

AGE	KH/ 17025 M	<b>ANDAR</b> CGILL ROAD, SAF
		SITE PL
	PROJECT DATA	PROJECT D
	A. <u>GENERAL DATA</u>	OWNER
	1. ADDRESS: 17025 McGILL ROAD, SARATOGA, CA 95070 2. ASSESSOR'S PARCEL NUMBER: 517-24-024 3. LOT AREA: 435,600 SQ.FT. = 10 AC.	ARCHITECT
	B. <u>PLANNING DATA</u>	CIVIL
	ZONING: HS UNDER 30% SLOPE SETBACKS FRONT = $30'$ SIDE = $30'$	GEOTECHNICAL
	HEIGHT LIMITATION: 32.5' PROPOSED HEIGHT: 32.5' STORIES: 3 PROPOSED: SINGLE FAMILY RESIDENCE + SEPARATE 2 CAR GARAGE SEWER: DRIP SEPTIC SYSTEM	WASTEWATER
	C. <u>CODES</u>	'
	THE FOLLOWING CODES APPLY: 2019 CALIFORNIA SINGLE FAMILY BUILDING CODE, 2019 CALIFORNIA FIRE CODE,	DRAWING IN
-8'-0" (522) -16'-0" (514)	2019 CALIFORNIA PLUMBING CODE, 2019 CALIFORNIA MECHANICAL CODE, 2019 CALIFORNIA ELECTRICAL CODE, 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE, COUNTY OF SANTA CLARA CODES AND ORDINANCES	ARCHITECTURAL A0 COVER S A1 SITE PLA A2 SITE PLA A3 PLAN & S

## HEIGHT ANALYSIS RESIDENCE

MAXIMUM ALLOWED HEIGHT: 35'-0" MAXIMUM ALLOWED HEIGHT FOR THIS LOCATION: 32'-6" PROPOSED RESIDENCE HEIGHT: 32'-6"

+32'-6" (MAXIMUN	1 ALLOWED HEIGHT)	+32'-6"
	LEVEL +2	+23'-0"
	LEVEL +I	+12'-0"
	LEVEL 0 @ 530+/-	0.00
	BASEMENT LEVEL -I	-10'-0"
	CROSS SECTION	

VICINITY MAP

A4

A5

C0

C1.0

C1.1

C1.2 C1.3

C1.4

C2.1

C2.2

C3.1

C3.2

C3.3

C4

CIVIL



## RE RESIDENCE RATOGA, CA 95070 (UNINCORPORATED)

## **LAN PERMIT APPLICATION**

## DIRECTORY

MILIND KHANDARE & NEHA DOBHAL 560 HOPE STREET, #27 MOUNTAIN VIEW, CA, 94041 DAN IONESCU ARCHITECTS & PLANNERS 650.570.6681 1611 BOREL PLACE, SUITE 230 SAN MATEO, CA 94402 OSUNA ENGINEERING, INC.

117 BERNAL ROAD, SUITE 70-336 SAN JOSE, CA 95119 **ROMIG ENGINEERS** 

1390 EL CAMINO REAL, SECOND FLOOR SAN CARLOS, CA 94070 **BIOSPHERE CONSULTING** 1315 KING STREET, SANA CRUZ, CA 95060

312.607.9870 nk.milind@gmail.com

diones@diap.com

408 772 4381 info@osunaengineering.com

650 591 5224 www.romigengineering.com

831 430 9116 www.biosphere-consulting.com

## NDEX

SHEET N AN DETAIL PLAN & SECTION SCHEMATICS ELEVATION SCHEMATICS ASSESSOR MAP & LOT CREATION

TITLE SHEET SITE PLAN - SLOPE CALCULATIONS **GRADING & DRAINAGE PLAN GRADING & DRAINAGE PLAN GRADING & DRAINAGE PLAN** EARTHWORK QUANTITIES CONSTRUCTION DETAILS CONSTRUCTION DETAILS COUNTY BMP SHEET 1 COUNTY BMP SHEET 2 EROSION CONTROL PLAN TRAFFIC CONTROL PLAN

# DAN IONESCU ARCHITECTS & PLANNERS SAN FRANCISCO BAY AREA

### ARCHITECTURE PLANNING URBAN DESIGN INTERIOR DESIGN HISTORIC REHABILITATION CONSTRUCTION MANAGEMENT

WWW.DIAP.COM

1611 BOREL PLACE, #230, SAN MATEO, CA 94402 TEL.: (650) 570-6681 FAX.: (650) 570-6540



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## **KHANDARE** RESIDENCE

LOCATION 17025 McGILL RD. SARATOGA CA 95070

<u>job no.</u> 2003 PROJECT PHASE SITE PLAN PERMIT

## COVER SHEET

DATE JULY 2021

ISSUES / REVISIONS

<u>scale</u> N/A



#### WASTEWATER SYSTEM

- ONSITE WASTEWATER TREATMENT
- SYSTEM DESIGN 2 ONSITE WASTEWATER TREATMENT SYSTEM DESIGN



![](_page_2_Figure_0.jpeg)

![](_page_3_Figure_0.jpeg)

![](_page_4_Figure_0.jpeg)

![](_page_4_Figure_1.jpeg)

![](_page_4_Figure_4.jpeg)

![](_page_5_Figure_0.jpeg)

![](_page_5_Figure_3.jpeg)

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### COUNTY OF SANTA CLARA General Construction Specifications

#### general conditions

- ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY ROMIG ENGINEERS, 1390 EL CAMINO REAL, SECOND FLOOR, SAN CARLOS, CA 94070, TEL 650-591-5224, PROJECT NO. 5340-1A AND DATED JUNE 30, 2021, THIS REPORT IS SUPPLEMENTED BY: 1) THESE PLANS AND SPECIFICATIONS, 2) THE COUNTY OF SANTA CLARA STANDARD DETAILS. 3) THE COUNTY OF SANTA CLARA STANDARD SPECS, 4) STATE OF CALIFORNIA STANDARD DETAILS, 5) STATE OF CALIFORNIA STANDARD SPECIFICATIONS. IN THE EVENT OF CONFLICT THE FORMER SHALL TAKE PRECEDENCE OVER THE LATTER. THE PERFORMANCE AND COMPLETION OF ALL WORK MUST BE TO THE SATISFACTION OF THE
- COUNTY DEVELOPER IS RESPONSIBLE FOR INSTALLATION OF THE IMPROVEMENTS SHOWN ON THESE PLANS AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE
- RESPONSIBLE FOR THEIR CONTINUED MAINTENANCE. DEVELOPER SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERRORS OR OMISSIONS IN THESE PLANS. THE COUNTY SHALL BE AUTHORIZED TO REQUIRE DISCONTINUANCE OF ANY WORK AND SUCH CORRECTION AND MODIFICATION OF PLANS AS MAY BE NECESSARY TO COMPLY WITH COUNTY STANDARDS OR CONDITIONS OF DEVELOPMENT APPROVAL.
- DEVELOPER SHALL OBTAIN ENCROACHMENT PERMITS FROM THE SANTA CLARA VALLEY WATER DISTRICT AND CALIFORNIA DEPARTMENT OF TRANSPORTATION WHERE NEEDED. COPIES OF THESE PERMITS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY THE COUNTY'S INSPECTOR.
- DEVELOPER SHALL REMOVE OR TRIM ALL TREES TO PROVIDE AN UNOBSTRUCTED FIFTEEN (15) FOOT VERTICAL CLEARANCE FOR ROADWAY AREA. THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE THE GROUND THAT ARE SHOWN TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT
- REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED. DEVELOPER SHALL PROVIDE ADEQUATE DUST CONTROL AS REQUIRED BY THE COUNTY INSPECTOR
- ALL PERSONS MUST COMPLY WITH SECTION 4442 OF THE PUBLIC RESOURCES CODE AND SECTION 13005 OF THE HEALTH AND SAFETY CODE RELATING TO THE USE OF SPARK ARRESTERS.
- UPON DISCOVERING OR UNEARTHING ANY BURIAL SITE AS EVIDENCED BY HUMAN SKELETAL REMAINS OR ARTIFACTS, THE PERSON MAKING SUCH DISCOVERY SHALL IMMEDIATELY NOTIFY THE COUNTY CORONER AT (4008) 454-2520 AND LAND DEVELOPMENT ENGINEERING OFFICE AT (408) 299-5730. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE LAND DEVELOPMENT OFFICE IN ACCORD WITH PROVISIONS OF THIS ORDINANCE (COUNTY ORDINANCE CODE SECTION B6-18).
- THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION ANY DEVIATION FROM THESE APPROVED PLANS SHALL BE RE-APPROVED IN
- WRITING BY THE COUNTY ENGINEER PRIOR TO CONSTRUCTION.

#### CONSTRUCTION STAKING

- THE DEVELOPER'S ENGINEER IS RESPONSIBLE FOR THE INITIAL PLACEMENT AND 8. REPLACEMENT OF CONSTRUCTION GRADE STAKES. THE STAKES ARE TO BE ADEQUATELY IDENTIFIED. LOCATED, STABILIZED, ETC. FOR THE CONVENIENCE OF CONTRACTORS. LATERAL OFFSET OF STAKES SET FOR CURBS AND GUTTERS SHALL NOT EXCEED 2 1/2 FEET FROM BACK OF CURB.
- ANY PROPERTY LINE STAKES OR ROAD MONUMENTS DISTURBED DURING LAND SURVEYOR.
- PROPERTY LINE STAKING MUST BE PERFORMED BY THE PROJECT ENGINEER OR LAND SURVEYOR TO ESTABLISH OR RE-ESTABLISH THE PROJECT BOUNDARY AND SHALL BE INSPECTED BY THE COUNTY INSPECTOR PRIOR TO THE BEGINNING OF THE WORK.
- PROPER CONSTRUCTION STAKES SHALL BE SET IN THE FIELD BY THE PROJECT ENGINEER OR LAND SURVEYOR AND VERIFIED BY THE COUNTY INSPECTOR PRIOR TO THE COMMENCEMENT OF GRADING.

#### ONSTRUCTION INSPECTION

- CONTRACTOR SHALL NOTIFY PERMIT INSPECTION UNIT, SANTA CLARA COUNTY
- PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE. COUNTY REQUIRES A MINIMUM OF 24 HOURS ADVANCE NOTICE FOR GENERAL INSPECTION, 48 HOURS FOR ASPHALT CONCRETE INSPECTION.
- INSPECTION BY SANTA CLARA COUNTY SHALL BE LIMITED TO INSPECTION OF MATERIALS AND PROCESSES OF CONSTRUCTION TO OBSERVE THEIR COMPLIANCE WITH PLANS & SPECIFICATIONS BUT DOES NOT INCLUDE RESPONSIBILITY FOR THE SUPERINTENDENT OF CONSTRUCTION. SITE CONDITIONS, EQUIPMENT OR PERSONNEL. CONTRACTOR SHALL NOTIFY THE COUNTY LAND DEVELOPMENT INSPECTOR AT PHONE (408) 299-6868 AT LEAST 24 HOURS PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
- DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE MUST SUBMIT WRITTEN REQUEST FOR FINAL INSPECTION AND ACCEPTANCE. SAID REQUEST SHALL BE DIRECTED TO THE INSPECTION OFFICE NOTED ON THE PERMIT FORM.
- THE CONTRACTOR SHALL PROVIDE TO THE COUNTY CONSTRUCTION INSPECTOR WITH PAD ELEVATION AND LOCATION CERTIFICATES, PREPARED BY THE PROJECT ENGINEER OR LAND SURVEYOR, PRIOR TO COMMENCEMENT OF THE BUILDING FOUNDATION.

### ITE PREPARATION (CLEARING AND GRUBBING)

- EXISTING TREES AUTHORIZED FOR REMOVAL, ROOTS, AND FOREIGN MATERIAL IN 2. AREAS TO BE IMPROVED WILL BE REMOVED TO AN AUTHORIZED DISPOSAL SITE AS FOLLOWS: A) TO A MINIMUM DEPTH OF TWO FEET BELOW THE FINISHED GRADE OF
  - PROPOSED ROADWAYS (EITHER PRIVATE OR TO BE DEDICATED TO
  - PUBLIC USE) B) FROM AREAS AFFECTED BY THE PROPOSED GRADING EXCEPT WHERE
- NOTED ON THE PLANS. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO MOVE OR RELOCATE UTILITY POLES AND OTHER OBSTRUCTIONS IN THE WAY OF CONSTRUCTION.
- ITILITY LOCATION, TRENCHING & BACKFILL
- CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-277-2600 A MINIMUM OF 24 HOURS BEFORE BEGINNING
- UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION OF UNDERGROUND UTILITIES. ACCURATE VERIFICATION AS TO SIZE, LOCATION, AND DEPTH OF EXISTING
- UNDERGROUND CONDUITS OR FACILITIES SHALL BE THE INDIVIDUAL CONTRACTORS RESPONSIBILITY. PLAN LOCATIONS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY. ALL UNDERGROUND INSTALLATIONS SHALL BE IN PLACE AND THE TRENCH
- BACKFILLED AND COMPACTED BEFORE PLACING AGGREGATE BASE MATERIAL OR SURFACE STRUCTURES. SURFACING MAY BE DONE IF THE UTILITY COMPANY CONCERNED INDICATES BY LETTER THAT IT WILL BORE. UNLESS SPECIFICALLY AUTHORIZED BY THE COUNTY, GAS AND WATER MAINS SHALL BE INSTALLED OUTSIDE THE PAVED AREAS.
- TRENCH BACKFILL IN EXISTING PAVEMENT AREAS SHALL BE SAND MATERIAL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS. THE STRUCTURAL SECTION FOR TRENCH REPLACEMENT SHALL CONSIST OF NOT LESS THAN 12 INCHES OF APPROVED AGGREGATE BASE MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 95% AND 4 INCHES OF HOT ASPHALT CONCRETE PLACED IN TWO LIFTS. TRENCH RESTORATION FOR HIGHER TYPE PAVEMENTS SHALL BE MADE IN KIND OR AS
- DIRECTED BY THE COUNTY TRENCH BACKFILL IN NEW CONSTRUCTION AREAS SHALL BE SAND MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 90%. THE REQUIREMENT FOR SELECT MATERIAL MAY BE WAIVED BY COUNTY IF THE NATIVE SOIL IS SUITABLE FOR USE AS TRENCH BACKFILL BUT THE COMPACTION REQUIREMENTS WILL NOT BE THEREBY WAIVED.
- BACKFILL AND TRENCH RESTORATION REQUIREMENTS SHALL APPLY AS MINIMUM STANDARDS TO ALL UNDERGROUND FACILITIES INSTALLED BY OTHER FIRMS OR PUBLIC AGENCIES.

#### ETAINING WALLS

- REINFORCED CONCRETE AND CONCRETE MASONRY UNIT RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR AND ENGINEER OF RECORD PRIOR TO POURING THE FOUNDATION AND FORMING THE WALL.
- SEGMENTAL BLOCK RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR.

#### GRADING

- 1. EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR SHALL BE HAULED AWAY FROM THE SITE TO A COUNTY APPROVED DISPOSAL SITE. WHERE FILL MATERIAL IS TO BE PLACED ON NATURAL GROUND, IS SHALL REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD. BE STRIPPED OF ALL VEGETATION. TO ACHIEVE A PROPER BOND WITH THE 3. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY (NON-TOXIC) SOIL FILL MATERIAL, THE SURFACE OF THE GROUND SHALL BE SCARIFIED TO DEPTH STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING OF 6" BEFORE FILL IS PLACED. WHERE NATURAL GROUND IS STEEPER THAN AREAS AT CONSTRUCTION SITES. 5:1, IT SHALL BE BENCHED AND THE FILL KEYED IN TO ACHIEVE STABILITY. 4. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING WHERE NEW FILL IS TO BE PLACED ON EXISTING FILL THE EXISTING FILL SHALL AREAS AND STAGING AREAS AT CONSTRUCTION SITES. THE USE OF DRY BE REMOVED UNTIL MATERIAL COMPACTED TO 90% RELATIVE COMPACTION IS POWDER SWEEPING IS PROHIBITED. EXPOSED. THEN THE NEW FILL MATERIAL SHALL BE PLACED AS PER THESE SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CONSTRUCTION NOTES. FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS CARRIED ONTO ADJACENT PUBLIC STREETS. THE USE OF DRY POWDER NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS, BEFORE COMPACTION BEGINS. SWEEPING IS PROHIBITED THE FILL SHALL BE BROUGHT TO A WATER CONTENT THAT WILL PERMIT ALL CONSTRUCTION VEHICLES, EQUIPMENT AND DELIVERY TRUCKS SHALL PROPER COMPACTION BY EITHER 1) AERATING THE FILL IF IT IS TOO WET OR HAVE A MAXIMUM IDLING TIME OF 5 MINUTES (AS REQUIRED BY THE 2) MOISTENING THE FILL WITH WATER IF IT IS TOO DRY. EACH LIFT SHALL BE CALIFORNIA AIRBORNE TOXIC CONTROL MEASURE TITLE 13, SECTION 2485 OF THOROUGHLY MIXED BEFORE COMPACTION TO ENSURE A UNIFORM DISTRIBUTION CALIFORNIA CODE OF REGULATIONS (CCR)). ENGINES SHALL BE SHUT OFF IF OF MOISTURE. CONSTRUCTION REQUIRES LONGER IDLING TIME UNLESS NECESSARY FOR EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE. PROPER OPERATION OF THE VEHICLE.
- SURPLUS EARTH FILL MATERIAL SHALL BE PLACED IN A SINGLE (8" MAX) THICK LAYER COMPACTED TO WITHSTAND WEATHERING IN THE AREA(S)
- DELINEATED ON THE PLAN. NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS. THE UPPER 6" OF SUBGRADE BELOW DRIVEWAY ACCESS ROAD OR PARKING
- AREA SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY. MAXIMUM CUT SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. MAXIMUM FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL EARTHWORK QUANTITIES

DESCRIPTION		EARTHWORK QUANTITIES ALL			EARTHWORK QUANTITIES EXCLUDING EXEMPT		MAXIMUM DEPTHS	
		CUT (-)	FILL (+)	EXEMPT?	CUT (-)	FILL (+)	CUT (-)	FILL (+)
		CY	CY	YES/NO	CY	CY	FT	FT
	MAIN HOUSE PAD (POLYLINES 5' FROM BUILDING)	379	16	YES			-10.4	4.1
BUILDING	POOL	65	7	YES			-8.3	2.4
EXEMPT	GARAGE PAD (POLYLINES 5' FROM BUILDING)	0	274	YES			0.0	5.5
	DRIVEWAY	8	52	NO	8	52	-1.0	9.8
SITE	STORM SYSTEM	67	0	NO	67	0	-5.0	0.0
WORK	WALKS/PATIO/DECK	194	180	NO	194	180	-9.0	8.7
	LANDSCAPE	67	111	NO	67	111	-2.6	8.7
	TOTALS:	780	640		336	343	<- EXEMP	TOTALS
TOTAL NET IMPORT: IMPORT (+) / EXPORT (-)		-428		CUBIC YARDS (IN-PLACE)	7		CUBIC YARDS (IN-PLACE)	

EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP 7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY

- GRADING WORK TO COORDINATE THE WORK IN THE FIELD. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
- THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95% 10. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95%
- RELATIVE COMPACTION. CONSTRUCTION SHALL BE REPLACED BY DEVELOPER'S ENGINEER AND LICENSED 11. THE GEOTECHNICAL PLAN REVIEW LETTER MUST BE REVIEWED AND APPROVED Y THE COUNTY GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY
  - ENGINEER FOR BUILDING OCCUPANCY. 12. THE PROJECT GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TESTING AND PRESENT THE RESULTS TO THE COUNTY ENGINEERING INSPECTOR PRIOR
  - O THE CONSTRUCTION OF ANY PAVED AREA. 13. GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE
  - DISCRETION OF THE SANTA CLARA COUNTY GRADING OFFICIAL. 14. TOTAL DISTURBED AREA FOR THE PROJECT
  - 15. WDID NO.\_\_
  - 16. THE INSPECTOR MAY VERIFY THAT A VALID NOTICE OF INTENT (NOI) HAS BEEN ISSUED BY THE STATE AND THAT A CURRENT AND UP TO DATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS AVAILABLE ON SITE.

REE PROTECTION

- FOR ALL TREES TO BE RETAINED WITH A CANOPY IN THE DEVELOPMENT AREA OR INTERFACES WITH THE LIMITS OF GRADING FOR ALL PROPOSED DEVELOPMENT ON SITE, THE TREES SHALL BE PROTECTED BY THE PLACEMENT OF RIGID TREE PROTECTIVE FENCING, CONSISTENT WITH THE COUNTY INTEGRATED LANDSCAPE GUIDELINES. AND INCLUDE THE FOLLOWING:
- FENCING SHOULD BE PLACED ALONG THE OUTSIDE EDGE OF THE DRIPLINE OF THE TREE OR GROVE OF TREES. THE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE CONSTRUCTION PERIOD AND SHALL BE INSPECTED PERIODICALLY FOR
- DAMAGE AND PROPER FUNCTION. FENCING SHALL BE REPAIRED, AS NECESSARY, TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES.
- SIGNAGE STATING, "WARNING- THIS FENCING SHALL NOT BE REMOVED WITHOUT PERMISSION FROM THE SANTA CLARA COUNTY PLANNING OFFICE (408) 299-5770. COUNTY OF SANTA CLARA TREE PROTECTION MEASURES MAY BE FOUND AT
- http://www.sccplanning.gov." SHALL BE PLACED ON THE TREE PROTECTIVE FENCING UNTIL FINAL OCCUPANCY. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY, TREE PROTECTIVE FENCING SHALL BE SECURELY IN PLACED AND INSPECTED BY THE LAND
- DEVELOPMENT ENGINEERING INSPECTOR. SEE EXISTING TREE PROTECTION DETAILS FOR MORE INFORMATION.

#### ACCESS ROADS AND DRIVEWAYS

- PERMIT CAS000004/ ORDER NO. 2013-0001-DWQ. DRIVEWAY LOCATIONS SHALL BE AS SHOWN ON THE IMPROVEMENT PLANS WITH DROP INLETS SHALL BE COUNTY STANDARD TYPE 5 UNLESS OTHERWISE NOTED CENTERLINE STATIONING. THE MINIMUM CONCRETE THICKNESS SHALL BE 6 ON THE PLANS. THE DEVELOPER'S ENGINEER SHALL BE RESPONSIBLE FOR THE INCHES THROUGHOUT (WITH A MAXIMUM APPROACH SLOPE OF 1 1/4 INCHES PROPER LOCATION OF DROP INLETS. WHERE STREET PROFILE GRADE EXCEEDS PER FOOT). 6% DROP INLETS SHALL BE SET AT 500 ANGLE CURB LINE TO ACCEPT WATER 2. ALL DRIVEWAY OR COMMON ACCESS ROAD SECTIONS IN EXCESS OF 15
- OR AS SHOWN ON THE PLANS. LONGITUDINAL SLOPE MUST BE PAVED WITH A MINIMUM 2-INCH ASPHALT LIFT WHERE CULVERTS ARE INSTALLED THE DEVELOPER SHALL BE RESPONSIBLE OR FULL DEPTH CONCRETE LIFT PRIOR TO ANY COMBUSTIBLE FRAMING. FOR GRADING THE OUTLET DITCH TO DRAIN TO AN EXISTING SWALE OR TO AN THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING OPEN AREA FOR SHEET FLOW.

DATE

\_\_\_\_\_

- PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS FOR EMERGENCY VEHICLES AND LOCAL RESIDENTS. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THE PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE
- ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO THE PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
- ALL WORK IN THE COUNTY ROAD RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE ROADS AND AIRPORTS DEPARTMENT. EACH INDIVIDUAL ACTIVITY REQUIRES A SEPARATE PERMIT - I.E. CABLE, ELECTRICAL, GAS, SEWER, WATER, RETAINING WALLS, DRIVEWAY APPROACHES, FENCES, LANDSCAPING, TREE REMOVAL, STORM DRAINAGE IMPROVEMENTS, ETC..

#### TREET LIGHTING

1. PACIFIC GAS & ELECTRIC ELECTROLIER SERVICE FEE SHALL BE PAID BY THE DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE. SANITARY SEWER

- 1. THE SANITARY SEWER AND WATER UTILITIES SHOWN ON THESE PLANS ARE NOT PART OF THIS GRADING PERMIT AND ARE SHOWN FOR REFERENCE ONLY.
- 2. ALL MATERIALS AND METHODS OF CONSTRUCTION OF SANITARY SEWERS SHALL CONFORM TO THE SPECIFICATIONS OF THE JURISDICTION INVOLVED. INSPECTION OF SANITARY SEWER WORK SHALL BE DONE BY SAID JURISDICTION.

#### PORTLAND CEMENT CONCRETE

CONCRETE USED FOR STRUCTURAL PURPOSES SHALL BE CLASS "A" (6 SACK PER CUBIC YARD) AS SPECIFIED IN THE STATE STANDARD SPECIFICATIONS. CONCRETE PLACED MUST DEVELOP A MINIMUM STRENGTH FACTOR OF 2800 PSI IN A SEVEN-DAY PERIOD. THE CONCRETE MIX DESIGN SHALL BE UNDER THE CONTINUAL CONTROL OF THE COUNTY INSPECTOR

#### AIR QUALITY, LANDSCAPING AND EROSION CONTROI

- 7. ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MILES PER HOUR. 8. ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND PROPERLY TUNED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL EQUIPMENT SHALL BE CHECKED BY A CERTIFIED MECHANIC AND DETERMINED TO BE RUNNING IN PROPER CONDITION PRIOR TO OPERATION.
- 9. POST A SIGN THAT IS AT LEAST 32 SQUARE FEET MINIMUM 2 INCHES LETTER HEIGHT VISIBLE NEAR THE ENTRANCE OF CONSTRUCTION SITE THAT IDENTIFIES THE FOLLOWING REQUIREMENTS. OBTAIN ENCROACHMENT PERMIT FOR SIGN FROM ROADS DEPARTMENT OR OTHER APPLICABLE AGENCY IF REQUIRED.
  - A. 15 MILES PER HOUR (MPH) SPEED LIMIT . 5 MINUTES MAXIMUM IDLING TIME OF VEHICLES
- TELEPHONE NUMBER TO CONTACT THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGARDING DUST COMPLAINTS. NOTE PHONE NUMBER OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AIR POLLUTION COMPLAIN HOTLINE OF 1-800-334-6367
- 10. ALL FILL SLOPES SHALL BE COMPACTED AND LEFT IN A SMOOTH AND FIRM CONDITION CAPABLE OF WITHSTANDING WEATHERING. 11. ALL EXPOSED DISTURBED AREAS SHALL BE SEEDED WITH BROME SEED SPREAD AT THE RATE OF 5 LB. PER 1000 SQUARE FEET (OR APPROVED EQUAL). SEEDING AND WATERING SHALL BE MAINTAINED AS REQUIRED TO ENSURE GROWTH.
- 12. ALL DITCHES SHALL BE LINED PER COUNTY STANDARD SD8. 13. ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED WITH EFFECTIVE ENTRANCE & OUTFALL EROSION CONTROLS E.G. SACKED CONCRETE RIP-RAP. ENERGY DISSIPATERS SHALL BE INSTALLED AT ALL DITCH OUTFALLS. WHERE OUTFALLS ARE NOT INTO AN EXISTING CREEK OR WATER COURSE, RUNOFF SHALL BE RELEASED TO SHEET FLOW.
- 14. PRIOR TO GRADING COMPLETION AND RELEASE OF THE BOND. ALL GRADED AREAS SHALL BE RESEEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADE SLOPES AND REDUCE THE POTENTIAL FOR EROSION OF THE SUBJECT SITE. 15. PERMANENT LANDSCAPING SHOWN ON THE ATTACHED LANDSCAPE PLAN MUST BE INSTALLED AND FIELD APPROVED BY THE COUNTY PLANNING OFFICE PRIOR
- TO FINAL APPROVAL BY THE COUNTY ENGINEER, AND FINAL OCCUPANCY RELEASE BY THE BUILDING INSPECTION OFFICE. 16. THE OWNER SHALL PREPARE AND PRESENT A WINTERIZATION REPORT TO THE COUNTY INSPECTOR FOR REVIEW PRIOR TO OCTOBER 15TH OF EVERY YEAR. 17. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL INSTALL AND MAINTAIN CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPS) ON THE PROJECT SITE AND WITHIN THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY THROUGHOUT THE DURATION OF THE CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL TO PREVENT THE DISCHARGE OF POLLUTANTS
- INCLUDING SEDIMENT, CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, AND WASTE INTO THE SANTA CLARA COUNTY RIGHT-OF-WAY, STORM SEWER WATERWAYS, ROADWAY INFRASTRUCTURE. BMPS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING: A. PREVENTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND
- EQUIPMENT LAYDOWN / STAGING AREAS. B. PREVENTION OF TRACKING OF MUD, DIRT, AND CONSTRUCTION
- MATERIALS ONTO THE PUBLIC ROAD RIGHT-OF-WAY. . PREVENTION OF DISCHARGE OF WATER RUN-OFF DURING DRY AND WET
- WEATHER CONDITIONS ONTO THE PUBLIC ROAD RIGHT-OF-WAY 18. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN YARDS. SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY.
- 19. EROSION CONTROL PLAN IS A GUIDE AND SHALL BE AMENDED AS NECESSARY TO PREVENT EROSION AND ILLICIT DISCHARGES ON A YEAR AROUND BASIS. DEPENDING ON THE SEASON, WEATHER, AND FIELD CONDITIONS. EROSION CONTROL MEASURES IN ADDITION TO THOSE NOTED IN THE PERMITTED PLANS MAY BE NECESSARY. FAILURE TO INSTALL SITE SITE AND SITUATIONALY APPROPRIATE EROSION CONTROL MEASURES MAY RESULT IN VIOLATIONS, FINES, AND A STOPPAGE OF WORK.

#### STORM DRAINAGE AND STORMWATER MANAGEMENT

- DEVELOPER IS RESPONSIBLE FOR ALL NECESSARY DRAINAGE FACILITIES WHETHER SHOWN ON THE PLANS OR NOT AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THE ADEQUACY AND CONTINUED MAINTENANCE OF THESE FACILITIES IN A MANNER WHICH WILL PRECLUDE ANY HAZARD TO LIFE, HEALTH, OR DAMAGE TO ADJOINING PROPERTY, CONSISTENT WITH NPDES PERMIT CAS612008 / ORDER NO. R2-2009-0047 AND NPDES
- UPON INSTALLATION OF DRIVEWAY CONNECTIONS, PROPERTY OWNERS SHALL PROVIDE FOR THE UNINTERRUPTED FLOW OF WATER IN ROADSIDE DITCHES. THE COUNTY SHALL INSPECT UNDERGROUND DRAINAGE IMPROVEMENTS AND STORMWATER MANAGEMENT FEATURES PRIOR TO BACKFILL.

#### AS-BUILT PLANS STATEMENT

THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (\_\_\_\_ WERE) (\_\_\_ WERE NOT) MINOR FIELD CHANGES - MARKED WITH THE SYMBOL (^). THERE (\_\_\_WERE) WERE NOT) PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL riangle .

NOTE: THIS STATEMENT IS TO BE SIGNED BY THE PERSON AUTHORIZED BY THE COUNTY ENGINEER TO PERFORM THE INSPECTION WORK. A REPRODUCIBLE COPYOF THE AS-BUILT PLANS MUST BE FURNISHED TO THE COUNTY ENGINEER AFTERCONSTRUCTION.

SIGNATURE

#### Geotechnical engineer observation

A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGIC REPORTS SHALL BE SUBMITTED PRIOR TO THE GRADING COMPLETION AND RELEASE OF THE BOND.

![](_page_6_Figure_97.jpeg)

#### SURVEY MONUMENT PRESERVATION

- 1. THE LANDOWNER / CONTRACTOR MUST PROTECT AND ENSURE THE PERPETUATION OF SURVEY MONUMENTS AFFECTED BY CONSTRUCTION
- ACTIVITIES. 2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE, STAKE, AND FLAG OR OTHERWISE IDENTIFY WITH PAINT OR OTHER MARKINGS ALL PERMANENT SURVEY MONUMENTS OF RECORD AND ANY UNRECORDED MONUMENTS THAT ARE DISCOVERED THAT ARE WITHIN 50 FEET OF THE CONSTRUCTION ACTIVITY.
- 3. THE LANDOWNER, CONTRACTOR AND/OR ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING MONUMENT, CORNER STAKE, OR ANY OTHER PERMANENT SURVEYED MONUMENT SHALL CAUSE TO HAVE A LICENSED LAND SURVEYOR OR CIVIL ENGINEER, AUTHORIZED TO PRACTICE SURVEYING, ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE COUNTY SURVEYOR'S OFFICE PRIOR TO DISTURBING SAID MONUMENTS AND RESET PERMANENT MONUMENT(S) IN THE SURFACE OF THE NEW CONSTRUCTION OR SET A WITNESS MONUMENT(S) TO PERPETUATE THE LOCATION IF ANY PERMANENT MONUMENT COÙLD BE DESTROYED, DAMAGED, COVERED, DISTURBED, OR OTHERWISE OBLITERATED. THE LICENSED LAND SURVEYOR OR CIVIL ENGINEER SHALL FILE A CORNER RECORD OR RECORD OF SURVEY WITH COUNTY SURVEYOR PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.

#### ABBREVATIONS

- AC = ASPHALT CONCRETEAD = AREA DRAIN
- BC = BEGIN CURVEBS = BOTTOM OF STAIR
- BU = BUBBLE UPBVC = BEGIN VERTICAL CURVE
- BRW = BOTTOM OF RETAINING WALL CB = CATCH BASIN
- CL = CENTERLINECO = CLEANOUT
- DS = DOWNSPOUT WITH SPLASH BOX
- EC = END CURVEELEV. = ELEVATION
- EVC = END VERTICAL CURVE EX. = EXISTING
- $F/C = FACE \ OF \ CURB$ FF = FINISHED FLOOR ELEVATION
- FH = FIRE HYDRANT
- FL = FLOW LINEGB = GRADE BREAK

- GFF = GARAGE FINISH FLOOR
- HP = HIGH POINT
- HC = HANDICAP UNITINV = INVFRT
- LP = LOW POINTPAD = PAD ELEVATIONPCC = PORTLAND CEMENT CONCRETE PL = PROPERTY LINE PV = PAVEMENT GRADEPVC = POLYVINYL CHLORIDE PIPEPVI = POINT OF VERTICAL INTERSECTION RCP = REINFORCED CONCRETE PIPE ROW = RIGHT OF WAYS=.004> SLOPE SD = STORM DRAIN SDMH = STORM DRAIN MANHOLE SG = SUBGRADE FLEVATIONSS = SANITARY SEWER SSMH = SANITARY SEWER MANHOLE STA = STATION  $TC = TOP \ OF \ CURB$ TF = TOP OF FENCETRW = TOP OF RETAINING WALL $TS = TOP \ OF \ STAIR$ TW = TOP OF WALLVCP = VITRIFIED CLAY PIPE WM = WATER METER WV = WATER VALVE

INSPECTION.

COUNTY OF SANTA CLARA DEPT.	OF ROADS AND AIRPORTS
ISSUED BY:	DATE:
ENCROACHMENT PERMIT NO.	

NO WORK SHALL BE DONE IN THE COUNTY'S RIGHT-OF-WAY WITHUOT AN ENCROACHEMENT PERMIT, INCLUDING THE STAGING OF CONSTRUCTION MATERIAL AND THE PLACEMENT OF PORTABLE TOILETS.

#### ENGINEER'S STATEMENT

I HEREBY STATE THAT THESE PLANS ARE IN COMPLIANCE WITH ADOPTED COUNTY STANDARDS, THE APPROVED TENTATIVE MAP (OR PLAN) AND CONDITIONS OF APPROVAL PERTAINING THERETO DATED

![](_page_6_Picture_122.jpeg)

### COUNTY ENGINEER'S NOTE

ISSUANCE OF A PERMIT AUTHORIZING CONSTRUCTION DOES NOT RELEASE THE DEVELOPER, PERMITTEE OF ENGINEER FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS OR OMISSIONS CONTAINED IN THE PLANS. IF, DURING THE COURSE OF CONSTRUCTION, THE PUBLIC INTEREST REQUIRES A MODIFICATION OF (OR DEPARTURE FROM) THE SPECIFICATIONS OF THE PLANS, THE COUNTY SHALL HAVE THE AUTHORITY TO REQUIRE THE SUSPENSION OF WORK, AND THE NECESSARY MODIFICATION OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.

CHRISTOPHER L. FREITAS 42107 R.C.E. NO.

![](_page_6_Picture_129.jpeg)

![](_page_6_Figure_130.jpeg)

#### VICINITY MAP

McGill Rd

![](_page_6_Figure_132.jpeg)

### EXISTING TREE PROTECTION DETAILS

. PRIOR TO THE COMMENCEMENT OF ANY GRADING, TREE PROTECTIVE FENCING SHALL BE IN PLACE IN ACCORDANCE WITH THE TREE PRESERVATION PLAN AND INSPECTED BY A CERTIFIED ARBORIST. THE ARBORIST SHALL MONITOR CONSTRUCTION ACTIVITY TO ENSURE THAT THE TREE PROTECTION MEASURES ARE IMPLEMENTED AND ADHERED TO DURING CONSTRUCTION. THIS CONDITION SHALL BE INCORPORATED INTO THE GRADING PLANS. 2. FENCE SHALL BE MINIMUM 5 FEET TALL CONSTRUCTED OF STURDY MATERIAL (CHAIN-LINK OR EQUIVALENT STRENGTH/ DURABILITY). 3. FENCE SHALL BE SUPPORTED BY VERTICAL POSTS DRIVEN 2 FEET (MIN) INTO

THE GROUND AND SPACED NOT MORE THAN 10 FEET APART. 4. TREE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE DURING THE CONSTRUCTION PERIOD, INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION, REPAIRED AS NECESSARY TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES, AND REMAIN IN PLACE UNTIL THE FINAL

5. A SIGN THAT INCLUDES THE WORDS, "WARNING: THIS FENCE SHALL NOT BE REMOVED WITHOUT THE EXPRESSED PERMISSION OF THE SANTA CLARA COUNTY PLANNING OFFICE," SHALL BE SECURELY ATTACHED TO THE FENCE IN A VISUALLY PROMINENT LOCATION.

![](_page_6_Figure_137.jpeg)

## McGILL ROAD PRELIMINARY GRADING PLAN \_ANDS OFKHANDARE, MILIND/ DOBHAL

#### SCOPE OF WORK

1. THE DEVELOPER IS RESPONSIBLE FOR THE INSTALLATION OF THE WORK PROPOSED ON THE EROSION CONTROL PLAN. THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE DESIGN OF THE EROSION CONTROL PLANS AND ANY MODIFICATIONS OF THE EROSION COTROL PLANS TO PREVENT ILLICIT DISCHARGES FROM THE SITE DURING CONSTRUCTION.

LEGEND

- 1. CLEAR, GRUB AND GRADE THE SITE
- 2. CONSTRUCTION OF NEW DRIVEWAY
- 3. CONSTRUCTION OF DRAINAGE FACILITIES
- 4. UNDERGROUND UTILITIES
- 5. LANDSCAPING

#### DESCRIPTION SYMBOL BOUNDARY LINE \_\_\_\_ LOT LINE EASEMENT LIN \_\_\_\_ SIDEWALK WOOD FENCE \_\_\_\_ x\_\_\_\_ x\_\_\_\_ CHAIN LINK FENCE \_\_\_\_**o\_\_\_o**\_\_\_ RETAINING WALL \_\_\_\_\_ DRIVEWAY DRAIN INLET AREA DRAIN DROP INLET MONUMENT 魚 FIRE HYDRANT ELECTROLIER WATER METER × $\boxtimes$ AC UNIT SANITARY SEWER LATERAL STORM DRAIN \_\_\_\_\_ SD \_\_\_\_\_ SANITARY SEWER STREET LIGHT CONDUITS \_\_\_\_\_ SI \_\_\_\_\_ WATER \_\_\_\_\_ w \_\_\_\_\_ JOINT TRENCH —— JT —— \_\_\_\_\_ SVC \_\_\_\_\_ HOUSE SERVICE SLOPE ARROW ----× EXISTING CONTOUR - - - 100 - - -\_\_\_\_\_\_(100)\_\_\_\_\_ PROPOSED CONTOUR OVERLAND RELEASE DIRECTION OF SURFACE DRAINIAGE 5% SLOPE AWAY FROM BUILDING

### SHEET INDEX

СО	TITLE SHEET							
C1.0	SITE PLAN - SLOPE CALCULATIONS							
C1.1-C1.3	GRADING AND	DRAINAGE PLAN						
C1.4	EARTHWORK	QUANTITIES						
C2	CONSTRUCTIO	N DETAILS						
C3.1	COUNTY BMP	SHEET 1						
C3.2	COUNTY BMP	SHEET 2						
C3.3	EROSION CON	ITROL PLAN						
C4	TRAFFIC CONTROL PLAN							
ENGINEEF	r's name: <u>P</u>	ORFIRIO OSCAR OSUN	IA					
ADDRESS	: <u>117 BERNA</u> <u>SAN JOSE,</u> 10. <u>408</u> -772-	L RD, #70-336 CA 95119 -4381						
EMAIL: info@osunaengineering.com								
Revision 1		APN 517-24 024	Sheet					
Revision 2		Co. File	of					
Revision 3								

\_\_\_\_\_\_

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE 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 THE ENGINEER HARMLESS FROM ANY AND ALL LABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. EXCEPTING FOR LABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

![](_page_7_Picture_1.jpeg)

![](_page_7_Figure_2.jpeg)

OJECT, INCLUD CONTRACTOR ORMANCE OF TON OF THIS PRO AND THAT THE C WITH THE PERFO HOURS; ECTION NUDITIONS DURING THE COURSE OF CO NOT BE LIMITED TO NORMAL WORKING LIABILITY, REAL OR ALLEGED, IN CON APPLY CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPO SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HAR ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEG.

![](_page_8_Picture_2.jpeg)

![](_page_9_Figure_0.jpeg)

![](_page_10_Figure_0.jpeg)

COJECT, INCLUI CONTRACTOR FORMANCE OF TON OF THIS PRC AND THAT THE ( WITH THE PERFC SE OF CONSTRUCTI WORKING HOURS; ), IN CONNECTION 8 SITE CONDITIONS DURING THE COUR SLY AND NOT BE LIMITED TO NORMAL AND ALL LIABILITY, REAL OR ALLEGED, CONTINUOUS FROM ANY APPLY - AND COMPLETE RESPO S REQUIREMENT SHALL AND THE ENGINEER HAR S EDOM THE SOLE NED UME SOLE , THAT THIS OWNER AN L Q Q AND AND SONS SONS PERS CONTRACTOR AG SAFETY OF ALL SHALL DEFEND,

"T" OUTFALL. SEE DETAIL D ON SHEET C2.2

![](_page_10_Figure_3.jpeg)

![](_page_11_Figure_0.jpeg)

NCLU ACTOR ICE OF F THIS PK THAT THE THE PERI S & S G THE COUR. TO NORMAL OR ALLEGED, IME SOLE AND COMPLETE RESF THAT THIS REQUIREMENT SHALL OWNER AND THE ENGINEER HA PROPERTY: PROPERTY: D HOLD THE SREES THAT HE PERSONS AND INDEMNIFY AND CT\_FXCFDTIALY CONTRACTOR AG SAFETY OF ALL SHALL DEFEND,

![](_page_12_Figure_0.jpeg)

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![](_page_13_Figure_0.jpeg)

![](_page_14_Figure_1.jpeg)

#### STANDARD BEST MANAGEMENT PRACTICE NOTES

- 1. Solid and Demolition Waste Management: Provide designated waste collection areas and containers on site away from streets, gutters, storm drains, and waterways, and arrange for regular disposal. Waste containers must be watertight and covered at all times except when waste is deposited. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C3) or latest.
- 2. <u>Hazardous Waste Management</u>: Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material hauler. Hazardous wastes shall be stored and properly labeled in sealed containers constructed of suitable materials. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-5 to C-6) or latest.
- 3. <u>Spill Prevention and Control</u>: Provide proper storage areas for liquid and solid materials, including chemicals and hazardous substances, away from streets, gutters, storm drains, and waterways. Spill control materials must be kept on site where readily accessible. Spills must be cleaned up immediately and contaminated soil disposed properly. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-7 to C-8, C-13 to C-14) or latest.
- 4. <u>Vehicle and Construction Equipment Service and Storage</u>: An area shall be designated for the maintenance, where onsite maintenance is required, and storage of equipment that is protected from stormwater run-on and runoff. Measures shall be provided to capture any waste oils, lubricants, or other potential pollutants and these wastes shall be properly disposed of off site. Fueling and major maintenance/repair, and washing shall be conducted off-site whenever feasible. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C9) or latest.
- 5. Material Delivery, Handling and Storage: In general, materials should not be stockpiled on site. Where temporary stockpiles are necessary and approved by the County, they shall be covered with secured plastic sheeting or tarp and located in designated areas near construction entrances and away from drainage paths and waterways. Barriers shall be provided around storage areas where materials are potentially in contact with runoff. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-11 to C-12) or latest.
- 6. <u>Handling and Disposal of Concrete and Cement</u>: When concrete trucks and equipment are washed on-site, concrete wastewater shall be contained in designated containers or in a temporary lined and watertight pit where wasted concrete can harden for later removal. If possible have concrete contractor remove concrete wash water from site. In no case shall fresh concrete be washed into the road right-of-way. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-15 to C-16) or latest.
- 7. Pavement Construction Management: Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution and properly disposing of wastes. Avoid paving in the wet season and reschedule paving when rain is in the forecast. Residue from saw-cutting shall be vacuumed for proper disposal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-17 to C-18) or latest.
- 8. Contaminated Soil and Water Management: Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediating contaminated soil should occur promptly after identification and be specific to the contaminant identified, which may include hazardous waste removal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-19 to C-20) or latest.
- 9. <u>Sanitary/Septic Water Management</u>: Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste haulers should be used. Secondary containment should be provided for all sanitary facilities. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-21) or latest.
- 10. Inspection & Maintenance: Areas of material and equipment storage sites and temporary sanitary facilities must be inspected weekly. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.

Best Management Practices and Erosion Control Details Sheet 1 County of Santa Clara

#### STANDARD EROSION CONTROL NOTES

1. Sediment Control Management:

Tracking Prevention & Clean Up: Activities shall be organized and measures taken as needed to prevent or minimize tracking of soil onto the public street system. A gravel or proprietary device construction entrance/exit is required for all sites. Clean up of tracked material shall be provided by means of a street sweeper prior to an approaching rain event, or at least once at the end of each workday that material is tracked, or, more frequently as determined by the County Inspector. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-31 to B-33) or latest.

Storm Drain Inlet and Catch Basin Inlet Protection: All inlets within the vicinity of the project and within the project limits shall be protected with gravel bags placed around inlets or other inlet protection. At locations where exposed soils are present, staked fiber roles or staked silt fences can be used. Inlet filters are not allowed due to clogging and subsequent flooding. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-49 to B-51) or latest.

Storm Water Runoff: No storm water runoff shall be allowed to drain in to the existing and/or proposed underground storm drain system or other above ground watercourses until appropriate erosion control measures are fully installed.

<u>Dust Control</u>: The contractor shall provide dust control in graded areas as required by providing wet suppression or chemical stabilization of exposed soils, providing for rapid clean up of sediments deposited on paved roads, furnishing construction road entrances and vehicle wash down areas, and limiting the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

Stockpiling: Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures(tarps, straw bales, silt fences, ect.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.

- 2. Erosion Control: During the rainy season, all disturbed areas must include an effective combination of erosion and sediment control. It is required that temporary erosion control measures are applied to all disturbed soil areas prior to a rain event. During the non-rainy season, erosion control measures must be applied sufficient to control wind erosion at the site.
- 3. Inspection & Maintenance: Disturbed areas of the Project's site, locations where vehicles enter or exit the site, and all erosion and sediment controls that are identified as part of the Erosion Control Plans must be inspected by the Contractor before, during, and after storm events, and at least weekly during seasonal wet periods. Problem areas shall be identified and appropriate additional and/ or alternative control measures implemented immediately, within 24 hours of the problem being identified.
- 4. <u>Project Completion</u>: Prior to project completion and signoff by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.

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COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERI

- 5. It shall be the Owner's/Contractor's responsibility to maintain control of the entire construction operation and to keep the entire site in compliance with the erosion control plan.
- 6. Erosion and sediment control best management practices shall be operable year round or until vegetation is fully established on landscaped surfaces.

![](_page_14_Figure_27.jpeg)

![](_page_15_Figure_0.jpeg)

![](_page_15_Figure_1.jpeg)

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SHING/STEAM CLEANING MUST BE DONE AT AN APPROPRIATELY EQUIPPED FACILITY WHICH DRAINS TO OR WASHING MUST BE MANAGED IN SUCH A WAY THAT THERE IS NO DISCHARGE OF SOAPS, SOLVENTS, OLLUTANTS TO THE STORM DRAINS. WASH WATER SHALL DISCHARGE TO THE SANITARY SEWER, SUBJECT JNION SANITARY DISTRICT.	
PONSIBLE FOR LITTER CONTROL AND SWEEPING OF ALL PAVED SURFACES DURING CONSTRUCTION.	
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L BE INSTALLED PER SANTA CLARA COUNTY BMP SHEET 1. ON WITH EROSION CONTROL MEASURES ARE TO BE BLOCKED UNLESS THE AREA DRAINED IS	No. 70829
STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTORL MEASURES TO THE	Exp. $6-30-23$
ES SHALL BE USED AS EROSION CONTROL MEASURES. SILT FENCES MAY ONLY BE USED AS A VEHICULAR AND PEDESTRIAN TRAFFIC FROM USING NON—APPROVED ACCESS POINTS (E.G. — ALONG	07-13-2020 <u>P. Oscan Osuna</u> PORFIRIO OSCAR OSUNA
G FLAT PADS ARE TO BE TREATED WITH STRAW AND TACKIFIER AT A RATE OF 2 TONS PER ACRE <.	RCE 70829 EXP. 6-30-19
& SEDIMENT CONTROL NOTES MENT CONTROL NOTES ABOVE.	
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ABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS AND/OR PRIVATE ROADS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE COUNTY. TRACKING TO E ROADS NOT ALLOWED.	i INC. ngineering. 772–4381 neering.com
TALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT.	A SURVE SURVE SURVE OSUNDEND
NTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO . VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. NOTIFY THE COUNTY HANGES.	Info@
SEPTEMBER 20, ALL SLOPES 3:1 OR STEEPER & GREATER THAN 3 FEET HIGH SHALL BE HYDROSEEDED OR OTHER MIXTURE APPROVED BY THE COUNTY: . 30 LB/ACRE	Pian Pian NG CIVIL ENC 35119
20 LB/ACRE	DNSULT E, CA
500 LB/ACRE 000 LB/ACRE	CC
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3:1 SLOPE MAX.	PLAN CALIFORN
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<u>FIBER ROLL</u> STALLATION DETAIL	OF 12 SHFFTS

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	<ul> <li>Guidance: <ol> <li>All lanes should be a mit</li> <li>The treatment shown sha a lane closure should be</li> </ol> </li> <li>Option: <ol> <li>For short-term use on loa and wider heavy comm</li> <li>Where the opposite shows shifted by use of closely maintained.</li> <li>Additional advance ware</li> <li>Temporary traffic barrier</li> <li>The shadow vehicle may</li> <li>A truck-mounted attenue</li> <li>For short-duration work activated high-intensity</li> <li>Vehicle hazard warnin strobe lights.</li> </ol> </li> <li>Standard: <ol> <li>Vehicle-mounted sign or supplies. Sign legen not in progress.</li> <li>Shadow and work vel</li> <li>Vehicle hazard warnin flashing, oscillating, of Guidance: <ol> <li>All advance warning signs visibility for road users.</li> <li>When existing accommod 6G.02) and the roadway w Warning (W11-1) sign and presence of bicyclists in the straffic speeds in the TTC at a lane with vehicular traffic widening the outside show be considered.</li> <li>If traffic volumes make it is traveled way lane and alide</li> <li>When existing accommod 6G.02) and the roadway w path should be considered.</li> </ol> </li> </ol></li></ul>	nime ould e us verci alde y-sp ning y be aton , the g si us sl ing r st ing r st ing c, as s sh datio vidth d the tr s anne c, as s anne s anne c, as s anne c s anne s a s anne s ann s a s ann s a s a s ann s a s s s s
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#### Notes for Figure 6H-6—Typical Application 6 Shoulder Work with Minor Encroachment

mum of 10 feet in width as measured to the near face of the channelizing devices. Id be used on a minor road having low speeds. For higher-speed traffic conditions, used.

v-volume, low-speed roadways with vehicular traffic that does not include longer rcial vehicles, a minimum lane width of 9 feet may be used. der is suitable for carrying vehicular traffic and of adequate width, lanes may be spaced channelizing devices, provided that the minimum lane width of 10 feet is

ng may be appropriate, such as a ROAD NARROWS sign.

- may be used along the work space.
- e omitted if a taper and channelizing devices are used.
- r may be used on the shadow vehicle.
- the taper and channelizing devices may be omitted if a shadow vehicle with otating, flashing, oscillating, or strobe lights is used.
- signals may be used to supplement high-intensity rotating, flashing, oscillating, or

shall be mounted in a manner such that they are not obscured by equipment s on vehicle-mounted signs shall be covered or turned from view when work is

cles shall display high-intensity rotating, flashing, oscillating, or strobe lights. g signals shall not be used instead of the vehicle's high-intensity rotating, strobe lights.

hould be placed so that the path of travel for bicycles is not blocked, while maintaining

- tions for bicycle travel are disrupted or closed in a long-term duration project (see Section dth is inadequate for allowing bicyclists and motor vehicles to travel side by side, the Bicycle the SHARE THE ROAD (W16-1P) plaque should be used to advise motorists of the travel way lanes.
- and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing as a result of the TTC zone, speed reduction countermeasures should be used to reduce ne. Refer to Sections 6C.01 and 6D.03.
- and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing as a result of the TTC zone, before narrowing the outside lane other measures such as ler to allow bicyclists and motor vehicles to travel side by side through the TTC zone should
- asible, the two left lanes should be merged into one lane to avoid using the shoulder as a ing continued use for emergency purposes and bicycle travel.
- ations for bicycle travel are disrupted or closed in a long-term duration project (see Section of th is inadequate for allowing bicyclists and motor vehicles to travel side by side, a separate for bicyclists.

![](_page_17_Figure_19.jpeg)

			COUNTR	COUNTY	OF SA	ANTA CL	ARA ROADS	AND	AIRPORTS	DEPARTMENT	ST	ANDARD TRAFFIC CON
			A CONTRACTOR		5-2015	SUBMITTED:			APPROVED:			SHOULDER
			*000*	DESIGNED	DATE							
			A CAR		5-2015							
			1850	DIVAMIN	5-2015							
BY	DATE	APP'D	TA CLE	CHECKED	DATE						WORK ORDER No. XX	ADVERTISEMENT DATE:

APPROVED FOR ISSUANCE REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERING

						REVISIONS
						CITY DATE
			1			BY
RCE	O7- PORFIL	PROFE 0 No. 7 (xp. 6- 0F 13- 0 29	SSIONA SCAP 20829 -30-2. (IL CALIFO 2020 CALIFO SCAR EXP.	OSUM OSUM		19
		ENGINEERING INC.	Planning Surveying Civil Engineering	CONSULTING CIVIL ENGINEERS & LAND SURVEYORS	11/ BERNAL RD. SIE. /0–336 IEL. (408) //2–4381	SAN JOSE, CA 95119 Info@osunaengineering.com
PRELIMINARY	<b>GRADING &amp; DRAINAGE PLAN</b>	TRAFFIC CONTROL PLAN			CALIF UNVIA	Project No.: 2143 Designed:T.N./0.0. Checked: 0.0 Date: 7/19/21
(	OF	SHE C 12	ЕЕТ 5 <b>4</b> SHI	EET	S	

#### NOTES:

WASTEWATER DESIGN FLOW IS 600 GPD. BASED ON PROPOSED 5 BEDROOM SINGLE FAMILY RESIDENCE

- 1) 4" ABS GRAVITY SEWER LINE WITH MINIMUM 2% GRADIENT AND 2-WAY CLEANOUTS SPACE 50' APART MIN.
- 2 1.500 GALLON ORENCO™ FRP PROCESSING TANK WITH ADVANTEX AX20 WASTEWATER TREATMENT SYSTEM (SEE DETAIL)
- (3) 2,000 GALLON CHAPIN CONCRETE PUMP TANK WITH OSI PF1010 DISCHARGE PUMP
- 4) VERICOMM<sup>®</sup> CONTROL PANEL. REQUIRES ONE 20 AMP 120 VOLT CIRCUIT AND TWO 20 AMP 230 VOLT CIRCUITS, AND AN ACTIVE CAT 5 DATA LINE FOR PANEL TELEMETRY.
- A REMOTE AUDIBLE/VISIBLE ALARM PANEL, TYPE 4X ENCLOSURE FOR OUTDOOR USE, SHALL BE INSTALLED AT HOUSE SITE. ORENCO PRODUCT CODE: AMSENTII-W
- 5) HEADWORKS VALVE BOX ASSEMBLY (SEE DETAIL)
- 6) ZONE VALVE BOX PROVIDING AUTOMATIC DIVERSION BETWEEN PRIMARY AND SECONDARY DRAINFIELD ZONES WITH TWO SOLENOID VALVES AND 50 PSI PRESSURE REGULATOR. (SEE DETAIL)
- 7) MID-FIELD (ZONE) CHECK VALVE WITH AIR VACUUM RELIEF VALVE INSTALLED DOWNSLOPE IN 7"-ROUND VALVE BOX (TYP.) 8X. (SEE DETAIL) NOTE: MAKE CERTAIN THAT CHECK VALVES ON SUPPLY AND RETURN HEADER MANIFOLDS ARE POSITIONED BETWEEN CORRELATIVE DRIP TUBE LATERALS.)
- 8) AIR VACUUM RELIEF VALVE 4X (THREE IN 7" ROUND VALVE BOX (TYP. SEE DETAIL)
- **9**) GEOFLOW SUBSURFACE DRIP DISPERSAL SYSTEM (**ZONE 1 PRIMARY** AND **ZONE 2**) **SECONDARY**) WITH A TOTAL OF 2,500 LINEAR FEET OF GEOFLOW WASTEFLOW PC SUBSURFACE DRIP TUBING WITH LATERALS SPACED 12" APART (0.53 GPH DRIP EMITTERS SPACED 12" APART) COVERING A TOTAL OF 2,500 SQUARE FEET RESULTING IN A SOIL APPLICATION RATE OF 0.48 GPD/SF BASED ON A PEAK DESIGN FLOW RATE OF 600 GPD DOSED TO A SINGLE 1,250 SQUARE FOOT ZONE.
- **10** DRIP FIELD FLUSH VALVE BOX PROVIDING AUTOMATIC FIELD FLUSH WITH ONE SOLENOID VALVE, TWO CHECK VALVES AND ONE AIR VACUUM RELIEF VALVE (SEE DETAIL)
- 11) 48 LF TRENCH WITH 12 QUICK4 EQUALIZER 24 LOW-PROFILE INFILTRATOR CHAMBERS AND END CAPS. 1" SCH 40 PVC DRIP FIELD FLUSH RETURN LINE PLUMBED TO DISCHARGE INTO 4" CAPPED INSPECTION RISER PIPE. A SECOND 4" CAPPED INSPECTION RISER SHALL ALSO BE INSTALLED IN LAST CHAMBER
- 12 3'-DEEP INSPECTION WELL 6X (SEE DETAIL)
- (13) INSTALL A WATER LINE AND HOSE BIB (PER CALIFORNIA PLUMBING CODE) POSITIONED GREATER THAN 10' FROM THE TANKS. THIS HOSE BIB IS FOR USE WHEN SERVICING THE SYSTEM.
- 14) DESIGNATED FUTURE DRIP EXPANSION AREA (375 SF PER ZONE. 750 SF TOTAL) TO ACCOMMODATE THE POTENTIAL FUTURE 2 BEDROOM ADU (300 GPD)

**IMPORTANT!** SPECIFIED WASTEWATER DRAINFIELD DISPERSAL AREAS SHALL BE FENCED OFF PRIOR TO ANY SITE DEVELOPMENT IN ORDER TO PROHIBIT ANY GRADING EQUIPMENT OR STAGING OF MATERIALS IN THESE AREAS. IT IS IMPORTANT THAT THE NATURAL SOIL CONDITIONS IN THESE AREAS BE PRESERVED FOR PROPER FUNCTION OF THE SHALLOW SOIL DISCHARGE SYSTEM. DO NOT ALLOW SOILS IN THESE AREAS TO BE COMPACTED. DO NOT ROUTE UTILITY TRENCHES THROUGH THE PROPOSED DRAINFIELDS. ALL STORMWATER LINES, INLETS/OUTLETS AND DRAINAGEWAYS SHALL MAINTAIN THE REQUIRED DEH SETBACKS TO THE PROPOSED DRAINFIELDS.

ALL BUILDING PLANS PREPARED FOR THE PROJECT SHOULD INCLUDE THIS NOTE.

![](_page_18_Figure_19.jpeg)

![](_page_18_Figure_20.jpeg)

![](_page_18_Figure_21.jpeg)

## FIELD FLUSH VALVE BOX DETAIL

![](_page_18_Figure_23.jpeg)

![](_page_18_Figure_24.jpeg)

![](_page_18_Figure_26.jpeg)

WITH 1" TO 1-1/2" SPACING TO PREVENT BURROWING ANIMALS FROM ENTERING AND FILLING THE VALVE BOXES.

#### PROJECT DESCRIPTION

An onsite wastewater system specifying enhanced treatment using alternative technology is proposed to serve new development of a five bedroom dwelling to be constructed at 17025 McGill Rd, Saratoga in Santa Clara County, California. An "alternative" system with subsurface drip dispersal is specified to provide supplemental treatment of the wastewater discharged on the site to address the limiting soil conditions and adjacent steep slopes on the subject property.

#### **CONSTRAINTS & DESIGN CRITERIA**

- The proposed AdvanTex<sup>™</sup> wastewater treatment and dispersal system is designed to serve a 5 bedroom dwelling with a design wastewater flow of 600 gallons per day (gpd) per County DEH guidelines.
- Soil profiles logged and recorded in the proposed drainfield area did not exhibit any evidence of seasonally high groundwater conditions. Seasonally high groundwater is estimated to occur at greater than 5' below grade.
- No wells, springs or watercourses are situated within 100' of the proposed Onsite Wastewater Treatment System.

#### SPECIFICATIONS

- 1. Building Sewer Lines, & Proposed Processing Tank.
- 1.1. A 4" ABS building sewer line shall be installed to convey all raw sewage from dwelling to the processing tank. All gravity sewer piping must maintain a minimum 2% continuous gradient.
- All wastewater including graywater shall be discharged to the processing tank.
- 1.2. Locate a 2-way, 4" ABS cleanout fittings on the building sewer to facilitate snaking and line location. 1.3. A 1,500 gallon, watertight, Fiberglass Reinforced Polyester (FRP) tank, from Orenco Systems<sup>®</sup>, Inc.(OSI) is specified for use as a processing tank with the proposed AdvanTex<sup>™</sup> (Mode 1) treatment system. The tank shall have 24" diameter OSI access risers with fiberglass, bolt-down lids (brown). The tank shall be installed according to the manufacturers guidelines including the 6" concrete collar above tank flange to prevent floatation. Tanks sufficiently close to roadway for pumper truck to access.
- 1.4. The tank hole shall be excavated so that the tank sits level. Install the access risers with a watertight joint using the adhesives supplied by manufacturer.
- 1.5. Install the tank inlet fitting with a watertight joint. Cap off or use a test plug on this fitting and fill the tank with clean water 2" above the joint between the riser and the tank top. Repair any leaks.
- 1.6. Obtain a watertight tank inspection by EH and the designer or distributor with 24 hours notice to each. 1.7. Install the recirculating splitter valve (RSV) in the outlet side of the tank according to the installation manual instructions.
- 2. AdvanTex™ Treatment System
- 2.1. An AdvanTex<sup>™</sup> treatment system includes a Biotube<sup>®</sup> pump package for recirculation, RSV, split-flow tee, a AX20 packed-bed filter pod(s) and a telemetry-enabled VeriComm<sup>®</sup> control panel.
- 2.2. Install the AdvanTex<sup>™</sup> system according to the installation instructions and in the location shown on the plan The filter pod shall be installed with the lid (brown) 2"-4" above final grade. A more shallow burial is possible, *but only if approved by the property owner.*
- 2.3. The pressurized transport pipe from the recirc. pump to the filter pod shall be 1.0" schedule 40 PVC.
- This pressurized line shall be plumbed to the side of the pod opposite of the 2" gravity drain (vent side) 2.4. The filtrate gravity return pipe from the filter pod to the RSV and on to the discharge pump basin shall be 2" schedule 40 PVC. Assure continuous fall on the return piping as venting through this pipe is critical. 2.5. Test the squirt height on the filter pod. It should be approximately 3'-4' high.
- Discharge Pump Tank and Filtrate Pumping
- 3.1. A 2,000 gallon Chapin concrete pump tank shall be installed adjacent to the processing tank.
- 3.2. The pump tank shall be installed according to the manufacturer's instructions and be made watertight.
- 3.3. Install the pump and float tree according to the instructions provided by manufacturer/dealer.
- 3.4. A 1 hp OSI high head effluent pump (PF1010) is specified for pressurized dispersal discharge. 3.5. The filtrate transport pipe to dispersal system shall be 1.0" schedule 40 PVC.

#### . Subsurface Drip Dispersal System

- 4.1. Approximately 2,500 lineal feet of Geoflow PC drip tubing (with 0.5gph emitters spaced 12" apart) shall be installed with a minimum of 12" lateral spacing covering an area of at least 2,500 square feet in the configuration shown on the plan. The drip field shall be divided evenly into two zones. The 12 air/vacuum relief valves specified shall be supplied by Geoflow. An additional 750 square feet of area shall be reserved and designated as future drip expansion to accommodate a potential future 2 bedroom ADU.
- 4.2. The drip dispersal field shall be installed according to the instructions in the Geoflow installation manual Installer shall assure that each drip lateral be installed in such a manner as to reduce the potential of low head drainage as described in the installation manual. The actual location and layout of the dispersal field may vary per owner's, landscaper's or installer's discretion with approval by designer.
- 4.3. The drip tubing lines shall be buried 8"-10" deep and spaced no closer than 12" apart. The supply header shall be installed 12" - 18" below grade. It may be easier to install the drip tubing first, and the supply and return headers afterwards. Great care must be taken to keep dirt out of the drip tubing and supply and return piping. All piping shall be thoroughly flushed and pressure tested prior to use.
- 4.4. The drip field flush return line is specified to be routed to a 48'-long trench with 12 Quick4 Equalizer 24 Infiltrator chamber
- 4.5. All pressurized piping shall be schedule 40 PVC and labelled according to current UPC requirements
- "treated wastewater do not drink". Pressure piping shall be pressure-rated to 150 psi and solvent welded.
- 4.6. Concrete thrust blocks, or equivalent restraint, shall be provided at sharp changes in piping direction.
- 4.7. Drainfield shall meet Santa Clara County guidelines for Tree Protection and Preservation for Land Use Applications. Refer to the Santa Clara County Odrinance C-16 Tree Preservation Removal
- . Installer Qualifications and Responsibilities
- 5.1. The system installer shall be licensed by the State of California, Department of Consumer Affairs, to install septic systems. Installer certification is required by the local AdvanTex<sup>™</sup> dealer. The installer is required to fully read and understand the AdvanTex<sup>™</sup> and Geoflow manuals prior to the commencement of work.
- 5.2. All piping shall conform to the current edition of the Plumbing Code.
- 5.3. The installer shall be responsible for locating any property lines, underground utilities or piping. Any damage to these facilities shall be the responsibility of the installer. 5.4. Installer shall be responsible for assuring that traffic barrier prevents encroachment closer than 20' from
- proposed OWTS components. 5.5. A pre-construction conference with designer, inspector and dealer/service provider shall be arranged prior to the commencement of work. Pre-construction conference should include construction procedures, staking or marking of the drip lines, supply and return piping, pump system and appurtenances to be provided. Construction inspections, watertight tank test inspection, AdvanTex<sup>™</sup> installation inspection, and final operation of system shall be made by designer (BioSphere Consulting) or local distributor and system service provider and the County of Santa Clara Department of Environmental Health (408-918-3400). Construction inspection should include inspection of the following: water tightness of effluent dosing (pump) tank, drip field layout, piping materials and installation, and all associated valves and connections, hydraulic testing of the drip system and functionality and setting of all control devices. Final inspection shall be performed in order to verify that all construction elements are in conformance with the approved plans, specifications, and manufacturer recommendations; all inspection wells are installed; and erosion control has been completed. The installer shall give at least 24 hours notice to each party for all inspections. Designer shall provide final installation approval letter and as-built drawings per DEH requirements.

#### 5. Electrical Work

- 6.1. The VeriComm<sup>®</sup> control panel shall be installed in the location shown on the map *with the bottom of the* panel box at 51" from the ground surface.
- 6.2. One, 20 amp, 120V electrical circuit and two 20 amp, 230V electrical circuits shall be extended to the VeriComm<sup>®</sup> panel in a single conduit. Underground circuits in separate conduits shall be installed from the panel to the recirculation pump and discharge pump. A separate underground conduit containing a live CAT5 phone line shall be installed to the VeriComm<sup>®</sup> panel. The system will not be final led until everything (including panel telemetry) is functional.
- 6.3. All work shall conform to the California Electrical Code and the contractor shall be responsible for obtaining any electrical permits required.

#### . Site Clean up and Erosion Control Measures

- 7.1. All excavated areas shall be smoothed and all construction debris shall be removed from the site. 7.2. All disturbed soils shall be seeded and mulched. Erosion Control Mix seed shall be used at the coverage
- recommended on the package for all disturbed soil.
- 7.3. Straw shall be used to cover all disturbed soil.
- 7.4. PER DIVISION C12, CHAPTER III OF THE COUNTY CODE (Sec. C12-513. Temporary erosion control.) "The permittee and any person(s) doing, causing or directing the grading shall install and maintain all precautionary measures necessary to protect adjacent watercourses and public or private property from damage by erosion, flooding, or deposition of mud or debris originating from the site. Precautionary measures must include provisions of properly designed erosion prevention and sediment control measures, so that downstream properties are not affected by upstream erosion or sediment transport by stormwater."

### PUMP SELECTION CHART

![](_page_19_Figure_48.jpeg)

![](_page_19_Figure_50.jpeg)

![](_page_19_Figure_52.jpeg)

![](_page_19_Figure_53.jpeg)

PRE-CAST

Proje	ct Location:	17025 McGill Rd, Saratoga, California [Santa					
Property Owner: Milind Khandare							
Mailing Address: 560 Hope St, Apt 27, Mountain View, CA 94041							
Owne	r Phone #:	(312) 607-9870					
Date:	05/03/18	By: Andrew Brownstone					
REVISION	$\frac{06}{04}$		<b>Job No.:</b> 21006	APN: 517-24-02	4 <b>2</b> OF 2		