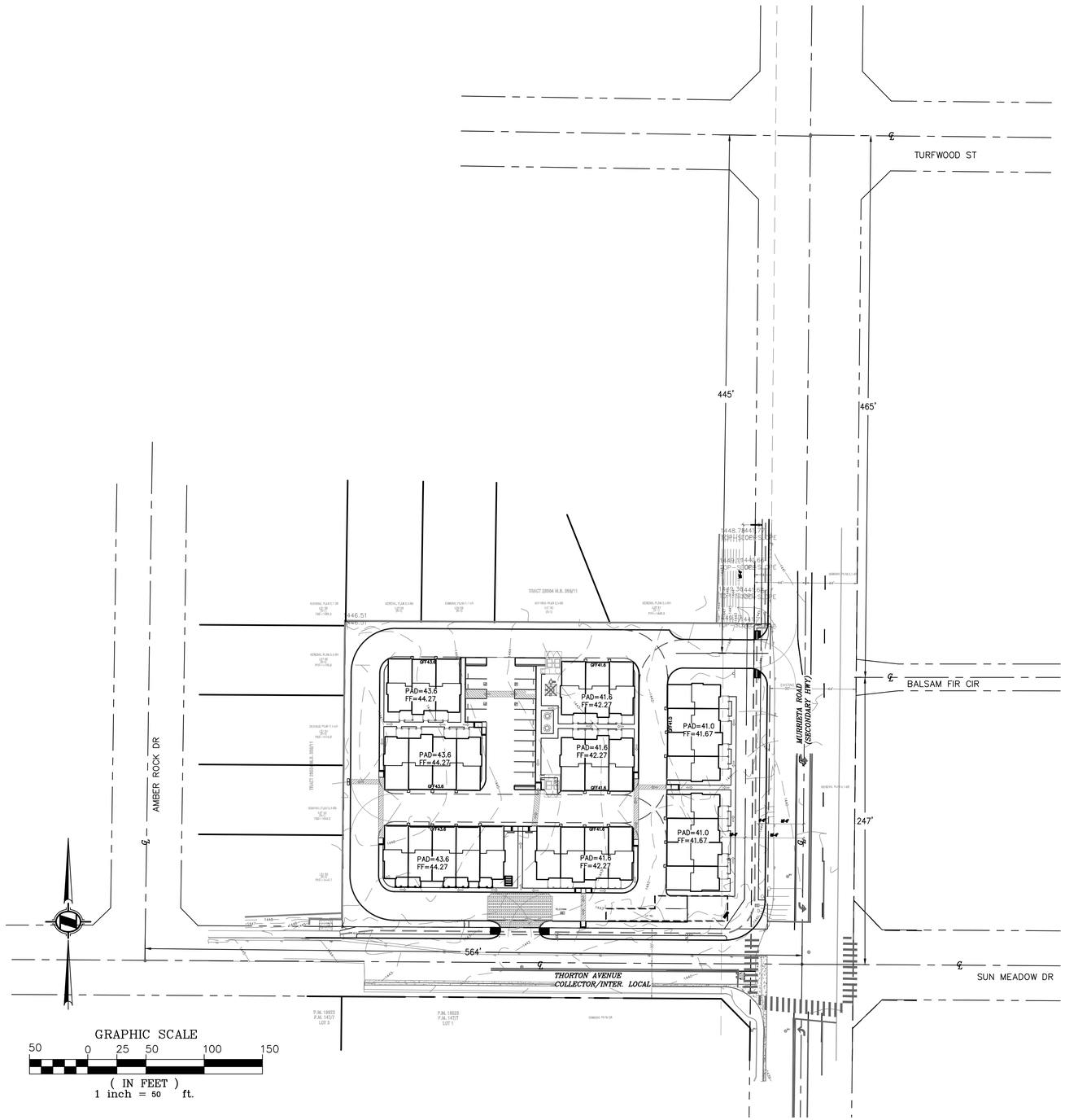
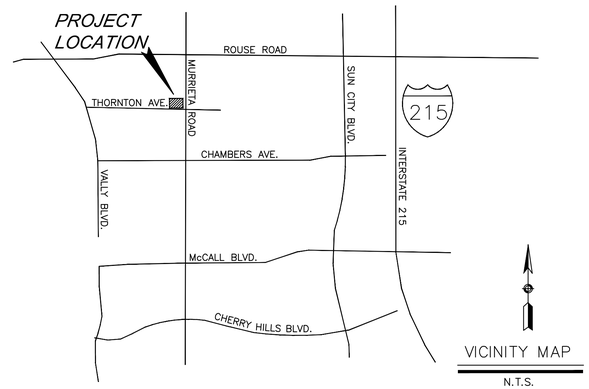




VICINITY MAP

N.T.S.

OWNER/APPLICANT:

LUIS NAVARRO
27225 MURRIETA ROAD
MENIFEE, CA 92584
(951)398-7177

SITE ADDRESS:

27225 MURRIETA ROAD
MENIFEE, CA 92584

ASSSESSORS PARCELS:

APN: 335-481-015

EARTHWORK QUANTITIES:

RAW CUT- 5,964 C.Y.
RAW FILL- 72 C.Y.

QUANTITIES ARE ESTIMATES ONLY AND CONTRACTOR IS TO VERIFY QUANTITIES PRIOR TO CONSTRUCTION

CIVIL ENGINEER:

WILFREDO S.D. VENTURA
VENTURA ENGINEERING INLAND, INC
27393 YNEZ RD, SUIT 159
TEMECULA, CA. 92591
PHONE (951) 252-7632

SOURCE OF TOPOGRAPHY

SOUTHWEST LAND SURVEYING
33175 TEMECULA PKWY
TEMECULA, CA 92592
(951) 699-4158

LEGAL DESCRIPTION

LOTS 15 OF PRATT'S EUCALYPTUS TRACT NO. 28504 AS SHOWN BY MAP ON FILE IN BOOK 359, PAGE 11 OF MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

UTILITY PURVEYORS & SCHOOL DISTRICT

WATER:	EASTERN MUNICIPAL WATER DISTRICT	(951) 928-3777
SEWER:	EASTERN MUNICIPAL WATER DISTRICT	(951) 928-3777
GAS:	SOUTHERN CALIFORNIA GAS	(800) 427-2200
ELECTRIC:	SOUTHERN CALIFORNIA EDISON	(800) 990-7788
TELEPHONE:	VERIZON - BUSINESS	(800) 483-3000
CABLE:	NO CABLE	
SCHOOL DISTRICT:	MENIFEE UNIFIED SCHOOL DISTRICT	(951) 672-1851

ZONING/USE:

EXISTING LAND USE:	VACANT LOT
PROPOSED ZONING:	MEDIUM DENSITY RESIDENTIAL (MDR)
PROPOSED LAND USE:	8.1-14R

PRELIMINARY GRADING NOTES

GROSS AREA	2.65 ACRES
NET AREA	2.20 ACRES
TOTAL (E) IMPERVIOUS SURFACE PRE-DEVELOPMENT	0 ACRES
TOTAL PROPOSED IMPERVIOUS SURFACE POST-DEVELOPMENT	1.83 ACRES

REVISIONS

SHT.	DESCRIPTION	DATE	BY	APRD

ENGINEER LOGO
VENTURA ENGINEERING INLAND, INC
29393 YNEZ RD, SUITE 159 PHONE (951) 252-7632
TEMECULA, CA. 92591

WILFREDO S.D. VENTURA
RCE 66532, EXP. 06/30/22

DATE: 5/20/22

ENGINEER SEAL
REGISTERED PROFESSIONAL ENGINEER
WILFREDO S.D. VENTURA
No. 66532
Exp. 6-30-24
CIVIL
STATE OF CALIFORNIA

SCALE: AS SHOWN
DESIGN:
DRAWN:
CHECKED:
APPROVED:
DATE:

CITY OF MENIFEE
ENGINEERING DEPARTMENT

YOLANDA S. MACALALAD RCE 68190 DATE
CITY ENGINEER EXP. 9/30/25

RECOMMENDED BY: DATE

SEAL
CITY OF MENIFEE OCTOBER 1, 2008

CITY OF MENIFEE ENGINEERING DEPARTMENT

CONCEPTUAL GRADING PLAN FOR VISTA RIDGE APARTMENTS

SHEET NO. 1

1 OF 6

PROJECT NO:

A. GENERAL NOTES

THE FOLLOWING GENERAL NOTES SHALL BE SHOWN ON THE TITLE SHEET (PROVIDE INFORMATION IN BRACKETS):

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF MENIFEE GRADING ORDINANCE ___ , CALIFORNIA BUILDING CODE APPENDIX J, THE CITY OF MENIFEE STANDARD DETAILS AND SPECIFICATIONS, POLICIES, CODES AND PERMIT REQUIREMENTS; IN ADDITION, THE WORK SHALL CONFORM TO THE CURRENT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (THE "GREENBOOK"), THE RIVERSIDE COUNTY STREET IMPROVEMENT STANDARDS AND SPECIFICATIONS AND STANDARD PLANS; COUNTY ORDINANCE NO. 461; CALTRANS STANDARD PLANS AND SPECIFICATIONS; CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. A GRADING PERMIT SHALL BE OBTAINED FROM THE CITY OF MENIFEE ENGINEERING DEPARTMENT PRIOR TO START OF WORK.
3. AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE CITY OF MENIFEE PRIOR TO START OF WORK FOR WORK PERFORMED WITHIN PUBLIC RIGHT-OF-WAY.
4. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
5. PRIOR TO START OF WORK, THE DEVELOPER/CONTRACTOR SHALL APPLY TO THE CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) FOR AN ENCROACHMENT PERMIT FOR WORK PERFORMED WITHIN THE STATE RIGHT-OF-WAY.
6. WHEN GRADING PLANS HAVE BEEN SUBMITTED TO THE CITY FOR CHECKING AND THE CHECKING PROCESS HAS BEEN INTERRUPTED FOR A PERIOD OF ONE YEAR OR MORE, THE PLANS SHALL BE DEEMED ABANDONED. APPROVED GRADING PLANS FOR ALL SUBDIVISIONS SHALL BE DEEMED ABANDONED IF CONSTRUCTION HAS NOT COMMENCED WITHIN TWO YEARS OF THE LATEST APPROVAL DATE (ONE YEAR FOR NON-SUBDIVISIONS). IF CONSTRUCTION IS INTERRUPTED FOR A PERIOD OF ONE YEAR OR MORE, THE PLANS SHALL BE DEEMED ABANDONED. ABANDONED PLANS SHALL BE RESUBMITTED FOR REVIEW AND ALL FEES SHALL BE PAID IN ACCORDANCE WITH THE PLAN CHECK AND PROCESSING POLICY PRIOR TO ANY PERMITS BEING ISSUED.
7. NOTIFY UNDERGROUND SERVICE ALERT, (800) 227-2600, AND ALL CONCERNED UTILITY COMPANIES AT LEAST TWO WORKING DAYS IN ADVANCE OF EXCAVATION.
8. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE DEVELOPER/CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS AND VERIFY CONDITIONS ON THE JOB SITE PRIOR TO COMMENCING WORK. THE DEVELOPER/CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR DAMAGES OCCURRED DUE TO FAILURE TO LOCATE AND PRESERVE UNDERGROUND UTILITIES. HAND DIG AS NEEDED UNTIL CLEAR OF OBSTRUCTIONS.
9. APPROVAL OF THIS PLAN BY THE CITY OF MENIFEE DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF, THE LOCATION OF, OR THE EXISTENCE OR NON-EXISTENCE OF, ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.
10. THE CONTRACTOR SHALL CONTACT THE CITY OF MENIFEE PUBLIC WORKS INSPECTOR 2 WORKING DAYS OR 48 HOURS PRIOR TO CONSTRUCTION AT (951) 672-6777.
11. A PRECONSTRUCTION MEETING WITH THE PUBLIC WORKS INSPECTOR IS REQUIRED PRIOR TO START OF WORK.
12. RIGHT OF ENTRY FOR ANY WORK PERFORMED ON ADJACENT PROPERTIES IS REQUIRED. PERMISSION FOR RIGHT OF ENTRY SHALL BE OBTAINED IN WRITING AND THE LETTER SHALL COMPLY WITH CITY FORMAT.
13. APPROVAL OF PLANS AND / OR PERMIT ISSUANCE DOES NOT RELIEVE THE PERMITTEE OF THEIR RESPONSIBILITY TO MAINTAIN WORK WITHIN THE PROJECT PROPERTY BOUNDARIES AND DEDICATED CITY RIGHT-OF-WAY. TRESPASSING ON PRIVATE PROPERTY IS AGAINST THE LAW AND CAUSE FOR CANCELLATION OF PERMIT AND ISSUANCE OF STOP WORK NOTICE.
14. ALL REVISIONS TO GRADING PLANS, OR MATERIAL SUBSTITUTION REQUESTS, PROPOSED DURING CONSTRUCTION SHALL BE SUBMITTED IN WRITING TO THE ENGINEERING DEPARTMENT BY THE ENGINEER OF RECORD AND SHALL FOLLOW THE PROCEDURES FOR APPROVAL OUTLINED IN THE MOST CURRENT CITY OF MENIFEE ENGINEERING DIRECTIVES.
15. IT IS THE RESPONSIBILITY OF THE PERMITTEE TO SUBMIT A REQUEST FOR PERMIT EXTENSION TO THE CITY ENGINEER IN WRITING PRIOR TO PERMIT EXPIRATION. EXTENSION AND EXPIRATION OF PERMITS SHALL BE IN ACCORDANCE WITH THE UNIFORM BUILDING CODE AND /OR THE CITY OF MENIFEE ENGINEERING DESIGN GUIDELINES POLICIES AND PROCEDURES.
16. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CLEAN UP ON CITY OF MENIFEE RIGHT-OF-WAY AFFECTED BY DEVELOPER'S/CONTRACTOR'S WORK. THE DEVELOPER/CONTRACTOR SHALL KEEP CITY OF MENIFEE RIGHT-OF-WAY CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCES BEING CONTROLLED AT ALL TIMES. METHOD OF STREET CLEANING SHALL BE STREET SWEEPING OF ALL PAVED AREAS. THERE SHALL BE NO STOCKPILING OF CONSTRUCTION MATERIALS WITHIN THE CITY OF MENIFEE RIGHT-OF-WAY WITHOUT THE PERMISSION OF THE MENIFEE CITY ENGINEER.
17. ALL PROPERTY CORNERS SHALL BE CLEARLY DELINEATED IN THE FIELD PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION/GRADING.
18. THE ENGINEER OF WORK WHO PREPARED AND SIGNED THIS GRADING PLAN HAS VERIFIED THE CONSISTENCY BETWEEN THE WORK WITHIN THE RIGHT-OF-WAY AND THE ON-SITE GRADING WORK APPROVED SEPARATELY BY THE CITY OF MENIFEE ENGINEERING DEPARTMENT.
19. A GEOTECHNICAL REPORT PREPARED BY A REGISTERED PROFESSIONAL SHALL BE PROVIDED.

B. GRADING NOTES

1. THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH HIS PRIVATE DEVELOPMENT CONSTRUCTION.
2. PRIOR TO REMOVAL OF VEGETATION AND GRADING OF THE SITE, ALL MITIGATION MONITORING AS IDENTIFIED AND ITEMIZED IN THE PLANNING COMMISSION/COMMUNITY DEVELOPMENT CONDITIONS OF APPROVAL SHALL BE ADDRESSED TO THE SATISFACTION OF THE COMMUNITY DEVELOPMENT DIRECTOR AND THE CITY ENGINEER.
3. FILL AREAS SHALL BE CLEARED OF ALL VEGETATION AND DEBRIS, SCARIFIED, AND INSPECTED BY THE GRADING INSPECTOR AND SOILS ENGINEER PRIOR TO THE PLACING OF FILL.
4. ALL CESSPOOLS, SEPTIC TANKS, ETC., TO BE ABANDONED SHALL BE FILLED OR REMOVED IN ACCORDANCE WITH THE RIVERSIDE COUNTY HEALTH DEPARTMENT AND CERTIFIED BY THE SOILS ENGINEER AND AS APPROVED BY THE CITY ENGINEER.
5. ANY EXISTING WELLS NOT TO BE USED SHALL BE DESTROYED IN ACCORDANCE WITH RIVERSIDE COUNTY ORDINANCE 682.
6. DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURES, TEMPORARY DRAINAGE CONTROL (BEST MANAGEMENT PRACTICES, BMPS) SHALL BE PROVIDED TO PREVENT PONDING WATER AND DAMAGE TO ADJACENT PROPERTIES
7. PRIOR TO ANY CONSTRUCTION, THE DEVELOPER SHALL PROVIDE THE CITY A COPY OF THE NOI WITH A VALID WDID NUMBER.

C. CUT/FILL NOTES

1. NO FILL SHALL BE PLACED ON EXISTING GROUND UNTIL THE GROUND HAS BEEN CLEARED OF WEEDS, DEBRIS, TOPSOIL AND OTHER DELETERIOUS MATERIAL.
2. CUT SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL, OR AS DETERMINED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER.
3. FILL SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL, OR AS DETERMINED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER.
4. MID SLOPE TERRACES AT LEAST SIX (6) FEET IN WIDTH SHALL BE ESTABLISHED AT NOT MORE THAN THIRTY (30) FOOT VERTICAL INTERVALS ON ALL CUT OR FILL SLOPES, EXCEPT THAT WHERE ONLY ONE (1) TERRACE IS REQUIRED, IT SHALL BE AT MID-HEIGHT. FOR CUT OR FILL SLOPES GREATER THAN 60 FEET AND UP TO 90 FEET IN VERTICAL HEIGHT, ONE TERRACE AT APPROXIMATELY MID-HEIGHT SHALL BE 12 FEET IN WIDTH. TERRACE WIDTHS AND SPACING FOR CUT AND FILL SLOPES GREATER THAN 90 FEET IN VERTICAL HEIGHT SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER AND APPROVED BY THE CITY ENGINEER. SUITABLE ACCESS SHALL BE PROVIDED TO PERMIT PROPER CLEANING AND MAINTENANCE.
5. THE SLOPE STABILITY FOR CUT AND FILL SLOPES OVER 30 FEET IN VERTICAL HEIGHT AND FOR SLOPES STEEPER THAN 2:1 (H:V) SHALL BE VERIFIED WITH A FACTOR OF SAFETY OF AT LEAST 1.5 BY CALCULATIONS SUBMITTED BY THE SOILS ENGINEER TO THE CITY OF MENIFEE ENGINEERING DEPARTMENT.
6. FILLS SHALL BE PLACED IN THIN LIFTS (8 INCH MAX OR AS RECOMMENDED IN SOILS REPORT), COMPACTED AND TESTED AS GRADING PROGRESSES UNTIL FINAL GRADES ARE ATTAINED. FILLS ON SLOPES STEEPER THAN 5:1 (H:V) AND A HEIGHT GREATER THAN 5 FEET SHALL BE KEYED AND BENCHED INTO FIRM NATURAL SOIL FOR FULL SUPPORT. THE BENCH UNDER THE TOE SHALL BE 10 FEET WIDE MIN. AND 2' HIGH MIN.
7. NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL WITH A MAXIMUM DIMENSION GREATER THAN 12 INCHES IN ANY DIMENSION SHALL BE BURIED OR PLACED IN FILLS.
8. STOCK PILE REQUIREMENTS: CASQA BEST MANAGEMENT PRACTICE, CONSTRUCTION, SECTION WM-3 – STOCKPILES WHICH HAVE NOT BEEN USED FOR 14 CALENDAR DAYS SHALL BE STABILIZED THROUGH THE APPLICATION OF SOD, SEED, AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES.
9. WHEN MATERIAL IS BEING IMPORTED FROM AN APPROVED PERMITTED BORROW SITE, THE AFTER TOPOGRAPHICAL SURVEY OF THE EXCAVATED PORTION OF THE BASIN SHALL BE SUBMITTED ALONG WITH THE ROUGH GRADING CERTIFICATE(S).
10. HAULING AND/OR STOCKPILE PERMITS MAYBE NOT BE COMBINED WITH A GRADING PERMIT.

D. DRAINAGE NOTES

1. EXISTING DRAINAGE COURSES ON THE PROJECT SITE SHALL CONTINUE TO FUNCTION. PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS SHALL BE USED TO PROTECT ADJOINING PROPERTIES DURING GRADING OPERATIONS AND SHALL BE APPROVED BY THE APPROPRIATE REGULATORY AGENCY.
2. DRAINAGE ACROSS THE PROPERTY LINE SHALL NOT EXCEED THAT WHICH EXISTED PRIOR TO GRADING. EXCESS OR CONCENTRATED DRAINAGE SHALL BE CONTAINED ON SITE OR DIRECTED TO AN APPROVED DRAINAGE FACILITY.
3. MID SLOPE SWALES OR DITCHES ON 6 FEET AND 12 FEET WIDE TERRACES SHALL HAVE A MINIMUM GRADIENT OF FIVE (5) PERCENT AND MUST BE PAVED WITH REINFORCED CONCRETE, OR APPROVED EQUAL, NOT LESS THAN THREE (3) INCHES IN THICKNESS. A SINGLE RUN OF SWALE OR DITCH SHALL NOT COLLECT RUNOFF FROM A TRIBUTARY AREA EXCEEDING 13,500 SQUARE FEET (PROJECTED) WITHOUT DISCHARGING INTO A DOWN DRAIN.
4. INTERCEPTOR DRAINS SHALL BE INSTALLED ALONG THE TOP OF CUT SLOPES RECEIVING DRAINAGE FROM A TRIBUTARY WIDTH GREATER THAN 40 FEET MEASURED HORIZONTALLY. INTERCEPTOR DRAINS SHALL BE 3 FEET WIDE MIN. AND 1 FOOT DEEP MIN., AND SHALL HAVE A MINIMUM GRADIENT OF TWO (2) PERCENT. THE DRAIN SHALL BE PAVED WITH CONCRETE NOT LESS THAN 3 INCHES THICK.
5. PROVIDE 4 FEET WIDE BY 1 FEET HIGH BERM ALONG THE TOP OF FILL SLOPES STEEPER THAN 3:1 (H:V) WHERE NECESSARY.
6. MINIMUM BUILDING PAD DRAINAGE GRADIENT SHALL BE = 1 PERCENT IF CUT OR FILL IS LESS THAN 10 FEET, 2 PERCENT IF CUT OR FILL IS GREATER THAN 10 FEET.
7. THE GROUND IMMEDIATELY ADJACENT TO THE BUILDING FOUNDATION SHALL BE SLOPED AWAY AT 2% MIN. TO 20% MAX. FOR THE FIRST THREE FEET, AND 1% THEREAFTER. SWALES SHALL HAVE A 1% MIN. SLOPE.
8. RESIDENTIAL LOT GRADING SHALL CONFORM TO THE CITY OF MENIFEE STANDARD PLAN NO.300.
9. THE ENGINEER MUST SET GRADE STAKES FOR ALL DRAINAGE DEVICES AND OBTAIN CITY INSPECTION CLEARANCE BEFORE PLACING CONCRETE.
10. RIPRAP SHALL BE GRADED STONE WHERE THE AVERAGE SIZE (D50) IS THE SIZE WHERE 50% OF THE RIPRAP BY WEIGHT IS SMALLER.
11. THE FORMULA FOR THE D50 STONE SIZE IS AS FOLLOWS:
D50 = 0.010V2.44 WHERE V = MEAN CHANNEL VELOCITY IN FPS
12. THE RIPRAP SECTION SHALL CONSIST OF GEOFABRIC PLACED ON 12" OF COMPACTED SUBGRADE TO 90% RELATIVE DENSITY, 6" OF AGGREGATE BASE AND THE RIPRAP PLACED TO TWICE THE THICKNESS OF THE D50 STONE SIZE TO THE HIGHER EVEN INCH.
13. RIPRAP STONE SHALL COMPLY WITH THOSE PROVISIONS OF SUBSECTION 200-1.6 OF THE STANDARD SPECIFICATIONS.
14. AGGREGATE BASE SHALL CONFORM TO NUMBER 2 GRADATION AS PROVIDED IN SUBSECTION 400-1.3.2 OF THE STANDARD SPECIFICATIONS.
15. ROCKS FOR GROUTED RIPRAP SHALL BE A GOOD QUALITY BROKEN AND/OR RIVER RUN ROCK. THE SMALLEST DIMENSIONS SHALL EXCEED 3 INCHES AND THE LARGEST DIMENSION SHALL NOT EXCEED 18 INCHES. THE LARGEST DIMENSION SHALL NOT EXCEED 4 TIMES THE SMALLEST DIMENSION.
16. THERE SHALL BE A GROUT BED OF AT LEAST 2 INCHES BENEATH THE FIRST LAYER OF ROCK. ALL THE VOIDS BETWEEN THE ROCKS SHALL BE FILLED WITH GROUT. MAXIMUM SPACING BETWEEN ROCKS SHALL BE 2 INCHES.
17. SURFACE ROCKS SHALL BE IMBEDDED FROM ½ TO 2/3 OF THEIR MAXIMUM DIMENSION.

E. COMPLETION OF WORK

1. A REGISTERED CIVIL ENGINEER SHALL SUBMIT TO THE CITY OF MENIFEE ENGINEERING DEPARTMENT WRITTEN ROUGH GRADING CERTIFICATION OF COMPLETION OF GRADING IN ACCORDANCE WITH THE APPROVED GRADING PLAN PRIOR TO REQUESTING INSPECTION AND ISSUANCE OF THE BUILDING PERMIT. CERTIFICATION SHALL INCLUDE LINE, GRADE, SURFACE DRAINAGE, ELEVATION, AND LOCATION OF PERMITTED GRADING ON THE LOT.
2. AFTER ALL WORK, INCLUDING THE INSTALLATION OF DRAINAGE STRUCTURES AND PROTECTIVE DEVICES, HAS BEEN COMPLETED AND REQUIRED REPORTS HAVE BEEN SUBMITTED, THE PERMITTEE SHALL REQUEST A ROUGH GRADING INSPECTION FROM THE CITY OF MENIFEE BUILDING INSPECTOR.
3. A REGISTERED CIVIL ENGINEER SHALL SUBMIT TO THE CITY OF MENIFEE ENGINEERING DEPARTMENT FOR APPROVAL WRITTEN FINAL GRADING CERTIFICATION OF COMPLETION IN ACCORDANCE WITH THE APPROVED PLANS. FINISH GRADING SHALL BE COMPLETED AND INSTALLED INCLUDING SLOPE PLANTING AND PERMANENT EROSION CONTROL AND IRRIGATION SYSTEMS PRIOR TO OCCUPANCY.

F. EROSION CONTROL NOTES

1. IN CASE OF EMERGENCY, CALL (RESPONSIBLE PERSON) AT (24 HOUR TELEPHONE).
2. ALL PUBLIC STREETS SHALL BE MAINTAINED FREE OF DUST AND SEDIMENT CAUSED BY GRADING OPERATIONS
3. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES. NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.
4. EROSION CONTROL DEVICES SHOWN ON THIS PLAN MAY BE REMOVED WHEN APPROVED BY THE BUILDING AND SAFETY/PUBLIC WORKS INSPECTOR IF THE GRADING OPERATION HAS PROGRESSED TO THE POINT WHERE THEY ARE NO LONGER REQUIRED.
5. GRADED AREAS ADJACENT TO FILL SLOPES LOCATED AT THE SITE PERIMETER MUST DRAIN AWAY FROM THE TOP OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
6. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM.
7. A GUARD SHALL BE POSTED ON THE SITE WHENEVER THE DEPTH OF WATER IN ANY DEVICE EXCEEDS 2 FEET. THE DEVICE SHALL BE DRAINED OR PUMPED DRY WITHIN 24 HOURS AFTER EACH RAINSTORM.
8. EXCEPT AS OTHERWISE APPROVED BY THE BUILDING AND SAFETY INSPECTOR, ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY OR WEEKENDS WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40%.
9. ALL LOOSE SOIL AND DEBRIS WHICH MAY CREATE A POTENTIAL HAZARD TO OFF-SITE PROPERTY SHALL BE REMOVED FROM THE SITE AS DIRECTED BY THE PUBLIC WORKS INSPECTOR.
10. THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION DAMAGE WITHIN THE SITE SHALL BE AT THE DISCRETION OF THE CITY ENGINEER.
11. DESILTING BASINS MAY NOT BE REMOVED OR MADE INOPERABLE BETWEEN OCTOBER 1 AND MAY 1 WITHOUT THE APPROVAL OF THE CITY INSPECTOR.
12. EROSION CONTROL DEVICES SHALL NOT BE MODIFIED WITHOUT THE APPROVAL OF THE CITY ENGINEER.
13. REVISED PLANS SHALL BE SUBMITTED TO THE CITY FOR APPROVAL.
14. THE CONTRACTOR SHALL SUPERVISE EROSION CONTROL WORK IN ACCORDANCE WITH THE APPROVED PLANS. THE WORK ALSO INCLUDES, BUT IS NOT LIMITED TO, INSPECTION OF EROSION CONTROL MEASURES BEFORE RAINSTORM AND 5-DAY PROBABILITY RAIN FORECAST.
15. DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURES, TEMPORARY DRAINAGE CONTROL (BEST MANAGEMENT PRACTICES, BMPS) SHALL BE PROVIDED TO PREVENT PONDING WATER AND DAMAGE TO ADJACENT PROPERTIES.
16. IMPLEMENT FUGITIVE DUST CONTROL MEASURES DUST BY WATERING OR OTHER APPROVED METHODS IN COMPLIANCE WITH SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) RULE 403.
17. FOR SLOPES 3:1 (H:V) OR STEEPER: SLOPES EQUAL TO OR GREATER THAN 3 FEET IN VERTICAL HEIGHT SHALL BE PLANTED WITH DROUGHT TOLERANT GRASS OR GROUND COVER AT A MAXIMUM SPACING OF 12 INCH ON CENTER. SLOPES EXCEEDING 15 FEET IN VERTICAL HEIGHT SHALL BE PLANTED WITH APPROVED SHRUBS NOT TO EXCEED 10 FEET ON CENTER, OR TREES SPACED NOT TO EXCEED 20 FEET ON CENTER OR SHRUBS NOT TO EXCEED 10 FEET, OR A COMBINATION OF SHRUBS AND TREES NOT TO EXCEED 15 FEET IN ADDITION TO THE GRASS OR GROUND COVER. SLOPES THAT REQUIRE PLANTING SHALL BE PROVIDED WITH AN IN-GROUND IRRIGATION SYSTEM EQUIPPED WITH AN APPROPRIATE BACKFLOW DEVICE PER CALIFORNIA PLUMBING CODE, CHAPTER 6. THE SLOPE PLANTING AND IRRIGATION SYSTEM SHALL BE INSTALLED PRIOR TO PRECISE GRADING FINAL INSPECTION.

G. NPDES NOTES:

WHEN ONE ACRE OR MORE IS BEING DISTURBED OR ON SITES THAT ARE PART OF A LARGER COMMON PLAN OF DEVELOPMENT THAT DISTURBS ONE ACRE OR MORE:
1. DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR THE IMPLEMENTATION OF THE REQUIREMENTS OF THE ONSITE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (TITLE) BY (NAME) DATED (DATE); AND THE REQUIREMENTS OF THIS DOCUMENT: WDID # _____. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL AND MAINTAIN ALL TEMPORARY BEST MANAGEMENT PRACTICES (BMPS), SHOWN IN THE APPROVED EROSION CONTROL PLANS, THROUGHOUT THE TIME OF CONSTRUCTION. A COPY OF THE SWPPP AND THE APPROVED EROSION CONTROL PLANS SHALL BE KEPT AT THE JOB SITE AT ALL TIMES. THE IMPLEMENTATION AND MAINTENANCE OF SITE BMPS IS REQUIRED TO MINIMIZE JOBSITE EROSION AND SEDIMENTATION. BMPS SHALL BE REQUIRED TO REMAIN IN PLACE THROUGHOUT THE YEAR TO MINIMIZE EROSION AND SEDIMENTATION.
2. IMPLEMENT AND MAINTAIN EROSION CONTROL BMPS TO MINIMIZE THE ENTRAINMENT OF SOIL IN RUNOFF FROM DISTURBED SOIL AREAS ON CONSTRUCTION SITES.
3. IMPLEMENT AND MAINTAIN YEAR ROUND SEDIMENT CONTROL BMPS TO MINIMIZE THE TRANSPORT OF SOIL FROM THE CONSTRUCTION SITE.
4. PHASE GRADING TO LIMIT THE AMOUNT OF DISTURBED AREAS EXPOSED TO THE EXTENT FEASIBLE.
5. LIMIT AREAS THAT ARE CLEARED AND GRADED TO ONLY THE PORTION OF THE SITE THAT IS NECESSARY FOR CONSTRUCTION. MANAGE THE CONSTRUCTION SITE TO MINIMIZE THE EXPOSURE TIME OF DISTURBED SOIL AREAS THROUGH PHASING AND SCHEDULING OF GRADING AND THE USE OF TEMPORARY AND PERMANENT SOIL STABILIZATION.
6. AT ANY TIME DURING THE YEAR, STABILIZE SLOPES PRIOR TO A PREDICTED STORM EVENT. ONCE DISTURBED, STABILIZE SLOPES (TEMPORARY OR PERMANENT) IF THEY WILL NOT BE WORKED WITHIN 14 DAYS. RE-VEGETATE CONSTRUCTION SITES AS EARLY AS FEASIBLE AFTER SOIL DISTURBANCE.
7. CONTAIN STOCKPILES OF SOIL TO ELIMINATE OR REDUCE SEDIMENT TRANSPORT FROM THE SITE VIA RUNOFF, VEHICLE TRACKING, OR WIND.
8. MAINTAIN CONSTRUCTION SITES TO ENSURE THAT A STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OTHER THAN STORMWATER (NON-STORMWATER DISCHARGES) ARE PROHIBITED, EXCEPT AS AUTHORIZED BY AN INDIVIDUAL NPDES PERMIT, THE STATEWIDE GENERAL PERMIT-CONSTRUCTION ACTIVITY.
9. CONTAIN RUNOFF FROM EQUIPMENT AND VEHICLE WASHING AT CONSTRUCTION SITE TO PREVENT DISCHARGING TO RECEIVING WATERS OR THE LOCAL STORM DRAIN SYSTEM.
10. IMPLEMENT BMPS FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS OR RESIDUES TO ELIMINATE OR REDUCE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTIES BY WIND OR RUNOFF.
11. ENSURE CONSTRUCTION CONTRACTORS AND SUBCONTRACTOR PERSONNEL ARE AWARE OF THE REQUIRED BMPS, MAINTENANCE, AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.
12. MAINTAIN BMPS AT ALL TIMES. INSPECT BMPS PRIOR TO PREDICTED STORM EVENTS, DURING AND FOLLOWING STORM EVENTS.
13. COLLECT AND PROPERLY DISPOSE OF IN TRASH OR RECYCLE BINS AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY, CONSTRUCTION DEBRIS AND WASTE MATERIALS.
14. 24 HOUR EMERGENCY NPDES CONTACT: FOR THE PERSON RESPONSIBLE FOR IMPLEMENTING, INSPECTING, AND MAINTAINING THE SITE' S EROSION CONTROL BMP' S.
NAME: _____
ADDRESS: _____
PHONE: _____
CHANGE OF SUCH PERSON, ADDRESS OR PHONE NUMBER SHALL BE FILED WITHIN 24 HOURS WITH THE CITY OF MENIFEE ENGINEERING DEPARTMENT AND THE PROJECT INSPECTOR, AND SHALL INCLUDE THE GRADING PERMIT NUMBER.

ADDITIONAL GRADING REQUIREMENTS

1. IF PROJECT AREA IS LOCATED WITHIN A FLOOD ZONE, DEVELOPER/CONTRACTOR SHALL APPLY TO RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT (RCFC& WCD) FOR FLOOD PLAIN MANAGEMENT REVIEW.
2. IF GRADING IS TO BE DONE ON PROPERTY THAT IS BEYOND THE PROJECT AREA BOUNDARY, DEVELOPER/CONTRACTOR SHALL OBTAIN AND SUBMIT SIGNED NOTARIZED LETTERS OF PERMISSION FROM THE PROPERTY OWNERS. A GRADING PERMIT WILL NOT BE AUTHORIZED UNTIL LETTERS OF PERMISSION ARE APPROVED BY THE CITY OF MENIFEE ENGINEERING DEPARTMENT. UPON APPROVAL OF BE LETTERS OF PERMISSION, ADD THE FOLLOWING NOTE TO THE PLAN:
A NOTARIZED LETTER OF PERMISSION ACCEPTING THIS GRADING IS ON FILE AT THE CITY OF MENIFEE ENGINEERING DEPARTMENT. DATE OF LETTER: _____
3. IF PROJECT AREA SITE IS TO BE ACCESSED DURING CONSTRUCTION USING OFF-SITE PRIVATE ROADS AND DEDICATED BUT NOT ACCEPTED ROADS, DEVELOPER/CONTRACTOR SHALL OBTAIN AND SUBMIT SIGNED NOTARIZED LETTERS OF PERMISSION FROM THE PROPERTY OWNERS. A GRADING PERMIT WILL NOT BE AUTHORIZED UNTIL LETTERS OF PERMISSION ARE APPROVED BY THE CITY OF MENIFEE ENGINEERING DEPARTMENT. UPON APPROVAL OF THE LETTERS OF PERMISSION, ADD THE FOLLOWING NOTE TO THE PLAN:
A NOTARIZED LETTER OF PERMISSION ACCEPTING THIS TEMPORARY USE OF PRIVATE ROADS AND DEDICATED BUT NOT ACCEPTED ROADS IS ON FILE AT THE CITY OF MENIFEE ENGINEERING DEPARTMENT. DATE OF LETTER: _____
4. EXCEPT FOR THE RETAINING WALLS IN CONJUNCTION WITH THIS GRADING, ALL INFORMATION ASSOCIATED WITH BUILDINGS (INCLUDING SETBACKS AND FF ELEVATIONS) IS FOR REFERENCE ONLY AND THE APPROVAL OF THIS GRADING PLAN DOES NOT INCLUDE ANY PROVISIONS ASSOCIATED WITH BUILDINGS.
5. IF STOCKPILING IS EXPECTED WITH THIS PROJECT, DEVELOPER/CONTRACTOR SHALL SUBMIT FOR APPROVAL A STOCKPILE PERMIT. A STOCKPILE WILL NOT BE AUTHORIZED UNTIL APPROVED BY THE CITY OF MENIFEE ENGINEERING DEPARTMENT. UPON APPROVAL OF STOCKPILE, ADD THE FOLLOWING NOTE TO THE PLAN: THIS STOCKPILING REGISTRATION WILL EXPIRE 12 MONTHS FROM THE DATE OF ISSUANCE. UPON EXPIRATION, THE STOCKPILE SHALL BE REMOVED PURSUANT TO A GRADING PERMIT AUTHORIZING SUCH REMOVAL.
6. IF JOB SITE IS NOT BALANCED WITH THIS PROJECT, DEVELOPER/CONTRACTOR SHALL SUBMIT FOR APPROVAL THE PRECISE LOCATION OF THE IMPORT SOURCE AND EXPORT PLACEMENT. A GRADING PERMIT WILL NOT BE AUTHORIZED UNTIL IMPORT SOURCE AND EXPORT PLACEMENT LOCATIONS ARE APPROVED BY THE CITY OF MENIFEE ENGINEERING DEPARTMENT.

REVISIONS

SHT.	DESCRIPTION	DATE	BY	APRD

ENGINEER LOGO
VENTURA ENGINEERING INLAND, INC
29393 YNEZ RD, SUITE 159 PHONE (951) 252-7632
TEMECULA, CA. 92591
WILFREDO S.D. VENTURA
RCE 66532, EXP. 06/30/22
DATE: 5/20/22

ENGINEER SEAL
REGISTERED PROFESSIONAL ENGINEER
WILFREDO S.D. VENTURA
No. 66532
Exp. 6-30-24
CIVIL
STATE OF CALIFORNIA

SCALE: AS SHOWN
DESIGN:
DRAWN:
CHECKED:
APPROVED:
DATE:

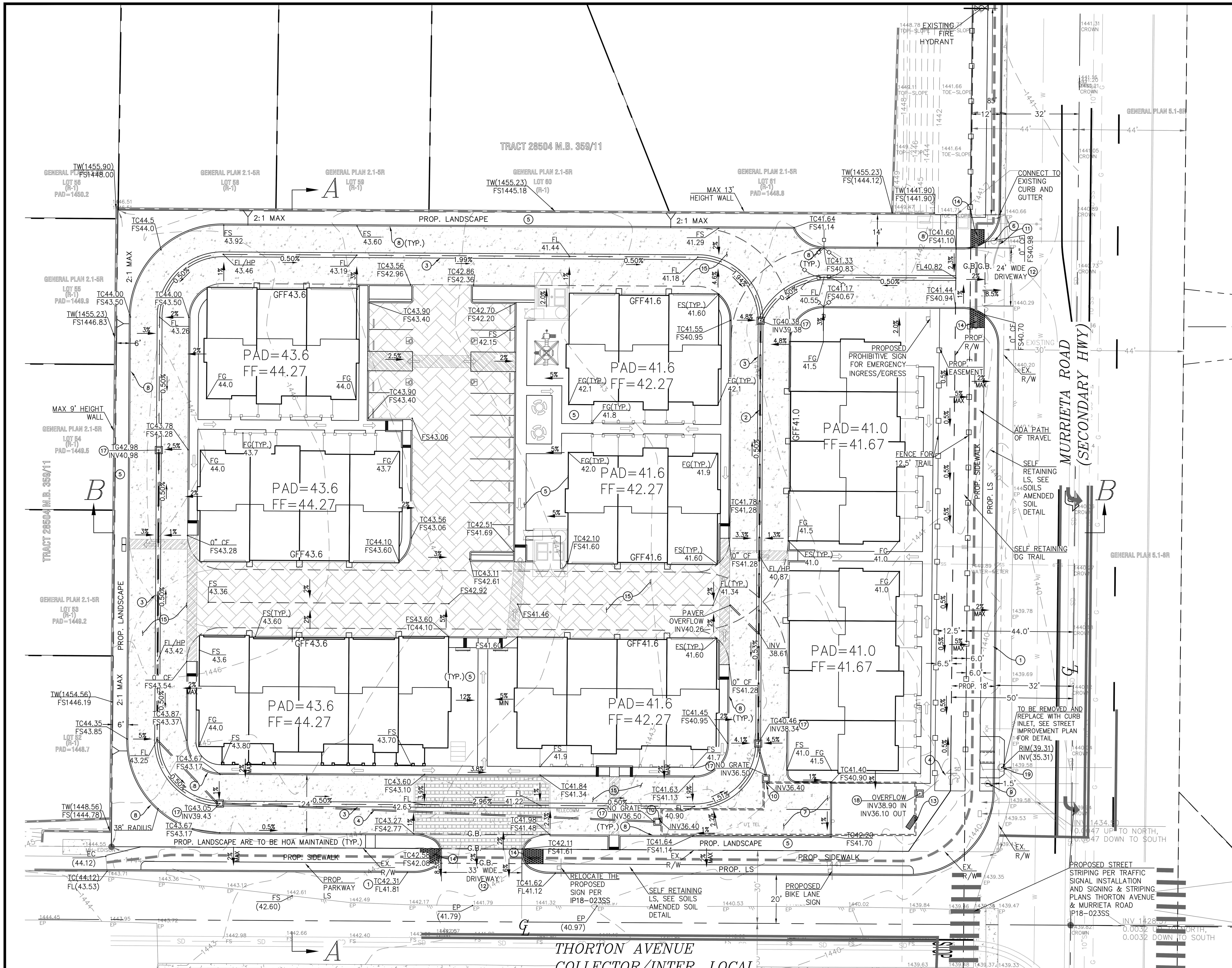
CITY OF MENIFEE
ENGINEERING DEPARTMENT
YOLANDA S. MACALALAD RCE 68190 DATE
CITY ENGINEER EXP. 9/30/25
RECOMMENDED BY: DATE

SEAL
CITY OF MENIFEE
OCTOBER 1, 2008

CITY OF MENIFEE ENGINEERING DEPARTMENT

CONCEPTUAL GRADING PLAN FOR VISTA RIDGE APARTMENTS

SHEET NO. 2
2 OF 6
PROJECT NO:



LEGEND

FS	FINISHED SURFACE
PL	PROPERTY LINE
FF	FINISHED FLOOR
FL	FLOWLINE
INV	INVERT ELEVATION
— - - -	PROPERTY LINE
— - —	STREET CENTERLINE
▬ ▬ ▬	EXISTING RETAINING WALL
00	PROPOSED GRADE
(00)	EXISTING GRADE
EOP	EDGE OF PAVEMENT
====	6" PVC PIPE
- - SD - -	12" PVC PIPE
▢	24" CATCH BASIN
	PERMEABLE CONCRETE PAVEMENT
	DRIVEWAY APPROACH
	CONCRETE DRIVEWAY
	CISTERN
	CONCRETE RIBBON GUTTER

CONSTRUCTION NOTE:

1	PROP. CURB AND GUTTER PER CITY OF MENIFEE STD PLAN NO. 200
2	PROP. 6" SDR 35 PVC @ 0.6% MIN
3	PROP. 2' RIBBON GUTTER PER DETAIL ON SHEET 5
4	PROP. 12" SDR 35 PVC @ 0.6% MIN
5	PROP. LANDSCAPE WITH 8" AMENDED SOILS PER LANDSCAPE PLAN AND DETAIL ON SHEET 5
6	EXISTING POWER POLE TO BE RELOCATED PER SCE STANDARD AND CITY STANDARD 402, NEW LOCATION TO BE DETERMINED IN FINAL ENGINEERING
7	PROP. STORMTECH INFILTRATION SYSTEM PER DETAILS ON SHEET 5
8	PROP. 6" CURB
9	EXISTING POWER POLE TO PROTECT IN PLACE
10	PROP. U.G. INFILTRATION SYSTEM INLET CONNECTION POINT
11	REMOVE EXISTING AC DIKE
12	PROP. DRIVEWAY APPROACH PER CITY OF MENIFEE STANDARD PLAN NO. 206 & 207
13	PROP. 6'X2' STUCCO MONUMENT
14	PROP. 6' LONG RAMP WITH 8.33% SLOPE MAX
15	PROP. 4" CONCRETE OVER 12" COMPACTED NATIVE SOIL AT 90%
16	PROP. 24" CATCH BASIN WITH TRAFFIC RATED GRATE PER DETAIL ON SHEET 4
17	PROP. 24" CATCH BASIN WITH NO GRATE PER DETAIL ON SHEET 4
18	PROP. 24" EMERGENCY OVERFLOW CATCH BASIN WITH NO GRATE PER DETAIL ON SHEET 4
19	PROP. CONNECTION TO THE EXISTING STORM DRAIN SYSTEM

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

REVISIONS

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DATE: 5/20/22

ENGINEER SEAL
REGISTERED PROFESSIONAL ENGINEER WILFREDO S.D. VENTURA No. 66532 Exp. 6-30-24 CIVIL STATE OF CALIFORNIA

SCALE: AS SHOWN
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CITY OF MENIFEE
ENGINEERING DEPARTMENT

YOLANDA S. MACALALAD RCE 68190 DATE
CITY ENGINEER EXP. 9/30/25

RECOMMENDED BY: DATE

SEAL

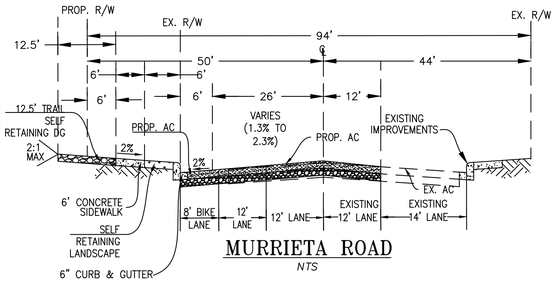
CITY OF MENIFEE ENGINEERING DEPARTMENT

CONCEPTUAL GRADING PLAN FOR VISTA RIDGE APARTMENTS

SHEET NO. 3

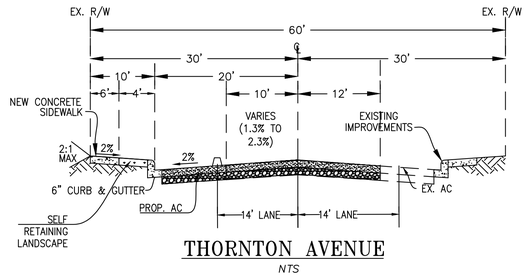
3 OF 6

PROJECT NO:



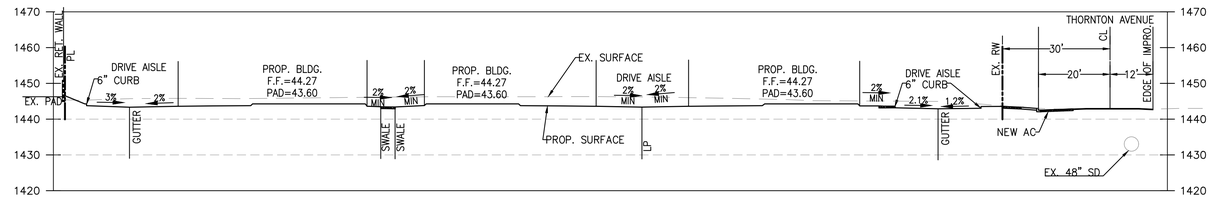
MURRIETA ROAD

NTS



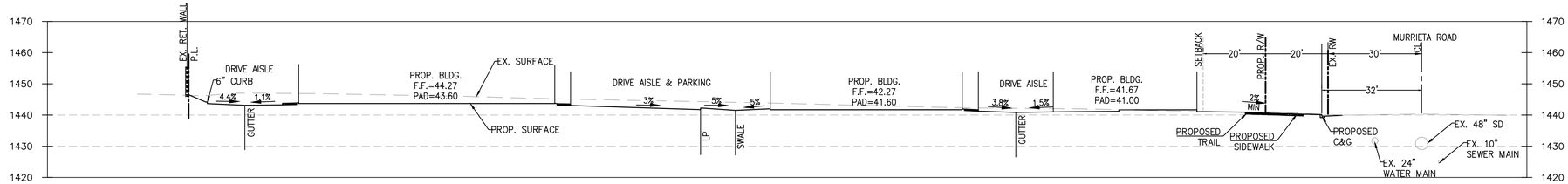
THORNTON AVENUE

NTS



SECTION A–A

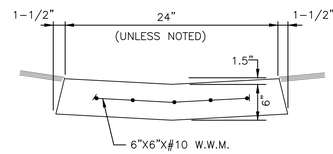
SCALE: 1:20



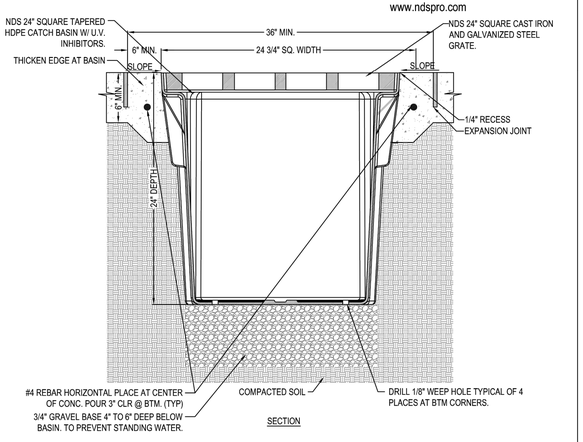
SECTION B–B

SCALE: 1:20

NOTE:
PROVIDE EXPANSION JOINTS AT 60' O.C. MAX W/WEAKENED PLANE JOINTS AT 20' O.C. INSTALL 3"X36" LONG DOWELS AT 12" O,C, AT EXPANSION JOINTS.



3 GUTTER DETAIL
NOT TO SCALE



SECTION

NOTES:
1. GRATE TO BE ATTACHED TO CATCH BASIN WITH SCREW PROVIDED AT TIME OF INSTALLATION.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. DO NOT SCALE DRAWING.
4. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY.
5. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

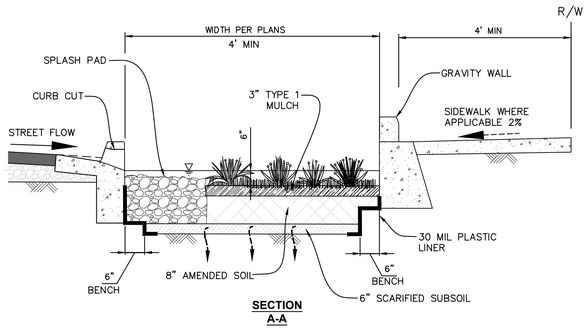
SQUARE CATCH BASIN

24" SQUARE CATCH BASIN - TYPICAL INSTALLATION FOR VEHICULAR TRAFFIC APPLICATIONS LOAD C

KEY COMPONENT
www.ndspro.com/s5

REVISION DATE 8-15-2016

NDS, INC.
851 NORTH HARVARD AVE.
LINDSAY, CA 93247
TOLL FREE: 1-800-726-1994
PHONE: (559) 562-9888
FAX: (559) 562-4488
www.ndspro.com



SECTION
A-A

5 AMENDED SOIL
NOT TO SCALE

16 WITH TRAFFIC RATED GRATE
NOT TO SCALE

17 SOLID LID, NO GRATE
NOT TO SCALE

18 SOLID LID, NO GRATE
NOT TO SCALE

REVISIONS				
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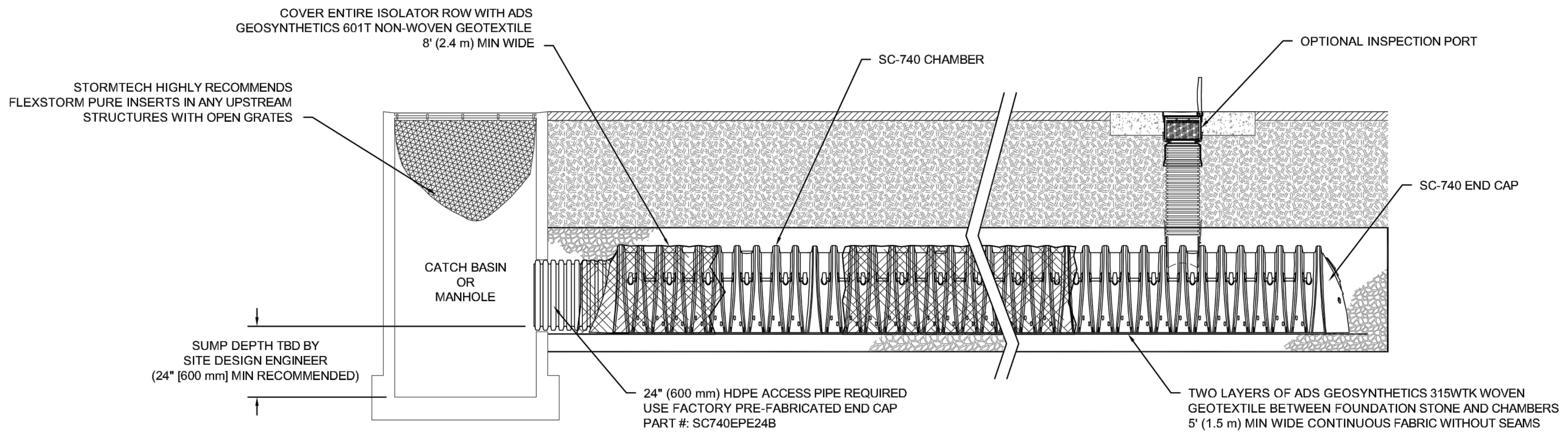
SEAL
CITY OF MENIFEE
OCTOBER 1, 2008

CITY OF MENIFEE ENGINEERING DEPARTMENT

CONCEPTUAL GRADING PLAN FOR VISTA RIDGE APARTMENTS

SHEET NO. 4
4 OF 6
PROJECT NO:



COVER ENTIRE ISOLATOR ROW WITH ADS GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE 8' (2.4 m) MIN WIDE
STORMTECH HIGHLY RECOMMENDS FLEXSTORM PURE INSERTS IN ANY UPSTREAM STRUCTURES WITH OPEN GRATES
SC-740 CHAMBER
OPTIONAL INSPECTION PORT
SC-740 END CAP
CATCH BASIN OR MANHOLE
SUMP DEPTH TBD BY SITE DESIGN ENGINEER (24" [600 mm] MIN RECOMMENDED)
24" (600 mm) HDPE ACCESS PIPE REQUIRED USE FACTORY PRE-FABRICATED END CAP PART #: SC740EPE24B
TWO LAYERS OF ADS GEOSYNTHETICS 315WTK WOVEN GEOTEXTILE BETWEEN FOUNDATION STONE AND CHAMBERS 5' (1.5 m) MIN WIDE CONTINUOUS FABRIC WITHOUT SEAMS

SC-740 ISOLATOR ROW DETAIL

NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

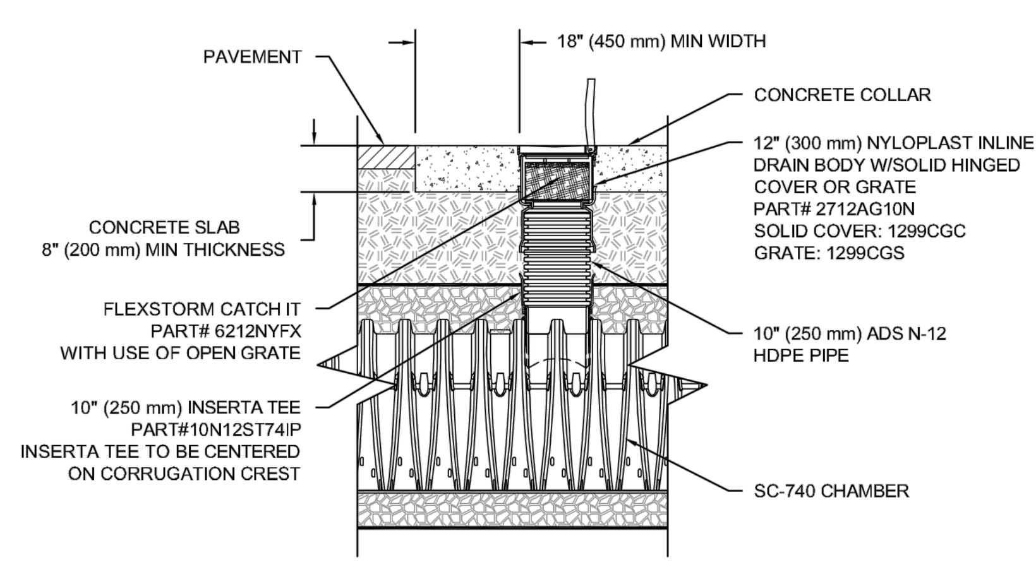
STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



PAVEMENT
18" (450 mm) MIN WIDTH
CONCRETE COLLAR
12" (300 mm) NYLOPLAST INLINE DRAIN BODY W/SOLID HINGED COVER OR GRATE PART# 2712AG10N SOLID COVER: 1299CGC GRATE: 1299CGS
CONCRETE SLAB 8" (200 mm) MIN THICKNESS
FLEXSTORM CATCH IT PART# 6212NYFX WITH USE OF OPEN GRATE
10" (250 mm) ADS N-12 HDPE PIPE
10" (250 mm) INSERTA TEE PART#10N12S74IP INSERTA TEE TO BE CENTERED ON CORRUGATION CREST
SC-740 CHAMBER

SC-740 INSPECTION PORT DETAIL

NTS

SC-740 ISOLATOR ROW DETAILS | DATE: 11/18/14 | DRAWN: JLM | CHECKED: JLM | PROJECT #:

REV | DRW | CHK | DESCRIPTION

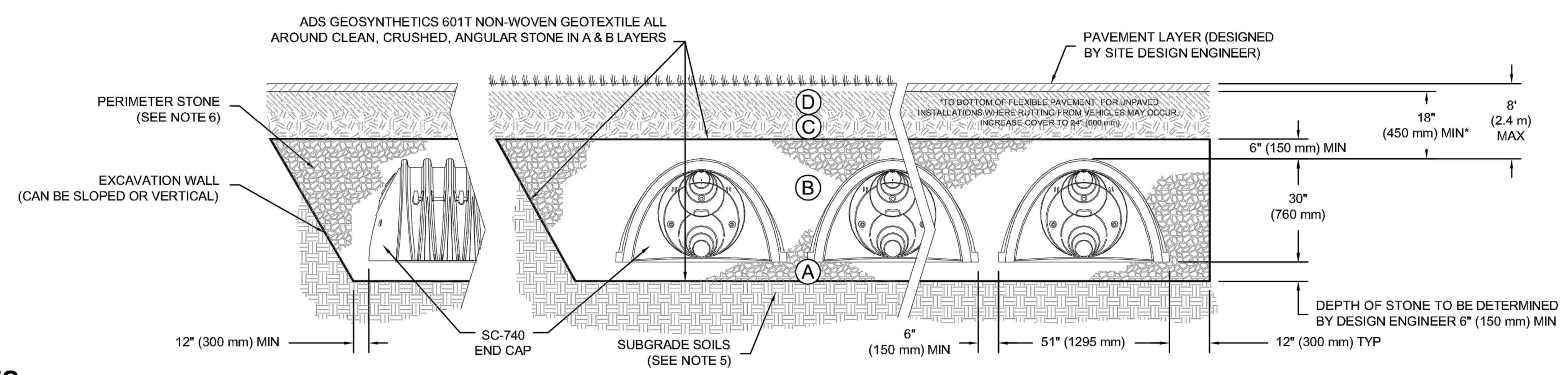
StormTech — ADS — 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473

SHEET 1 OF 1

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



ADS GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE ALL AROUND CLEAN, CRUSHED, ANGULAR STONE IN A & B LAYERS
PAVEMENT LAYER (DESIGNED BY SITE DESIGN ENGINEER)
PERIMETER STONE (SEE NOTE 6)
*TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 24" (600 mm).
18" (450 mm) MIN*
8' (2.4 m) MAX
6" (150 mm) MIN
EXCAVATION WALL (CAN BE SLOPED OR VERTICAL)
30" (760 mm)
DEPTH OF STONE TO BE DETERMINED BY DESIGN ENGINEER 6" (150 mm) MIN
12" (300 mm) MIN
SC-740 END CAP
SUBGRADE SOILS (SEE NOTE 5)
6" (150 mm) MIN
51" (1295 mm)
12" (300 mm) TYP

NOTES:

1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.
5. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
7. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

SC-740 STANDARD CROSS SECTION | DATE: 11/18/14 | DRAWN: JLM | CHECKED: JLM | PROJECT #:

REV | DRW | CHK | DESCRIPTION

StormTech — ADS — 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473

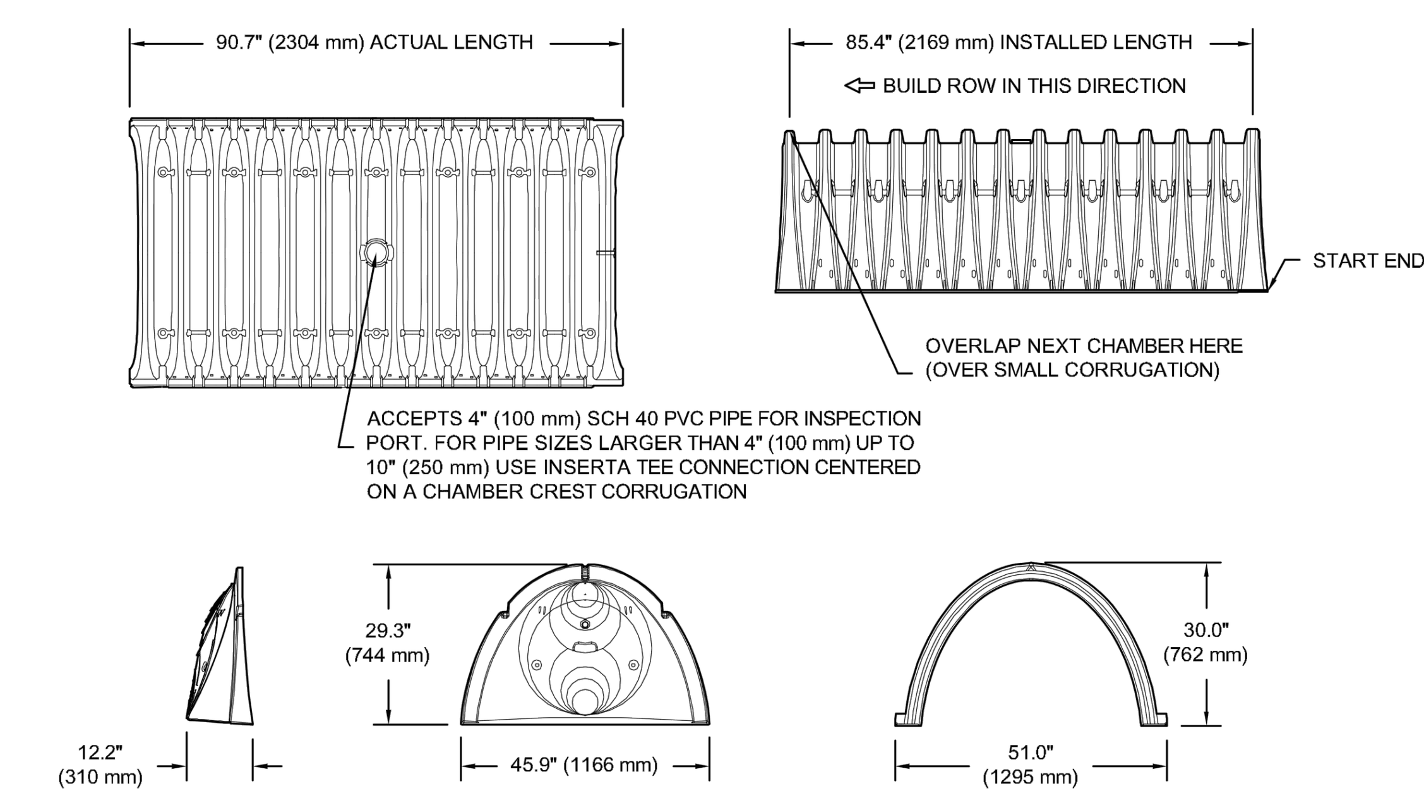
SHEET 1 OF 1

(7) STORMTECH INFILTRATION TANK DETAILING

ENTIRE SHEET – NOT TO SCALE

SC-740 TECHNICAL SPECIFICATION

NTS

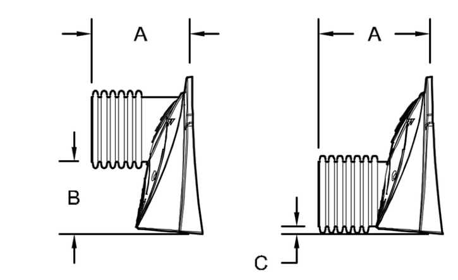


90.7" (2304 mm) ACTUAL LENGTH
85.4" (2169 mm) INSTALLED LENGTH
BUILD ROW IN THIS DIRECTION
START END
OVERLAP NEXT CHAMBER HERE (OVER SMALL CORRUGATION)
ACCEPTS 4" (100 mm) SCH 40 PVC PIPE FOR INSPECTION PORT. FOR PIPE SIZES LARGER THAN 4" (100 mm) UP TO 10" (250 mm) USE INSERTA TEE CONNECTION CENTERED ON A CHAMBER CREST CORRUGATION
29.3" (744 mm)
12.2" (310 mm)
45.9" (1166 mm)
30.0" (762 mm)
51.0" (1295 mm)

NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC			---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

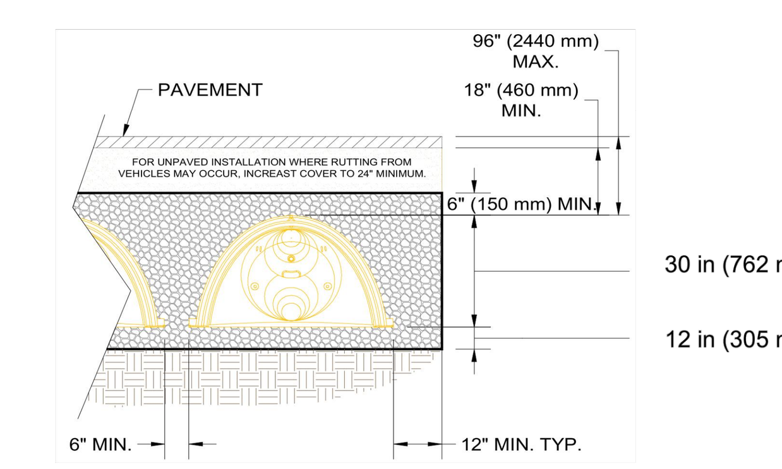
StormTech — Detention • Retention • Recharge — Subsurface Stormwater Management℠

Units: Imperial

Project: Vista Ridge Apartments
By: Ventura Engineering Inland, Inc.
Point of Contact: Robert
Date: 20-May-22

System Requirements

Required Storage Volume	3,337	CF
Select Stormtech Chamber System	SC-740	
Stone Porosity (Industry Standard = 40%)	40%	
Stone Foundation Depth	12	Inches
Storage Volume Per Chamber	81.70	CF
Avg Cover over Chambers (18 in min. & 96 in max.)	18	Inches
Number of Chambers Required -	**41**	
Approximate Bed Size Required	1,651	SF
Tons of Stone Required	245	Tons
Volume of Excavation	306	CY
Area of Filter Fabric	590	SY
# of End Caps Required	4	Each
Length of ISOLATOR ROW	149.52	FT
ISOLATOR FABRIC	83	SY



Is the limiting dimension for the bed the width or length? width

Controlled by Width (Rows)			Controlled by Length		
Width	12	FT	Length	100	FT
# of Chambers Long	21	EA	# of Chambers long	-	EA
# of Rows	2	EA	# of Rows	-	EA
Actual Length	153.12	FT	Actual Length	-	FT
Actual Width	11.00	FT	Actual Width	-	FT

1 of the chambers rows will contain only 20 chambers

Material Estimate

To use this sheet: Please enter data into the blue and green cells. If switching between Imperial and Metric units please check the correct units and data is input in the green cells.

Please call StormTech @ 888-892-2694 for conceptual cost estimates.

www.stormtech.com | 20 Beaver Road | Suite 104 | Wethersfield | Connecticut | 06109 | 888.892.2694 | fax 866.328.8401

REVISIONS

NO.	SHT.	DESCRIPTION	DATE	BY	APRD

ENGINEER LOGO
VENTURA ENGINEERING INLAND, INC
29393 YNEZ RD, SUITE 159 PHONE (951) 252-7632
TEMECULA, CA. 92591
DATE: 5/20/22
WILFREDO S.D. VENTURA
RCE 66532, EXP. 06/30/22

ENGINEER SEAL
REGISTERED PROFESSIONAL ENGINEER — WILFREDO S.D. VENTURA — No. 66532 — Exp. 6-30-24 — CIVIL — STATE OF CALIFORNIA

SCALE: AS SHOWN
DESIGN:
DRAWN:
CHECKED:
APPROVED:
DATE:

CITY OF MENIFEE
ENGINEERING DEPARTMENT
YOLANDA S. MACALALAD — RCE 68190 — DATE
CITY ENGINEER — EXP. 9/30/25
RECOMMENDED BY: — DATE

SEAL — CITY OF MENIFEE — OCTOBER 1, 2008

CITY OF MENIFEE ENGINEERING DEPARTMENT

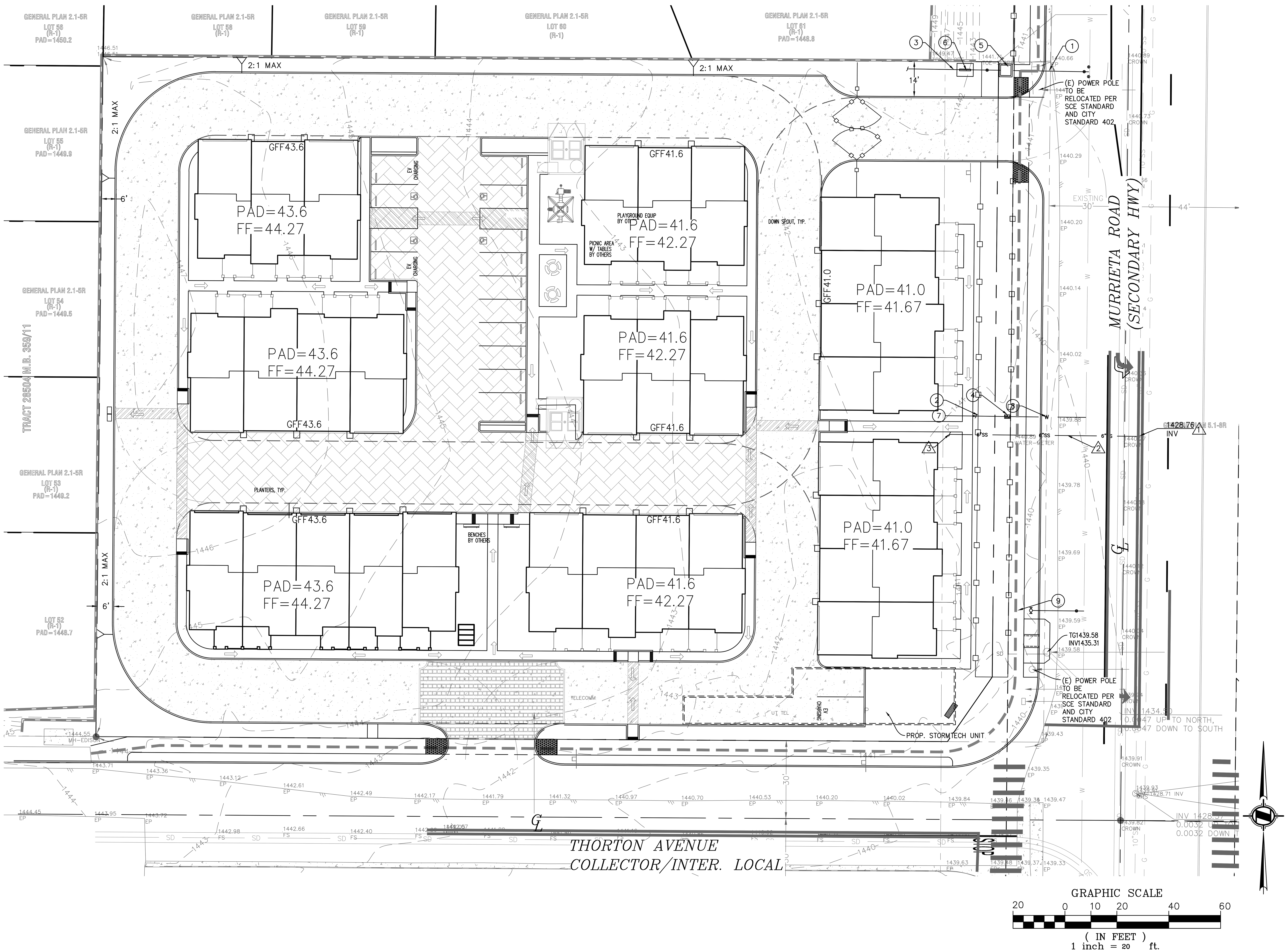
CONCEPTUAL GRADING PLAN
FOR VISTA RIDGE APARTMENTS

SHEET NO. 5

5 OF 6

PROJECT NO:

Exhibit: G
PP2018-0225
DATE: 6/15/2022
Planner: D. McGriff



GENERAL NOTES

1. ALL STORM DRAIN CONNECTIONS WITHIN THE GEOGRID REINFORCED ZONE MUST BE WATER TIGHT. AT MINIMUM, RUBBER GASKETS ARE RECOMMENDED.
2. STORM AND SEWER PIPE INSTALLATION WITHIN THE GEOGRID REINFORCED ZONE MUST BE COORDINATED DURING WALL CONSTRUCTION.
3. WATER LINES, INCLUDING IRRIGATION SYSTEMS, MUST BE WATER TIGHT WITHIN 100 FEET OF THE RETAINING WALL. LEAKAGE BEHIND A RETAINING WALL WILL INCREASE THE HORIZONTAL PRESSURE AGAINST THE WALL LEADING TO WALL FAILURE. FOR THIS REASON, SUBSURFACE WATERLINES AND IRRIGATION SYSTEMS SHOULD BE INSTALLED ABOVE THE REINFORCED ZONES OF THE RETAINING WALL, OR WITHIN 5 FEET OF THE REINFORCED ZONE.

ABBREVIATIONS

AVE	AVENUE
BW	BOTTOM OF WALL
CL	CENTER LINE
CONC	CONCRETE
DTL	DETAIL
E	EXISTING
EA	EACH
EX	EXISTING
FL	FLOW LINE
FS	FINISHED SURFACE
H	HEIGHT
HP	HIGH POINT
IE	INVERT ELEVATION
JT	JOINT TRENCH
LF	LINEAR FEET
MSE	MECHANICALLY STABILIZED EARTH
P	PROPOSED
PCC	PORTLAND CEMENT CONCRETE
POC	POINT OF CONNECTION
PL	PROPERTY LINE
PR	PROPOSED
RET	RETAINING
RW	RIGHT-OF-WAY
S	SEWER
SD	STORM DRAIN
SF	SQUARE FEET
SHT	SHHET
STD	STANDARD
TC	TOP OF CURB
TW	TOP OF WALL
TYP	TYPICAL
W	WATER
WM	WATER METER

WATER CONSTRUCTION NOTES

(1) INSTALL 6" PVC WATERLINE (PVT) PER EMWD WATER STD B-408
(2) INSTALL WATER MAIN THRUST BLOCK (PVT) PER EMWD WATER STD B-407
(3) INSTALL 6" WATER MAIN END CAP (PVT)
(4) INSTALL 3" WATER METER PER EMWD WATER STD B-633.
(5) INSTALL 6" FIRE SERVICE LATERAL AND METER PER PER EMWD WATER STD B-993
(6) INSTALL 6" FIRE SERVICE BACKFLOW ASSEMBLY PER EMWD WATER STD B-657
(7) INSTALL 3" WATER MAIN END CAP (PVT)
(8) INSTALL 3" PVC WATERLINE (PVT) PER EMWD WATER STD B-408
(9) INSTALL 6" STANDARD FIRE HYDRANT AND LATERAL (PVT) PER EMWD WATER STD B-362

SEWER CONSTRUCTION NOTES

△1 INSTALL SADDLE CONNECTION TO EXISTING SEWER LINE PER EMWD SEWER STD SB-176
△2 INSTALL 6" SDR-35 PVC SEWER LATERAL (PVT) PER EMWD SEWER STD SB-158
△3 INSTALL SEWER LATERAL WYE AND CLEAN OUT (PVT) PER EMWD SEWER STD SB-52

REVISIONS

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ENGINEER LOGO
VENTURA ENGINEERING INLAND, INC
29393 YNEZ RD, SUITE 159 PHONE (951) 252-7632
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YOLANDA S. MACALALAD RCE 68190 DATE
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RECOMMENDED BY: DATE

SEAL
CITY OF MENIFEE
OCTOBER 1, 2008

CITY OF MENIFEE
ENGINEERING DEPARTMENT

CONCEPTUAL GRADING PLAN
FOR VISTA RIDGE APARTMENTS

SHEET NO.
6
6 OF 6
PROJECT NO: