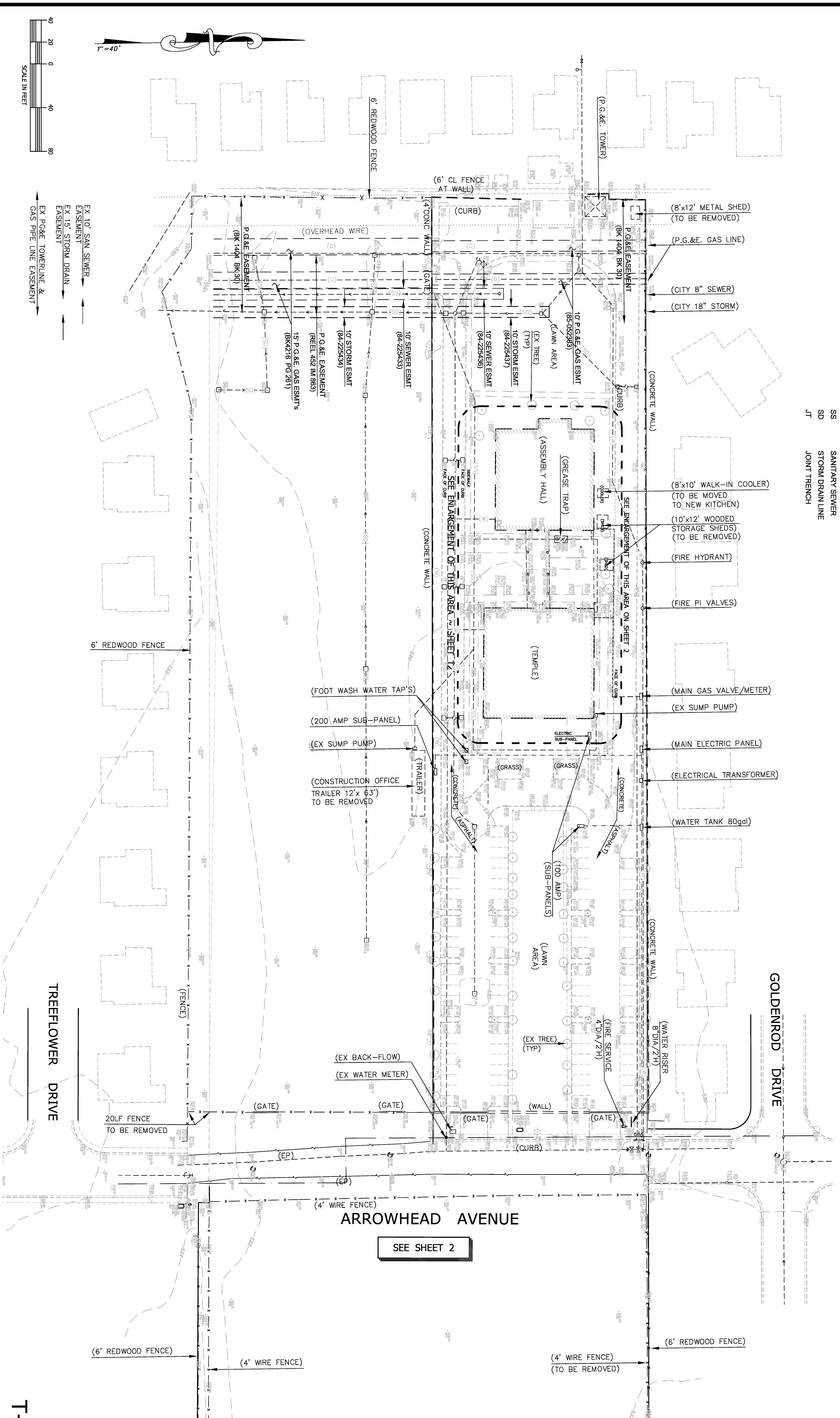
JAMES E. DIGGINS RCE 2788  
RENEWAL DATE: 03/31/12

DeBolt Civil Engineering  
811 San Ramon Valley Boulevard  
Danville, California 94526  
Tel: 925/837-5780  
Fax: 925/837-4378

CE-8



- LEGEND:**
- G GAS LINE
  - SS SANITARY SEWER
  - SD STORM DRAIN LINE
  - JT JOINT TRENCH



# TOPOGRAPHIC SURVEY

**HINDU COMMUNITY AND CULTURAL CENTER**  
 1232 ARROWHEAD AVENUE  
 ALAMEDA COUNTY  
 CALIFORNIA

JAMES E. DIGGINS  
 R.C.E. 27818  
 RENEWAL DATE: 0083110

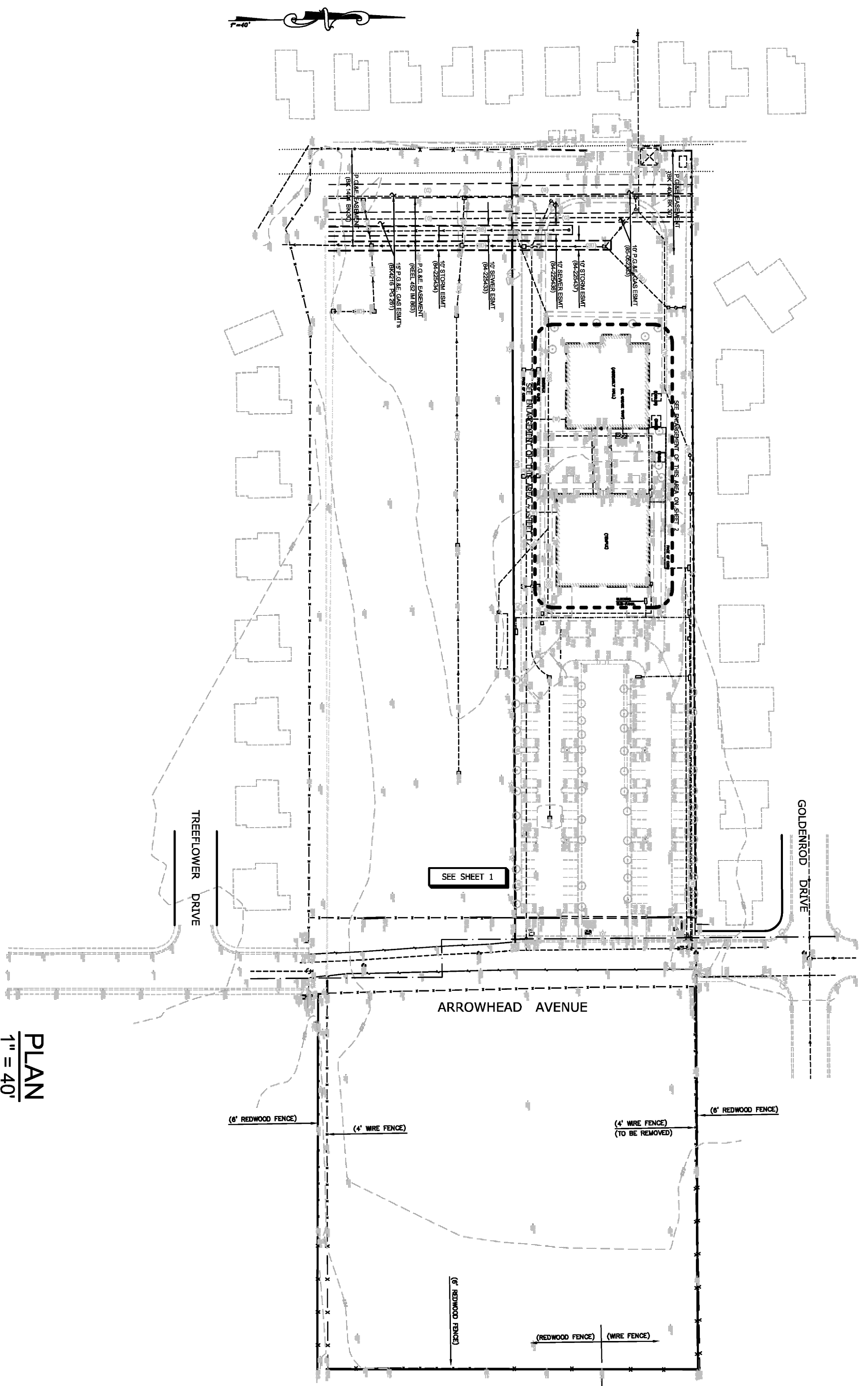
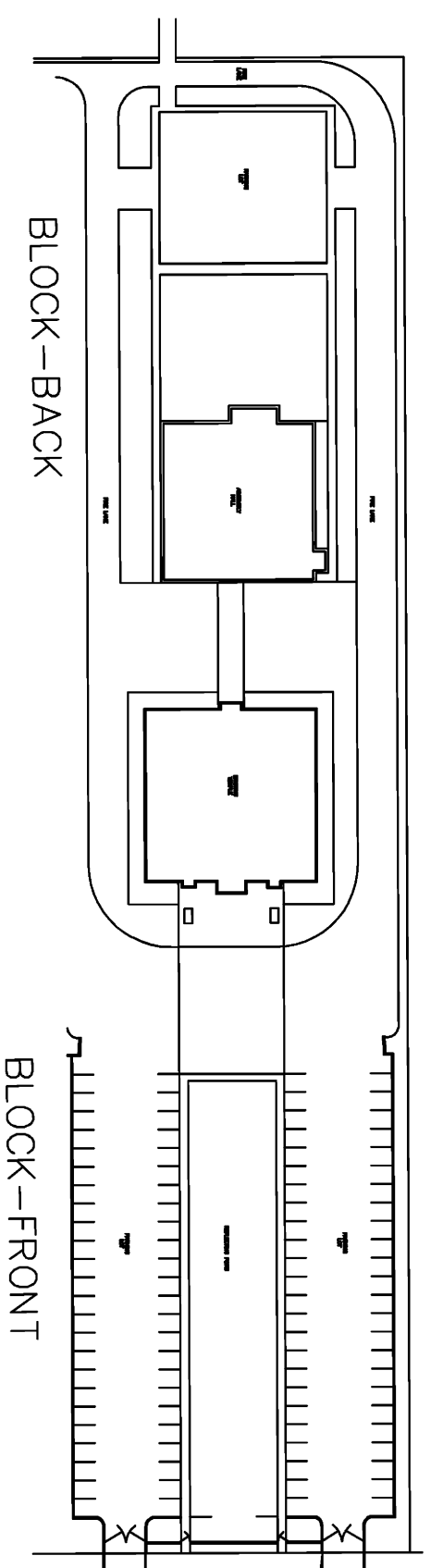
#	REVISIONS	DATE

**DeBolt Civil Engineering**  
 811 San Ramon Valley Boulevard  
 Danville, California 94526  
 Tel: 925/857-5780  
 Fax: 925/857-4378

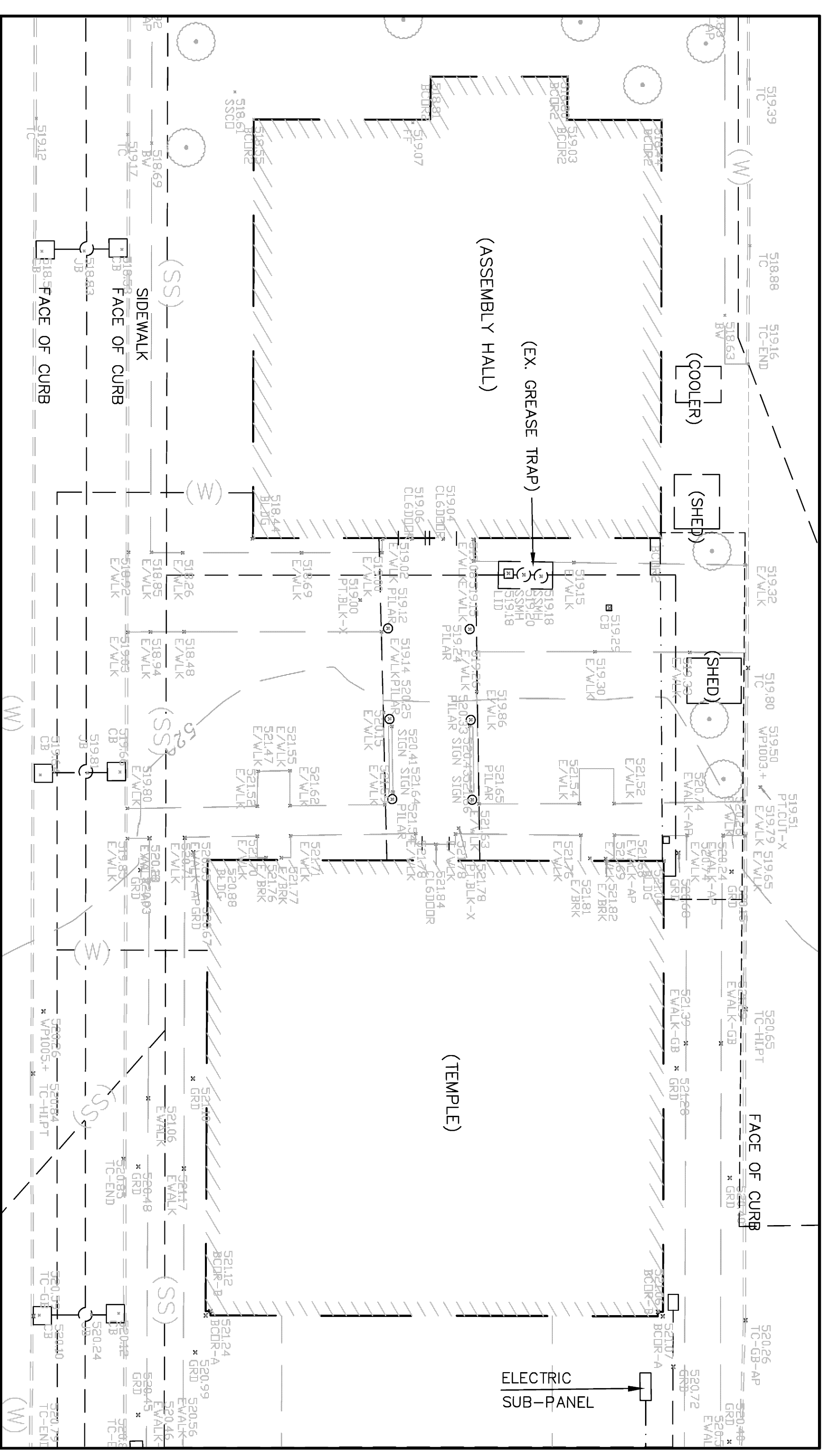
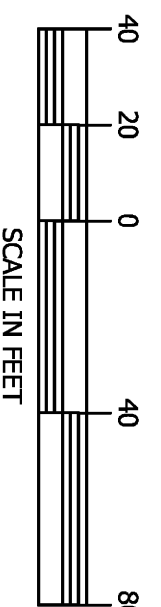
Date: 8/14/09  
 Scale: 40'  
 By: JED / JI  
 Job No.: 06099

**T-1**

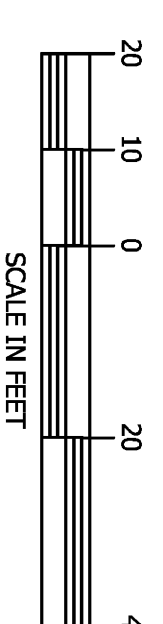




PLAN  
1" = 40'



DETAIL  
1" = 20'



T-2

# TOPOGRAPHIC SURVEY

## HINDU COMMUNITY AND CULTURAL CENTER 1232 ARROWHEAD AVENUE ALAMEDA COUNTY CALIFORNIA

CITY OF LIVERMORE

CALIFORNIA

JAMES E. DIGGANS  
RENEWAL DATE: 03/31/10  
R.C.E. 27818

#	REVISIONS	DATE

**DeBolt Civil Engineering**  
811 San Ramon Valley Boulevard  
Danville, California 94526  
Tel: 925/837-3780  
Fax: 925/837-4378

Date: 8/14/09  
Scale: AS SHOWN  
By: JED / JA  
Job No.: 06309