

GRADING & DRAINAGE PLAN

HILLVIEW DRIVE SLOPE REPAIR VISTA TASSAJARA, DANVILLE, CALIFORNIA

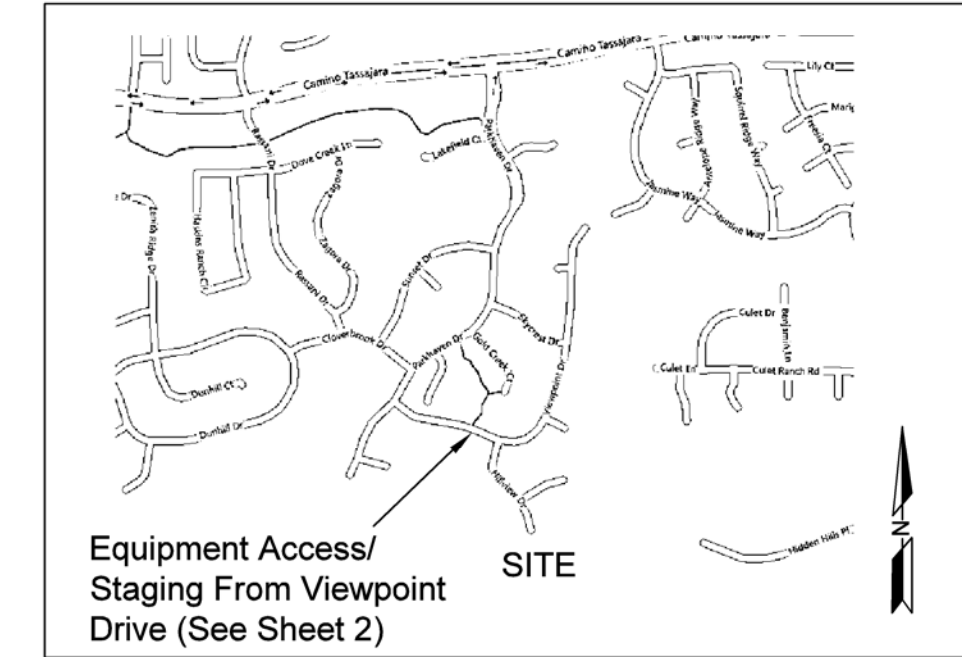
GENERAL NOTES

- The "Owner" shall be Vista Tassajara Homeowner Association, the "Engineer" shall be the Stevens, Ferrone & Bailey Engineering Company (SFB), and the "Contractor" shall be an independent entity retained by the Owner to perform the work described herein.
- All work shall be performed in accordance with the geotechnical investigation report for the project by SFB, dated June 5, 2017.
- Construction work shall occur only between the hours of 8 A.M. to 5 P.M., Monday through Friday unless an exception is required or granted by the Owner. All heavy equipment and any internal combustion engines shall be fitted with adequate mufflers.
- A complete functioning system of improvements is intended by these plans and specifications. The contractor shall provide all manpower, equipment, tools, materials, and incidentals necessary for the proper operation of these improvements. All compensation for same shall be included in the contract unit prices for the various items of work concerned, and no additional compensation will be allowed.
- All work or construction shall comply with applicable or pertinent Federal, State, and local requirements, codes, laws and ordinances. All work related to these plans, specifications, and details shall conform to all Federal Occupational Safety and Health Standards (OSHA). Where excavation exceeds five (5) feet in depth, the Contractor shall obtain an excavation permit from the CAL/OSHA industrial relations department. The Contractor shall follow all local and state regulations regarding storm water pollution prevention during construction.
- If public notice is required for any aspect of the work described herein, Contractor shall be responsible for its preparation, issuance, and distribution.
- It is the responsibility of the Contractor to verify the accuracy of all provided information; any discrepancies shall be brought to the attention of the Engineer.
- The Contractor shall coordinate the work of all trades and shall secure at its expense all licenses, permits, consents, and approvals (including those from local authorities) necessary for the performance of the work described herein.
- The Contractor agrees that they shall assume sole and complete responsibility for jobsite safety conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours and that the Contractor shall defend, indemnify and hold the Owner and Engineer harmless from any safety liability, real or alleged, in connection with the performance of the work on this project excepting for liability arising from the sole negligence of the Owner or Engineer. The Owner, Engineer, and their employees, shall not be liable for claims, losses, damages, injuries, and liabilities resulting from the death or injury of any person or persons or from the damage or destruction of any properties caused by or connected with the performance of the Contractor, Contractor's subcontractors, or their employees.
- The Contractor shall verify all dimensions, elevations, and existing conditions (where applicable) at the job site as well as the provisions of the entire construction documents and bring to the Engineer's attention any discrepancy. In the event of a discrepancy in the construction documents, the note or detail utilizing the stricter requirement shall apply, unless recommended otherwise by the Engineer.
- The Engineer assumes no responsibility beyond the adequacy of the design contained herein. The Engineer assumes no responsibility or liability for subsurface conditions encountered during construction. Subsurface conditions shall be the responsibility of the contractor.
- Locations are approximate and shall be verified by the Contractor in the field. The Contractor shall be responsible for all other measurements that may be necessary or required for the execution of any work to the locations, lines and grades specified or shown.
- In the event that any conditions not covered by the drawings or specifications are encountered during construction operations, the Engineer shall be immediately contacted for recommendations.
- Contractor shall notify the Owner and Engineer at least five (5) working days prior to commencing work or if work has been suspended for a period of more than twenty-four (24) hours. The Engineer shall be provided with at least forty-eight (48) hours advance notice of construction activities requiring inspection by the Engineer and/or Geologist.
- The Contractor shall provide the Owner and Engineer with the name and telephone number of the Contractor's responsible person to contact 24 hours a day with regard to this project. The Contractor shall have a responsible party who shall have full authority to represent and act for the Contractor on site at all times during work hours.
- All existing utility and underground facility locations shown on the plans are for general information purposes only. Contractor shall be responsible for determining precise locations and depths of all utilities and underground facilities, and shall pothole where appropriate (such as at all crossings, etc.) to avoid damage to existing utilities and underground utilities. Locations shown on the plans were transferred from various sources, using a variety of distorted base maps and shall be considered diagrammatic in nature. All existing utilities and roadways shall be protected from damage. Any incurred damage shall be repaired by the Contractor at Contractor's expense and to the satisfaction of the Owner and Engineer.
- Contractor shall assume all responsibility for location and avoidance of all underground utilities and underground facilities. Contractor shall utilize an underground utility and underground facility locating firm and call U.S.A. (Underground Service Alert) at (800) 277-2600, at least forty-eight (48) hours prior to beginning work to verify location of existing underground utilities. If the Contractor fails to adequately protect the utilities and underground facilities, resulting damage shall be repaired at Contractor's expense. Any distress or damage to existing structures not identified for construction including pavement, concrete curbs, utilities, etc. shall be repaired or replaced at the Contractor's expense.
- The Contractor shall provide, place and maintain all lights, signs, delineators, barricades, temporary traffic striping, flag men, detours or other devices necessary to provide for the safe and convenient passage of vehicles and pedestrian traffic through and adjacent the construction site.
- It shall be the Contractor's sole responsibility to design and provide adequate shoring, bracing, formwork, etc., as required for protection of life and property, and to support any construction loads. It is the Contractor's responsibility to assure stability of adjacent slopes and structures during excavations.
- Contractor shall conform to the rules and regulations for the State Construction Safety Orders pertaining to excavations and trenches.
- The Contractor shall exercise particular care to preserve existing trees and other landscaping. All existing live trees and their root systems shall be protected against damage. The Contractor shall request the approval from the Owner to remove any tree or branch prior to removal.
- All materials and methods of construction shall comply with the provisions of the Caltrans Standard Specifications (latest edition). Materials, construction quality, and methods for this project are subject to the state of California Department of Transportation standard plans and standard specifications.
- Earthwork shall conform to the provisions of Section 19, "Earthwork" of the standard specifications.
- All utility boxes shall be set flush with finished grade.

- All CAL/OSHA requirements and guidelines shall be adhered to during all phases of work, including excavations, trenching, and grading phases.
- All excavated and graded soils shall be watered to prevent dust and watering shall provide complete coverage of all exposed rock and soil within the construction area. Contractor shall provide adequate dust control and street cleaning at all times as needed. Any operation that creates excessive dust shall cease immediately until sufficient measures satisfactory to the Owner have been taken to insure compliance with dust control requirements, 24 hours per day, 7 days per week.
- If used, all imported materials to be used as fill shall be approved by the Engineer prior to arrival at the site.
- All work at the site shall conform to the Erosion Control Plan. The contractor shall construct and maintain measures as necessary to control erosion at all times. The contractor shall take the necessary erosion control measures to prevent debris and sediment from migrating off-site. Both during and after construction, Erosion Prevention and Sediment Control Measures and Best Management Practices shall be implemented to prevent erosion, sediment transport, and storm water pollution.
- It is expressly understood that approval of this plan shall not relieve the Owner or Contractor of any responsibilities under the permit, agreement or plans for the successful implementation of sedimentation control in conformity with the requirements of all county, state, federal ordinances, laws, manuals, conditions, permits, or plans.
- Pre-cast concrete structures shall conform to the requirements of section 70-1.02H of the "Precast Concrete Structures" standard specifications.
- The Contractor shall be responsible for site clean-up to the satisfaction of the Owner. All disturbed slope areas shall be covered with an erosion control blanket and treated with hydrosed at the completion of the project. See Sheet 9 for additional details, specifications, and requirements.
- All work shall be subject to inspection and approval by the Engineer.
- Any changes or alternatives to these plans, specifications, and details shall be made in writing by the Contractor and submitted to the Owner and Engineer for review. No implementation or construction of any change or alternative shall be made unless written approval is provided to the Contractor by the Owner or Engineer.
- The Owner shall be responsible to maintain the slope and all drainage improvements after construction.

REMEDIAL SLOPE GRADING NOTES

- Equipment access/staging shall be from open space entry at Viewpoint Drive. See Sheet 2.
- All live trees and their root systems shall be protected from damage during construction. No work shall be performed within drip lines of live trees.
- Actual limits of over-excavation shall be determined onsite by the Engineer during construction and may vary from the limits and depths shown on these plans.
- The Contractor shall submit an over-excavation plan and drawing for review and approval by the Engineer and Owner describing their planned over-excavation and backfill sequences including but not limited to slot phasing, cut and fill steps, fill stockpiling, and subdrain installation.
- The Contractor shall survey and document all work tasks during construction. An as-built plan shall be prepared by Contractor and submitted to the Engineer and Owners showing limits and bottom elevations of over-excavation, and locations and inverts of subdrains, collector pipes, and other drainage facilities. The as-built plan shall be submitted no later than 2 weeks after the completion of construction.
- Removed fills and soils can be temporarily stockpiled at a construction staging area located at the base of slope. The lower one-third of the site slope area can be used as additional fill stockpile area if approved by the Engineer.
- All existing soil stockpiles shall be used as fill to rebuild the slope.
- Removed fills and soils shall be used to rebuild the slope. All fills and soils placed at the site shall not contain rocks or lumps larger than 6 inches in greatest dimension with not more than 15 percent larger than 2.5 inches. Removed concrete debris shall be broken up to not larger than 12 inches in greatest dimension and may be used as fill onsite provided it is not nested and it is closely monitored by the Engineer. Large concrete debris shall be disposed offsite.
- Fills and soils to be used as new engineered fill onsite shall be moisture conditioned to approximately 3 to 5% over optimum and compacted to at least 90% relative compaction in accordance with ASTM D1557 (latest edition). Fill shall be placed in lifts not exceeding 12 inches. Compaction testing of fill shall be performed by the Engineer.
- New fill shall be keyed into competent existing fill to the minimum depths shown on these plans. A keyway of at least 20 feet wide shall be provided at the base of the rebuilt slope with a subdrain installed at the bottom and to the rear of the keyway. The keyway shall be sloped toward the back of the key at 2 percent or greater. A subgrade bench and subdrain shall be provided for approximately every 10 to 20 feet of vertical elevation gain, and the subgrade bench shall extend at least 5 feet into competent existing fill. The locations of keying, benching, and subdrains shown on the plans are approximate; the actual locations shall be determined by the Engineer during construction.
- Subdrains shall consist of perforated pipe (perforations down) surrounded by free draining, uniformly graded, 1/2 to 3/4 inch crushed gravel wrapped in filter fabric such as Mirafi 140N or equivalent. The pipe shall be underlain by about 1 inch of the gravel, and on the sides by at least 4 inches of gravel. The height of the filter fabric wrapped gravel depends on the extent of keyway or bench construction and, if encountered, depth of seepage. The keyway subdrain shall extend the full depth of fill slope keyway. The subdrains at over-excavation back cut shall also extend the full depth of back cut. The filter fabric shall overlap approximately 12 inches or more at joints. The lateral drainpipes shall be at least 4 inches in diameter. Laterals shall be connected to a solid collector pipe with a minimum diameter of 6 inches. Subdrain and collector pipe clean-outs shall be provided. Subdrain and collector pipes shall consist of rigid ABS SDR-23.5 or PVC Schedule 40 (or equivalent) perforated pipes. The clean-out locations shall be based upon the reach of the rotary cleaning systems and the restrictions of pipe bends. Caltrans Class 2 permeable material may be used in lieu of gravel and filter fabric.
- Reinforced concrete pipe used for storm drains shall meet the requirements of Section 30 of the Contra Costa County ordinance specifications. PVC or HDPE pipe used for storm drains may be proposed, subject to approval by the Engineer.
- Drop inlets, frames, and grates shall meet the Contra Costa County Type 'J' inlet requirements. All inlets over 4 feet in depth shall have steps installed per the latest safety standard.
- A certified engineering geologist working for the Engineer shall observe and approve keyway construction, subgrade bench construction, and subdrain installation prior to any fill placement.
- All slope benches shall be graded to a 2 percent gradient or greater to direct surface water away from the top of the slope.
- Final grade shall be track walked and left in a firm condition.



VICINITY MAP
NOT TO SCALE

ESTIMATED EARTHWORK QUANTITIES*

EARTHWORK VOLUME: 65,000 CY.

*Note: Volume estimated between bottom of over-excavation and final grades (See Sheets 5 and 7). Earthwork quantities shown are approximate. It shall be Contractor's responsibility to independently estimate quantities for Contractor's own use. Import and/or export may be needed to achieve final grades.

LIMITATIONS

- Surface and subsurface data and information contained herein are derived from work by others. SFB is not responsible for the validity or accuracy of information, analyses, test results, or designs provided to SFB by others or prepared by others.
- It is beyond the purpose of the slope repair work to address the stability of the areas beyond the limits of the repair site which includes open spaces, homes, properties, and streets. The stability of the hillside region and this site are affected by numerous factors including the underlying soil and rock characteristics, rainfall, irrigation, earthquake shaking, and changes to the topography. Therefore, the stability of the site and site vicinity can change over time.
- Lack of maintenance or poor maintenance can reduce the stability and performance of the rebuilt slope.
- See SFB report dated June 5, 2017 for additional conditions and limitations.

SHEET INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SITE ACCESS AND STAGING AREA PLAN
3	TOPOGRAPHIC SURVEY OF EXISTING SURFACE CONDITIONS
4	SITE PLAN AND ENGINEERING GEOLOGY MAP
5	EXISTING CONDITION CROSS-SECTIONS
6	REMEDIAL SLOPE GRADING PLAN
7	REMEDIAL GRADING CROSS-SECTIONS
8	IMPROVEMENT PLAN
9	CONSTRUCTION DETAILS
10	EROSION AND SEDIMENT CONTROL PLAN

REVISION NO.	DATE	BY	DESCRIPTION	DATE	PROJECT NO.	TITLE SHEET	SHEET
			These plans, notes, specifications, and details were prepared by me or were prepared under my direct supervision.	June 2017	768-1	HILLVIEW DRIVE SLOPE REPAIR Vista Tassajara, Danville, California	1 of 10 Sheets
			Kenneth C. Ferrone, P.E., G.E., C.E.G.	6/20/17 DATE			

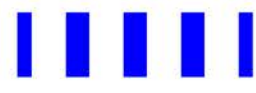
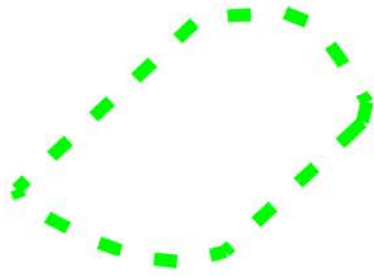

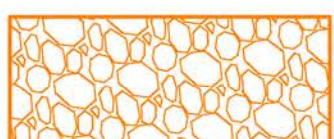


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Ferrone &
Bailey**
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KEY

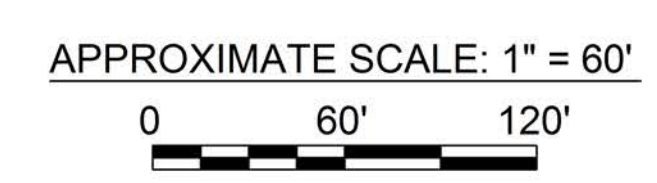
-  Construction Access Routes (Install Continuous Orange Construction Fencing at Edges of Routes)
-  Approximate Over-Excavation Boundary
-  Temporary Chain Link Construction Fence With Locked Entrance
-  Stabilized Construction Entrance/Exit at Least 50 Feet Long Per California Stormwater BMP Handbook Construction Detail TC-1

NOTES: All locations shown are approximate; actual locations to be determined by the Engineer during construction. All disturbed areas shall be repaired to original grades and stabilized per the General Notes, Erosion Control Notes, and Sediment Control Notes shown on Sheet 10.



BASE MAP: Aerial Photograph from Google Earth image dated 3/11/17. Topographic Survey Shown on Sheet 3.

REVISION NO.	DATE	BY	DESCRIPTION



DATE	June 2017
PROJECT NO.	768-1

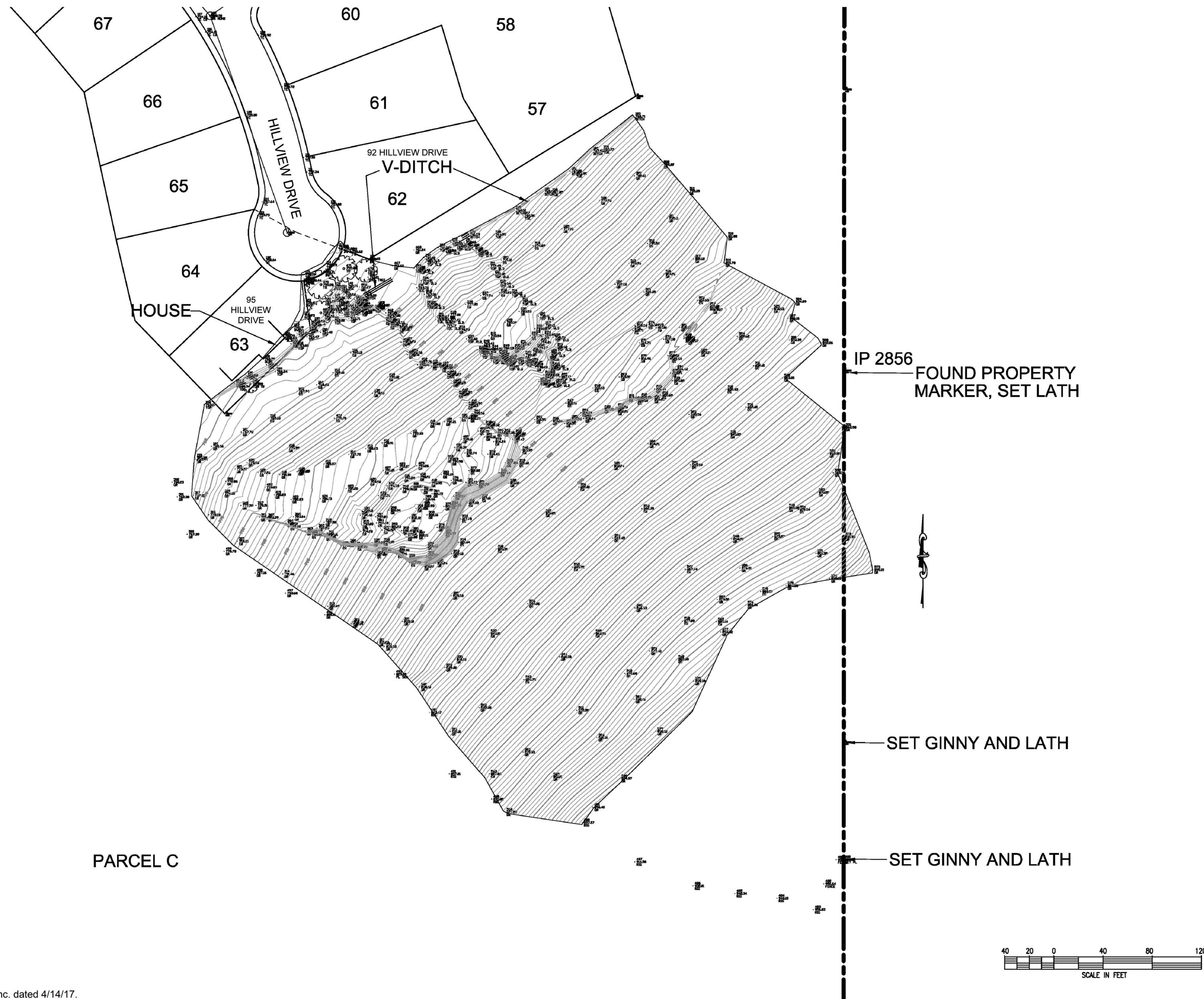
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SITE ACCESS AND STAGING AREA PLAN

HILLVIEW DRIVE SLOPE REPAIR

Vista Tassajara, Danville, California



PARCEL C

NOTE: Topographic survey by Meridian Associate, Inc. dated 4/14/17.

REVISION NO.	DATE	BY	DESCRIPTION

DATE: APRIL 14, 2017
 SCALE:
 DRAWN: TJB
 DESIGNED:
 ENGINEER: PC
 MANAGER: HK

MERIDIAN ASSOCIATES, INC.
 CIVIL ENGINEERING • PLANNING • SURVEYING

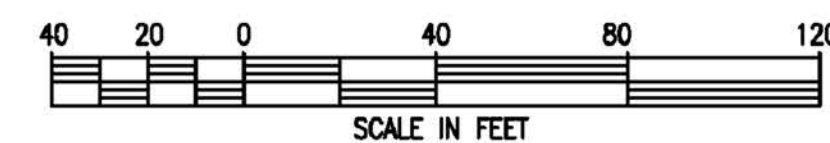
1470 CIVIC COURT, SUITE 360
 CONCORD, CA 94520

PHONE: 925-691-7300
 FAX: 925-691-7110

DATE
June 2017
PROJECT NO.
768-1

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 Engineering Company, Inc.

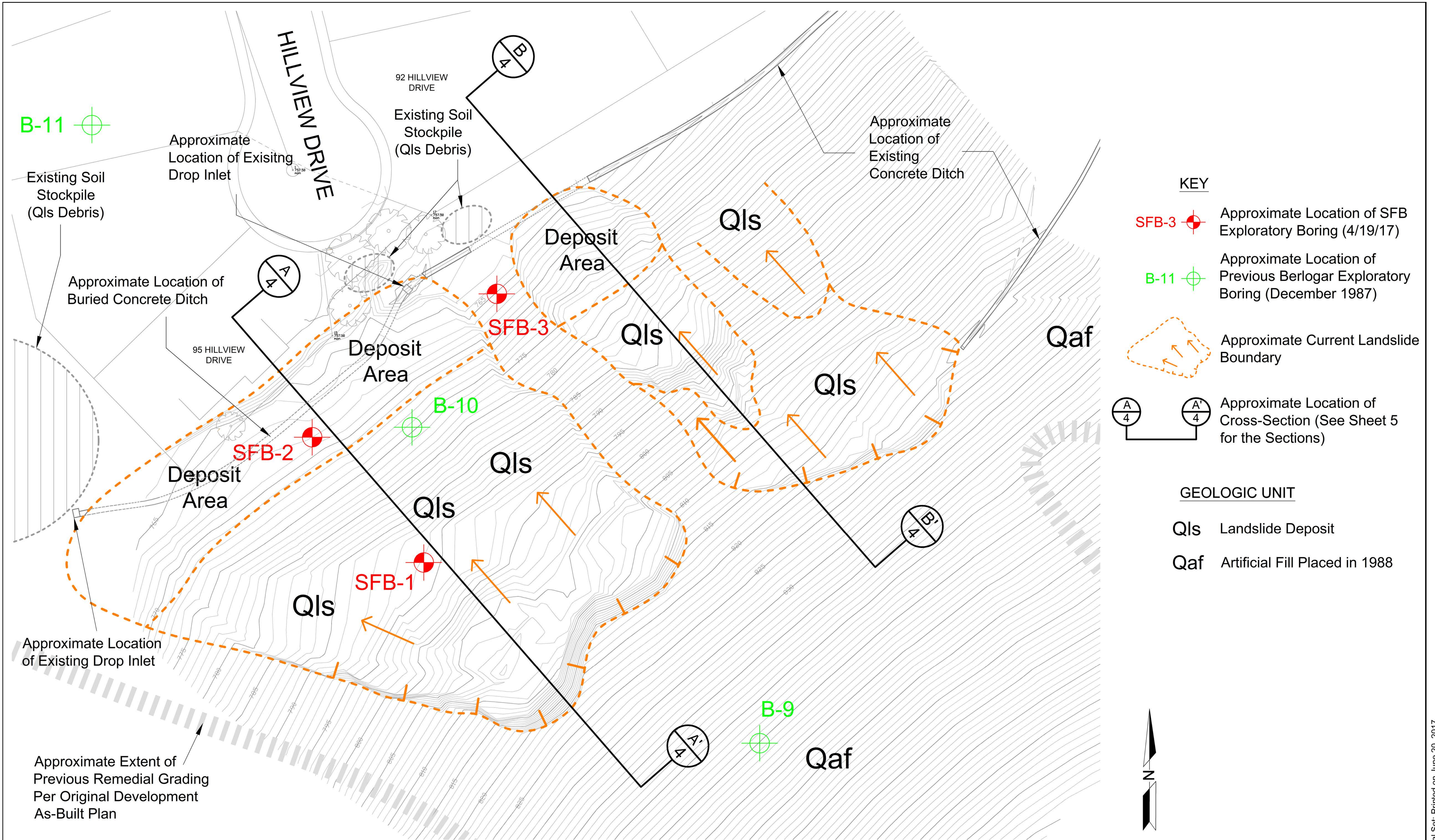
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TOPOGRAPHIC SURVEY OF EXISTING SURFACE CONDITIONS
HILLVIEW DRIVE SLOPE REPAIR Vista Tassajara, Danville, California

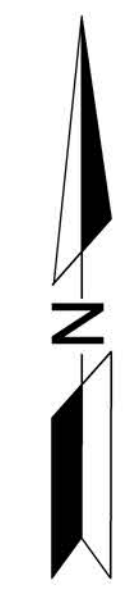
SHEET
3 of 10 Sheets

Revised Permit Submittal Set; Printed on June 20, 2017



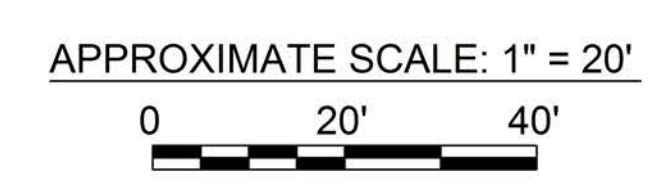
- KEY**
- SFB-3 Approximate Location of SFB Exploratory Boring (4/19/17)
 - B-11 Approximate Location of Previous Berlogar Exploratory Boring (December 1987)
 - Approximate Current Landslide Boundary
 - Approximate Location of Cross-Section (See Sheet 5 for the Sections)

- GEOLOGIC UNIT**
- Qls Landslide Deposit
 - Qaf Artificial Fill Placed in 1988



BASE MAP: Topographic Survey Shown on Sheet 3.

REVISION NO.	DATE	BY	DESCRIPTION



DATE
June 2017

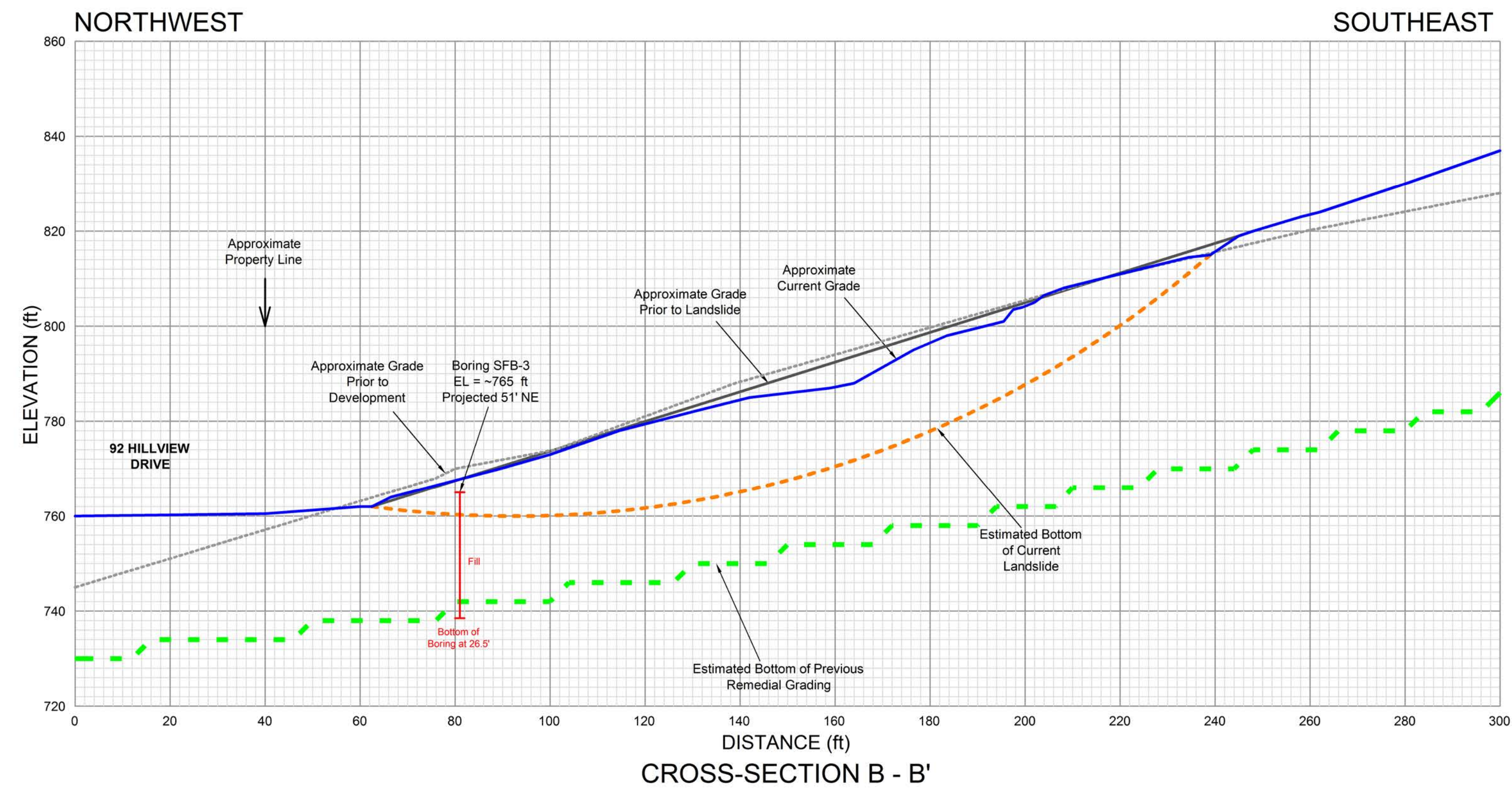
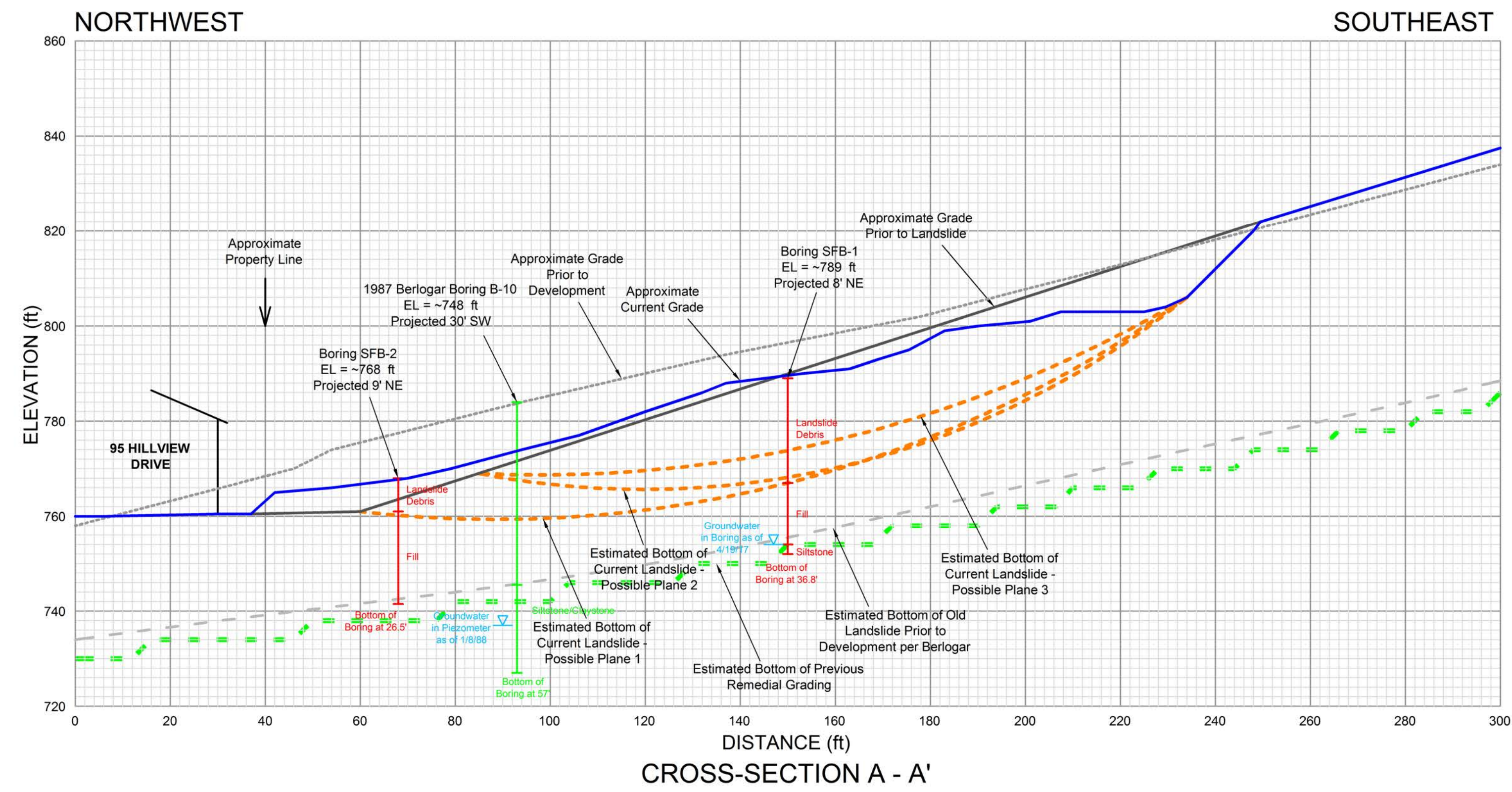
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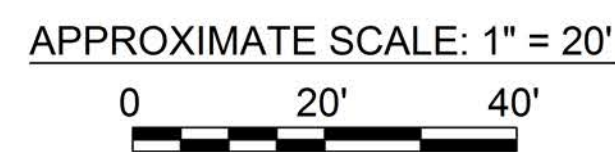
SITE PLAN AND ENGINEERING GEOLOGY MAP	SHEET
HILLVIEW DRIVE SLOPE REPAIR Vista Tassajara, Danville, California	4 of 10 Sheets

Revised Permit Submittal Set; Printed on June 20, 2017



- NOTES:**
1. See Sheet 4 for location of section.
 2. Ground features, structures, and elevations are based on survey by Meridian Associate, Inc. dated 4/14/17.
 3. Refer to boring logs for more details. Borings projected onto cross-sections.

REVISION NO.	DATE	BY	DESCRIPTION



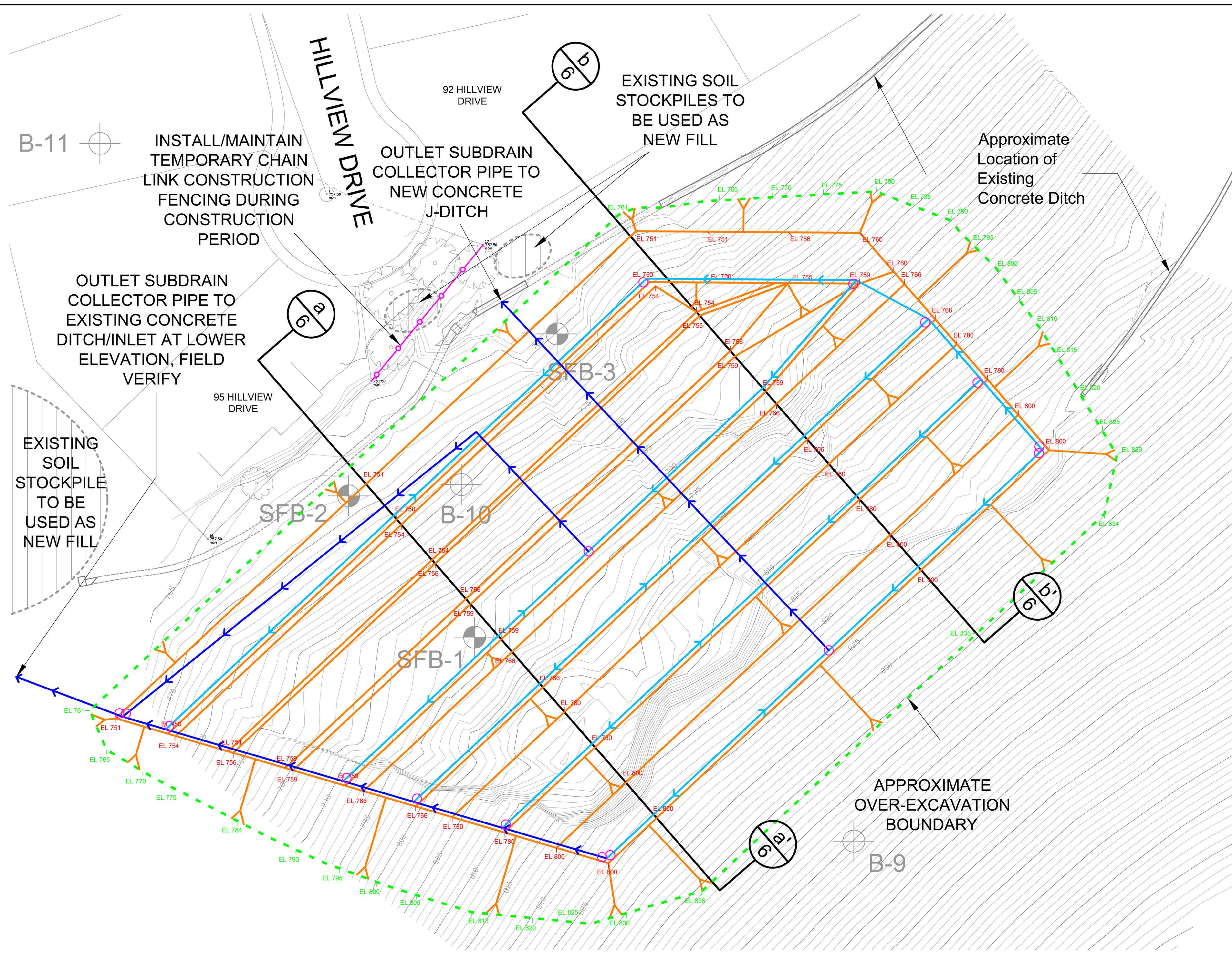
DATE: June 2017
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EXISTING CONDITION CROSS-SECTIONS	SHEET
HILLVIEW DRIVE SLOPE REPAIR Vista Tassajara, Danville, California	5 of 10 Sheets

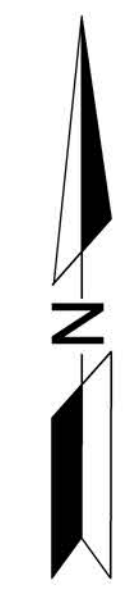
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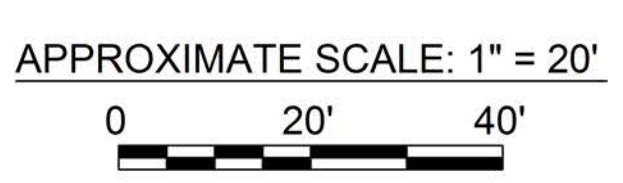
- EL 750 Approximate Bottom of Over-excavation Elevation
- New 4 inch Dia. Perforated Subdrain Pipe (Sloped to Drain)
- New 6 inch Dia. Solid Subdrain Collector Pipe (Sloped to Drain)
- New Solid Subdrain and Collector Pipe Cleanout with Capped Access at Finished Grade
- Approximate Over-Excavation Boundary
- EL 820 Approximate Over-excavation Boundary Elevation
- Temporary Chain Link Construction Fence
- Approximate Location of Cross-Section (See Sheet 7 for the Sections)

NOTES: All elevations and locations shown are approximate; actual elevations and locations to be determined by the Engineer during construction. See Sheet 9 for construction details.



BASE MAP: Topographic Survey Shown on Sheet 3.

REVISION NO.	DATE	BY	DESCRIPTION



DATE: June 2017
 PROJECT NO.: 768-1

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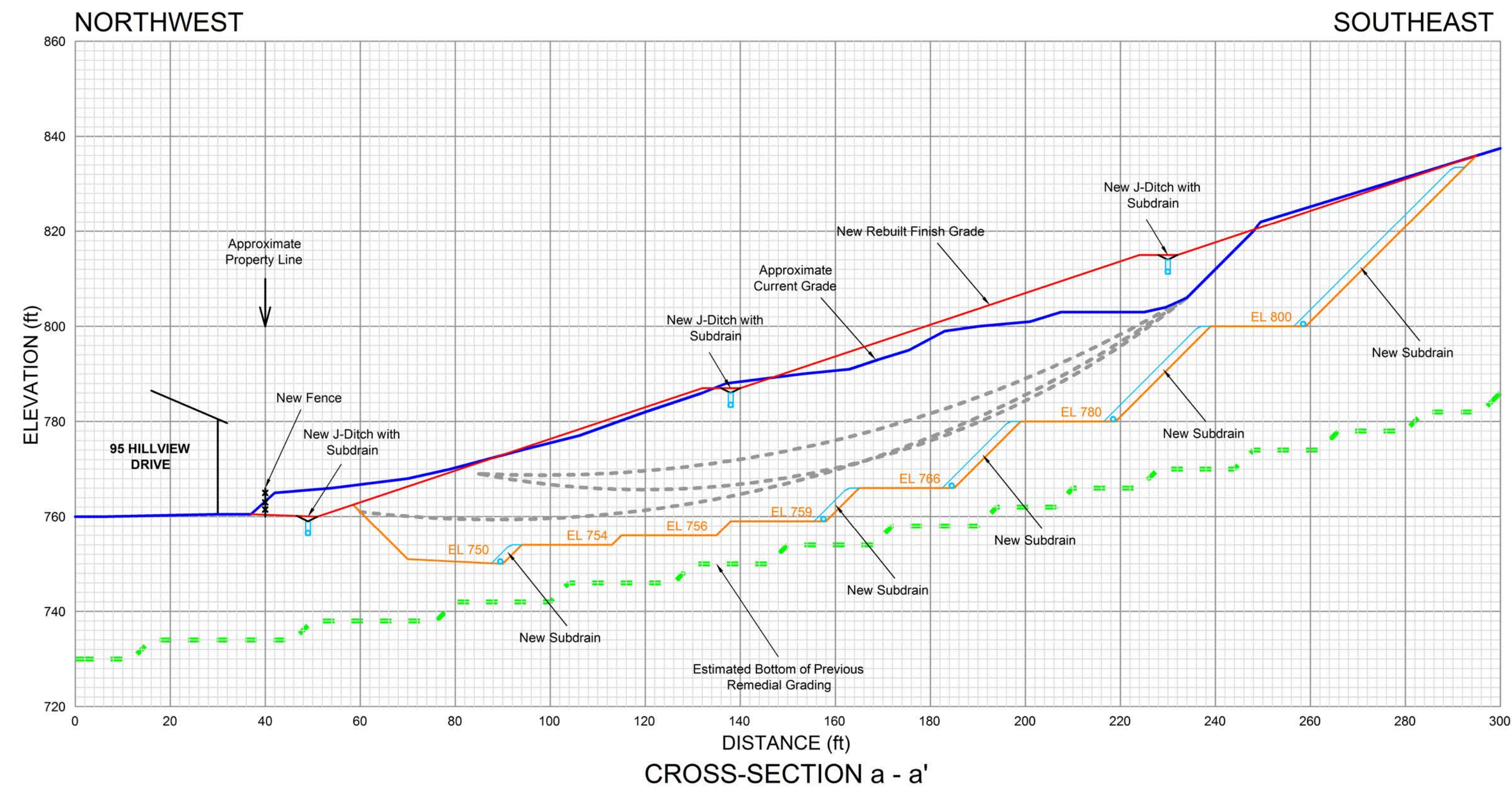
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REMEDIAL SLOPE GRADING PLAN

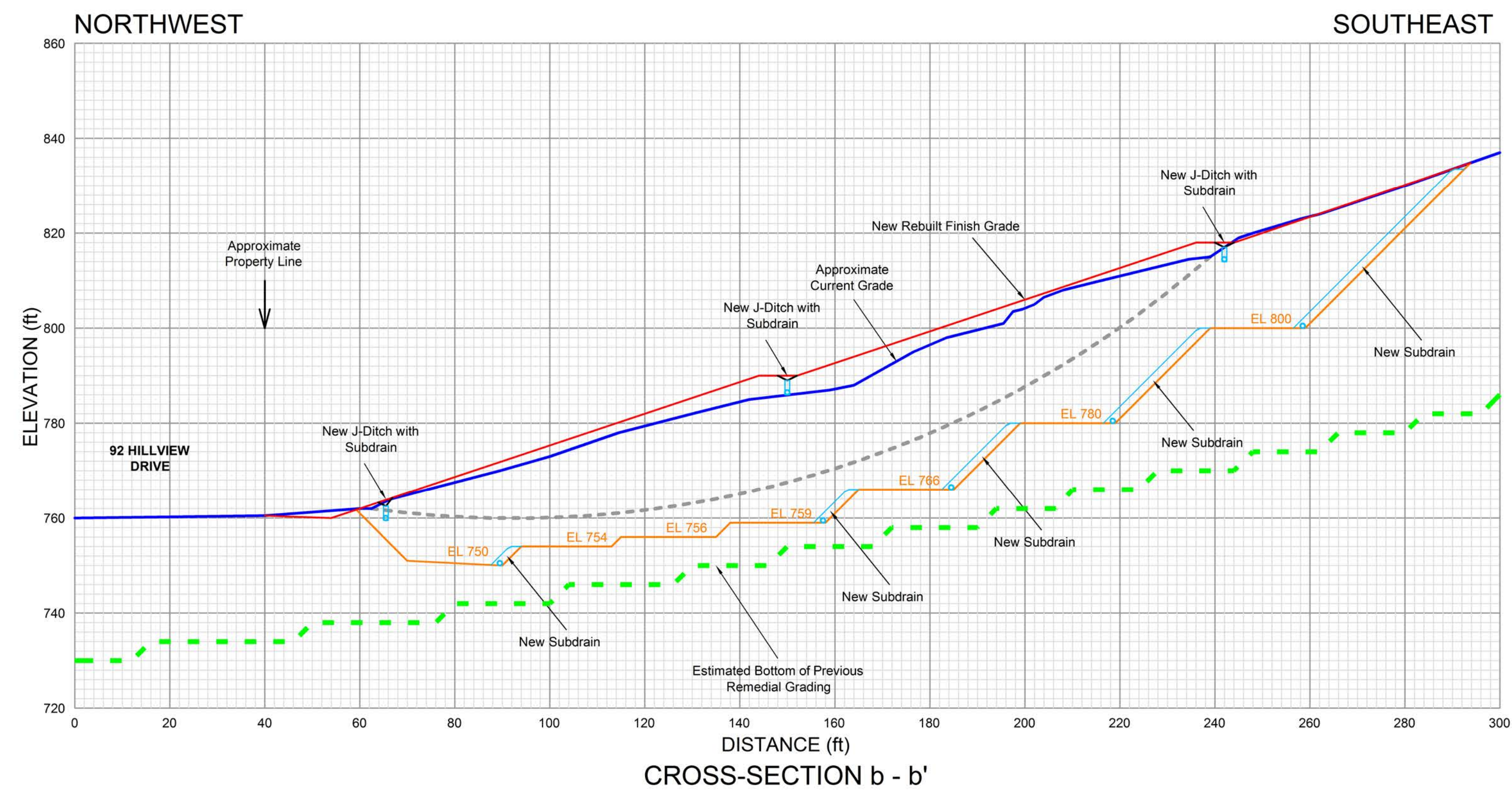
HILLVIEW DRIVE SLOPE REPAIR

Vista Tassajara, Danville, California

Revised Permit Submittal Set; Printed on June 20, 2017



*NOTE: The bottoms of all excavations shall be determined by Certified Engineering Geologist working for Engineer at time of excavation. No fill or subdrains shall be installed without approval. See Sheet 9 for construction details.



REVISION NO.	DATE	BY	DESCRIPTION

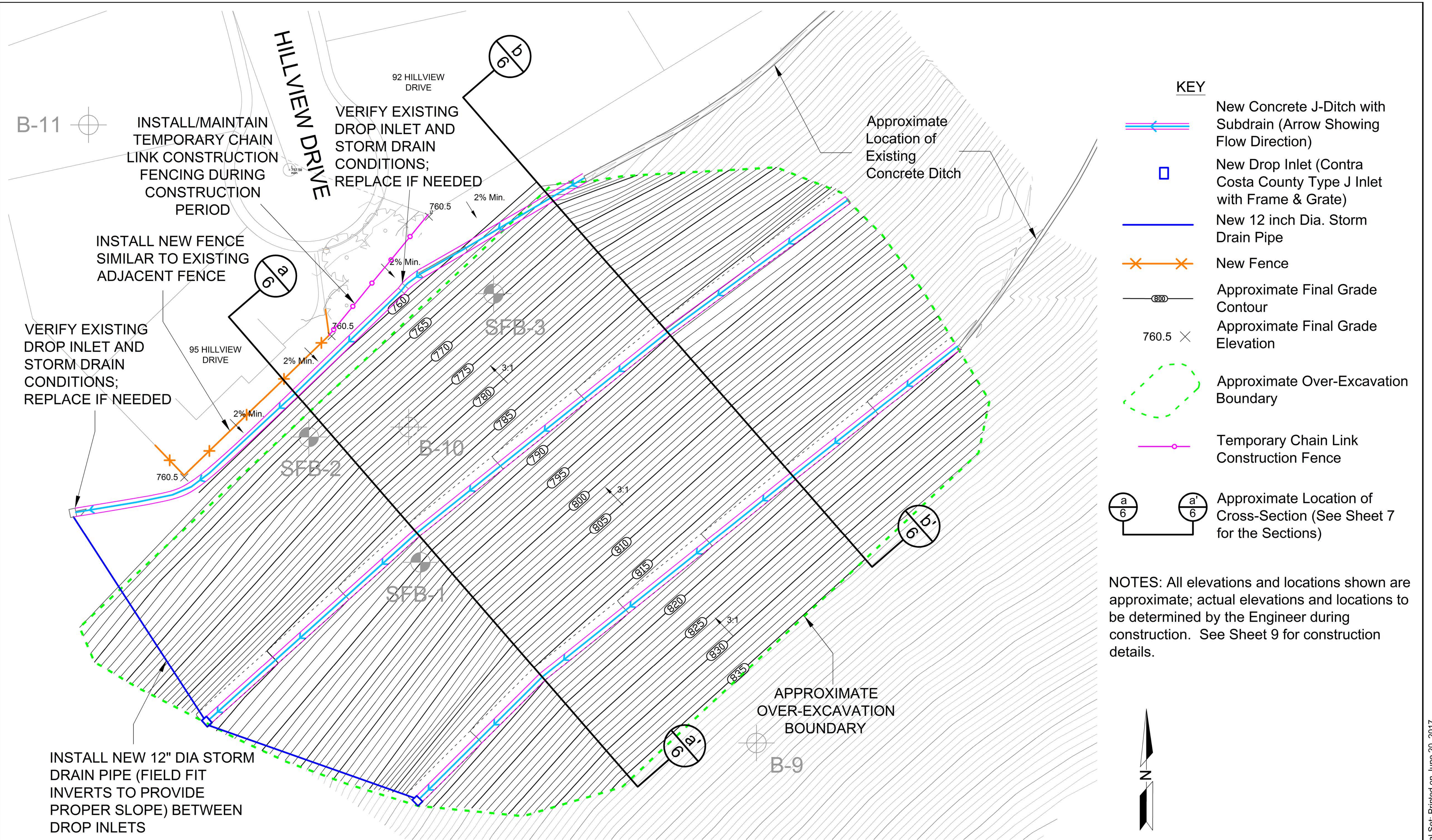
APPROXIMATE SCALE: 1" = 20'
 0 20' 40'

DATE	June 2017
PROJECT NO.	768-1

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REMEDIAL GRADING CROSS-SECTIONS	SHEET
HILLVIEW DRIVE SLOPE REPAIR	7
Vista Tassajara, Danville, California	of 10 Sheets

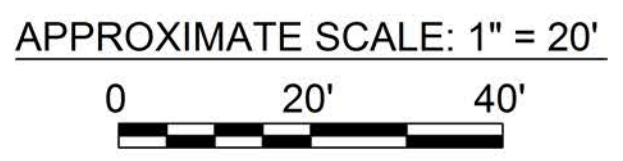


- KEY**
- New Concrete J-Ditch with Subdrain (Arrow Showing Flow Direction)
 - New Drop Inlet (Contra Costa County Type J Inlet with Frame & Grate)
 - New 12 inch Dia. Storm Drain Pipe
 - New Fence
 - Approximate Final Grade Contour
 - Approximate Final Grade Elevation
 - Approximate Over-Excavation Boundary
 - Temporary Chain Link Construction Fence
 - Approximate Location of Cross-Section (See Sheet 7 for the Sections)

NOTES: All elevations and locations shown are approximate; actual elevations and locations to be determined by the Engineer during construction. See Sheet 9 for construction details.

BASE MAP: Topographic Survey Shown on Sheet 3.

REVISION NO.	DATE	BY	DESCRIPTION



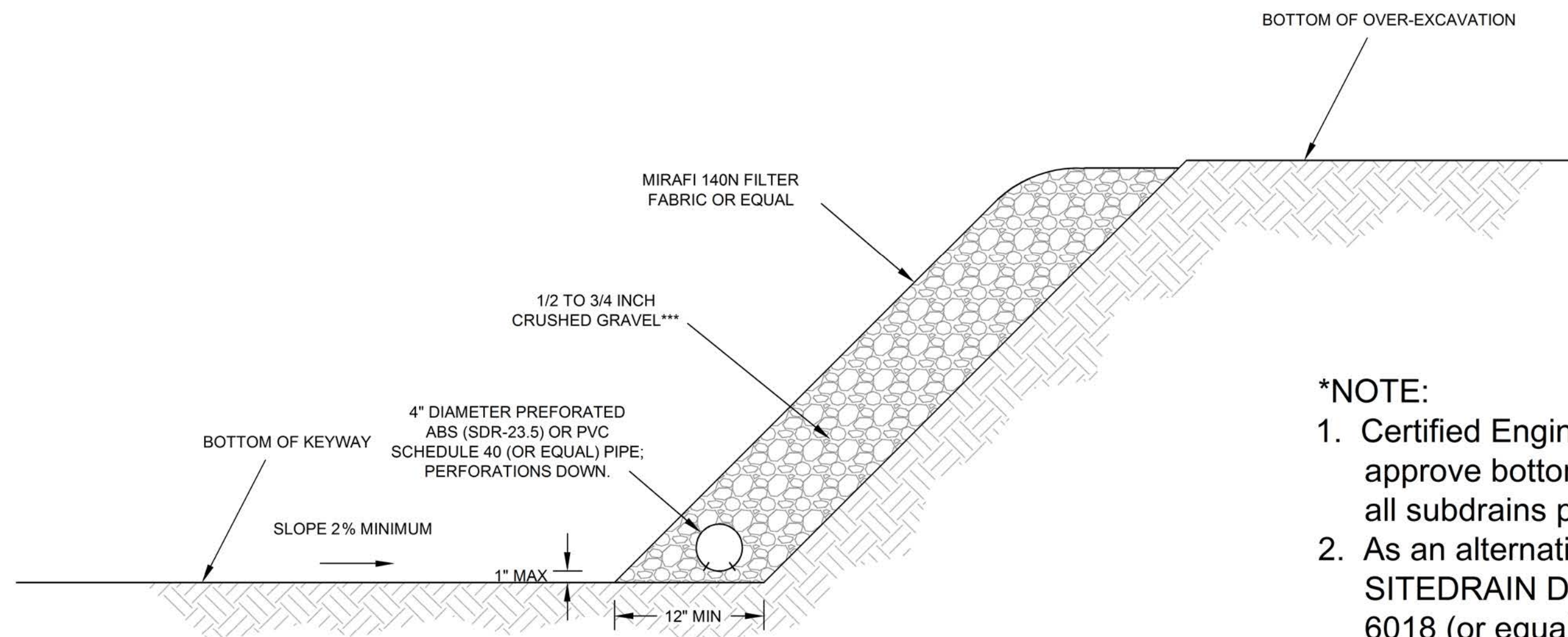
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IMPROVEMENT PLAN	SHEET
HILLVIEW DRIVE SLOPE REPAIR Vista Tassajara, Danville, California	8 of 10 Sheets

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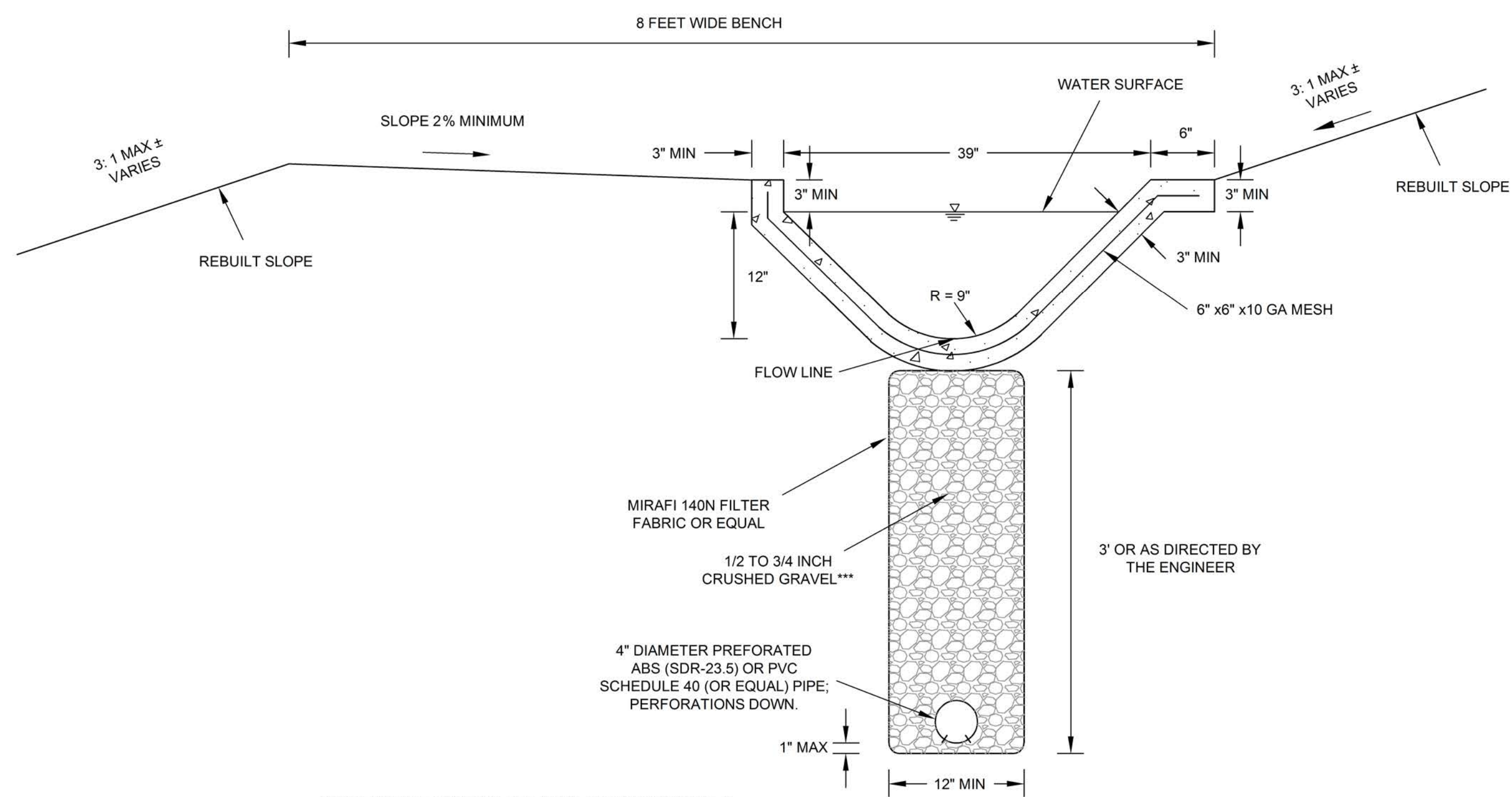


***NOTE: ALTERNATIVELY, CALTRANS CLASS 2 PERMEABLE MATERIAL CAN BE USED IN LIEU OF GRAVEL AND FILTER FABRIC.

KEYWAY & SUBDRAIN* DETAIL NTS

***NOTE:**

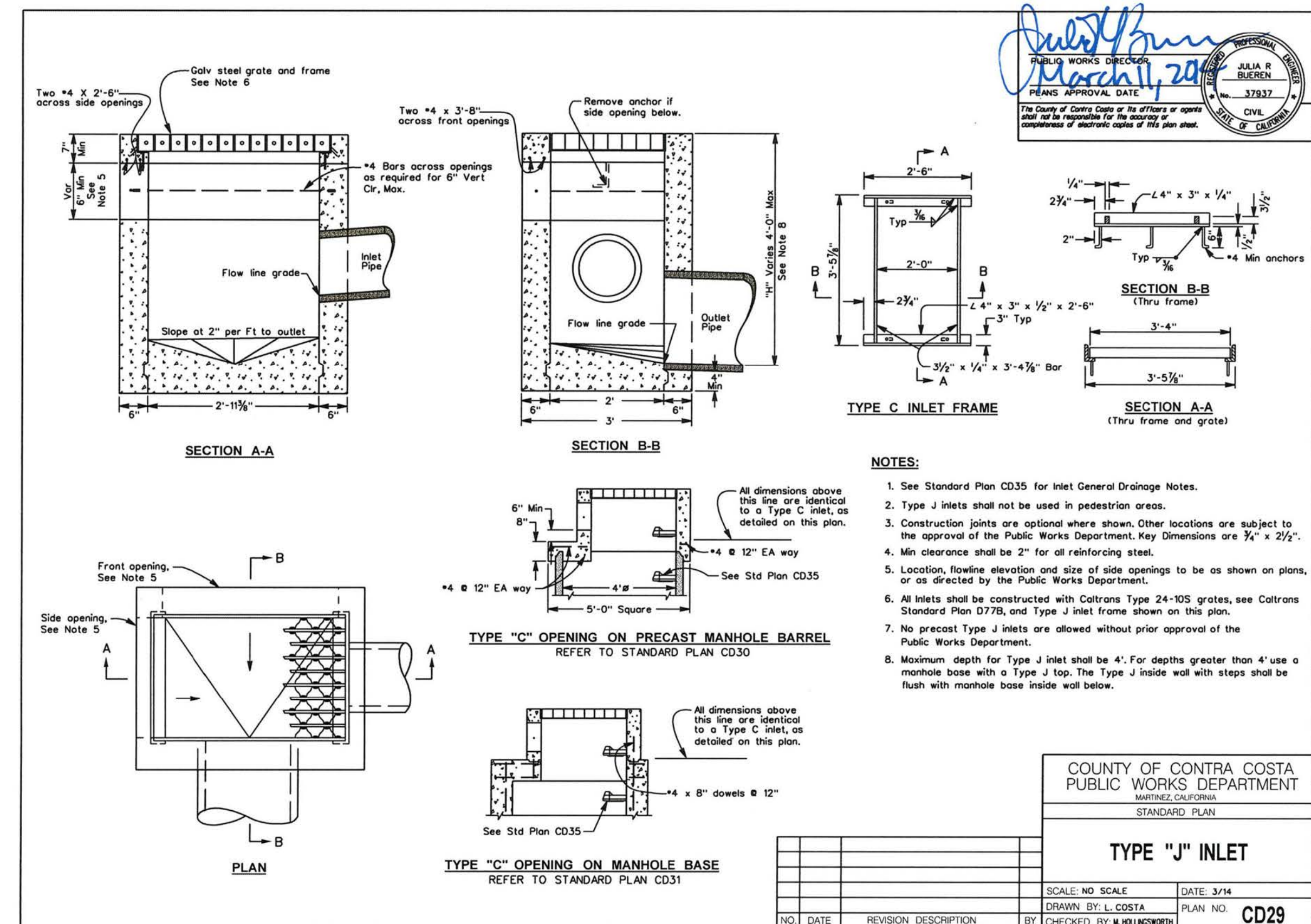
1. Certified Engineering Geologist working for Engineer shall approve bottom of keyway, bottoms of all excavations, and all subdrains prior to fill placement.
2. As an alternative at over-excavation back-cuts, AWD SITEDRAIN DS-180 (or equal) and AWD SITEDRAIN Strip 6018 (or equal) can be used in lieu of gravel/Class 2 permeable material, filter fabric, and pipe.



**NOTE: SLOPE OF DITCH PER PLAN. MINIMUM SLOPE 2%. PLACE DEEP JOINT AT 12 FEET O. C.

***NOTE: ALTERNATIVELY, CALTRANS CLASS 2 PERMEABLE MATERIAL CAN BE USED IN LIEU OF GRAVEL AND FILTER FABRIC.

CONCRETE J-DITCH** WITH SUBDRAIN DETAIL NTS

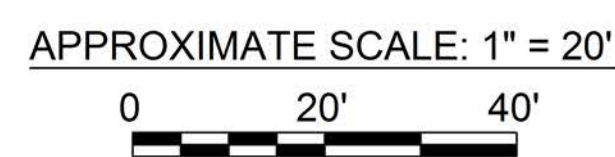


NOTES:

1. See Standard Plan CD35 for Inlet General Drainage Notes.
2. Type J inlets shall not be used in pedestrian areas.
3. Construction joints are optional where shown. Other locations are subject to the approval of the Public Works Department. Key Dimensions are 3/4" x 2 1/2".
4. Min clearance shall be 2" for all reinforcing steel.
5. Location, flowline elevation and size of side openings to be as shown on plans, or as directed by the Public Works Department.
6. All inlets shall be constructed with Caltrans Type 24-105 grates, see Caltrans Standard Plan D778, and Type J inlet frame shown on this plan.
7. No precast Type J inlets are allowed without prior approval of the Public Works Department.
8. Maximum depth for Type J inlet shall be 4'. For depths greater than 4' use a manhole base with a Type J top. The Type J inside wall with steps shall be flush with manhole base inside wall below.

COUNTY OF CONTRA COSTA PUBLIC WORKS DEPARTMENT STANDARD PLAN	
TYPE "J" INLET	
SCALE: NO SCALE	DATE: 3/14
DRAWN BY: L. COSTA	PLAN NO. CD29
CHECKED BY: N. HOLLINGSWORTH	

REVISION NO.	DATE	BY	DESCRIPTION



DATE	June 2017
PROJECT NO.	768-1

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CONSTRUCTION DETAILS	
HILLVIEW DRIVE SLOPE REPAIR	
Vista Tassajara, Danville, California	

SHEET
9
of 10 Sheets



KEY

- APPROXIMATE AREA TO BE GRADED - TO BE STABILIZED WITH EROSION CONTROL BLANKET UPON COMPLETION OF GRADING ACTIVITIES
- STORM DRAIN SYSTEM (N)
- SILT FENCE
- FIBER ROLL - TO BE INSTALLED UPON COMPLETION OF GRADING; SHEET FLOW LENGTH ALONG SLOPE NOT TO EXCEED 20-FEET
- NEW CONCRETE V-DITCH AND SUBDRAIN
- INLET PROTECTION (INLET FILTER AND ROCK BAGS)
- FLOW DIRECTION

SWPPP MANAGER TO MARK LOCATIONS ONCE KNOWN

- MATERIALS AND EQUIPMENT STORAGE AREA
- GARBAGE CONTAINERS
- CHEMICAL / HAZARDOUS MATERIAL STORAGE
- VEHICLE MAINTENANCE / FUELING AREA
- SANITARY FACILITY
- SINK
- CONCRETE WASHOUT
- TEMPORARY STOCKPILE

GENERAL NOTES

- CONSTRUCTION ACTIVITIES ARE SCHEDULED TO OCCUR DURING SUMMER/FALL 2017 (JUNE THROUGH OCTOBER). IF CONSTRUCTION EXTENDS PAST OCTOBER 2017, ADDITIONAL BMPs MAY BE REQUIRED.

EROSION CONTROL NOTES

- ALL AREAS MUST BE STABILIZED WITHIN 14 DAYS OF THE COMPLETION OF GRADING ACTIVITIES.
- EXPOSED SLOPES SHOULD BE STABILIZED WITH EROSION CONTROL BLANKET. THE EROSION CONTROL BLANKET SHOULD BE TENSAR NORTH AMERICAN GREEN BIONET SC150BN OR EQUIVALENT WITH BIODEGRADABLE NETTING AND SHOULD BE LEFT IN PLACE UPON PROJECT COMPLETION. ALTERNATIVELY, A SPRAY ON BONDED FIBER MATRIX, SUCH AS RAINIER FIBER BFM (OR EQUAL) CAN BE USED IN LIEU OF EROSION CONTROL BLANKETS.
- PRIOR TO EROSION CONTROL BLANKET INSTALLATION, AN EROSION CONTROL SEED MIX SHOULD BE APPLIED TO DISTURBED SLOPES. THE SEED MIX SHOULD BE THE PACIFIC COAST SEED "GREEN TO GOLD" BLEND APPLIED AT A RATE OF 55 POUNDS/ACRE.

SEDIMENT CONTROL NOTES

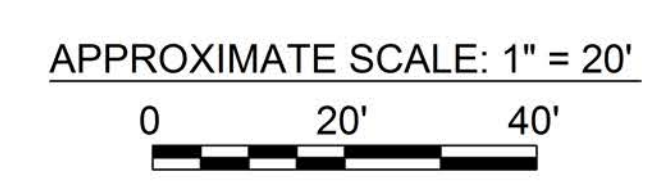
SEDIMENT CONTROL BMPs

- INSTALL SILT FENCING AT THE DOWNSLOPE PERIMETER OF THE AREA TO BE GRADED PRIOR TO THE START OF GRADING ACTIVITIES.
- ONCE GRADING IS COMPLETE, STRAW ROLLS SHOULD BE INSTALLED SO THAT THE SHEET FLOW LENGTH ALONG THE SLOPE DOES NOT EXCEED 20 FEET. APPROXIMATE LOCATIONS ARE SHOWN ON THIS PLAN. STRAW ROLLS SHOULD HAVE BIODEGRADABLE NETTING (BURLAP COVER OR EQUIVALENT) AND REMAIN IN PLACE UPON PROJECT COMPLETION.

STORM DRAIN INLET PROTECTION

- INSTALL CATCH BASIN INLET PROTECTION CONSISTING OF AN INLET FILTER AND PERIMETER PROTECTION (SILT FENCING OR STRAW ROLL) AROUND THE EXISTING INLET(S).

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EROSION AND SEDIMENT CONTROL PLAN

HILLVIEW DRIVE SLOPE REPAIR

Vista Tassajara, Danville, California

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 of 10 Sheets

Revised Permit Submittal Set; Printed on June 20, 2017