PRECISE GRADING PLAN
FOR
PM-20394
125 W. EMPORIA STREET,
IN THE CITY OF ONTARIO

OWNER/APPLICANT:
STEVE SEIDNER / RWSS LLC
1405 FAIRPLEX DRIVE, SUITE B3,
LA VERNE, CA 91750
PHONE: (626) 533-8312

SOILS ENGINEER:
JACK C. LEE, PRINCIPAL ENGINEER
CALLAND ENGINEERING, INC.
576 E. LAMBERT ROAD,
BREA, CA 92821
TEL. NO.: (714) 671-1050

BENCHMARK:
ONTARIO CITY BENCHMARK: ONTARIO K-17-1

2.5 IN. BRASS DISK STAMPED "CITY OF ONTARIO K-17-1. SET ON TC @ MOC OF NORTHEAST RETURN OF EUCLID AVENUE AND TRANSIT AVE.

ELEVATION: 996.616' 2018
NOTE: THE ELEVATION SHOWN ON THIS GRADING PLAN WOULD BE SUBTRACTED BY 0.21' TO TIE IN TO THE SAID CITY OF ONTARIO BENCHMARK.

BASIS OF BEARING:
CENTERLINE OF LAUREL AVENUE, N 00°30'00" W AS PER RECORD OF SURVEY 4-322, R.S.B.126-31

LEGAL DESCRIPTION:
BLK D OF THE TOWN OF ONTARIO, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE PLAT THEREOF RECORDED IN BOOK 9, PAGE 43 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 1049-059-14

EARTHWORK QUANTITIES:

	125 W. EMPORIA STREET
AREA	0.893 AC.
CUT	71 C.Y.
FILL	572 C.Y.
OVER-EXCAVATION	3,843 C.Y.
ON-SITE WATER	1"ø PVC/DIP - 17'
	2"ø PVC/DIP - 17'
	6"ø PVC/DIP- 17'
ON-SITE SEWER	6"ø VCP/ABS - 33'
ON-SITE YARD DRAIN	6"ø PVC - 252'
	8"ø PVC - 160'
	12"ø PVC - 81'
SPECIAL NOTE: THE QUANTITIES SHOWN HEREON ARE FOR PERMIT AND BONDING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY QUANTITIES PRIOR TO START OF GRADING.	

UTILITIES SERVICES:
WATER - CITY OF ONTARIO UTILITIES DEPARTMENT - (909) 395-2050
SEWER - CITY OF ONTARIO UTILITIES DEPARTMENT - (909) 395-2050
GAS - SOUTHERN CALIFORNIA GAS CO. - (800) 427-2200
ELECTRICAL - SOUTHERN CALIFORNIA EDISON CO. - (800) 655-4555
SCHOOL - ONTARIO-MONTCLAIR SCHOOL DISTRICT - (909) 459-2505
FIRE - CITY OF ONTARIO FIRE DEPARTMENT (909) 395-2029
SHERIFF - COUNTY OF POLICE DEPARTMENT (909) 986-6711
CABLE - FRONTIER COMMUNICATION - (855) 845-7442
TELEPHONE - VERIZON COMMUNICATION - (800) 483-300

FEMA FIRM MAP
THE PROJECT SITE IS LOCATED ON A 0.20% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANGE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE, ZONE X, PER MAP 06071C8617J, EFFECTIVE 02/18/2015.

SITE INFORMATION

TOTAL SITE AREA:	38,914 S.F. = 0.893 ACRES
DISTURBED AREA:	38,914 S.F. = 0.893 ACRES
BUILDING AREA:	21,703 S.F. = 0.498 ACRES
PERVIOUS AREA:	2,504 S.F. = 0.057 ACRES
IMPERVIOUS AREA:	36,410 S.F. = 0.836 ACRES

REFERENCE PLANS
SANITARY SEWER PLAN S10890

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTHS AND HAVE REACHED PROPER MATERIAL.	-	X
3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS.	-	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	X	-
5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X

THE FOLLOWING TESTING PROCEDURES SHOULD BE USED TO DEMONSTRATE CONFORMANCE WITH THE BUILDING CODE AND THE PROJECT SPECIFIC GEOTECHNICAL REPORT.

TESTING PROCEDURE	TEST METHOD
MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT	ASTM D-1557
EXPANSION INDEX	UBC STANDARD 18-2 OR ASTM D-4829
UNIT WEIGHT OF SOIL IN-PLACE BY THE SAND CONE METHOD	ASTM D-1556
DENSITY OF SOIL AND AGGREGATE IN-PLACE BY NUCLEAR METHOD	ASTM D-2922

THE TESTING FREQUENCY SHOULD BE IN ACCORDANCE WITH THE PROJECT SPECIFIC GEOTECHNICAL REPORT. MORE FREQUENT TESTING MAY BE APPROPRIATE, BASED ON FIELD CONDITIONS OR AS DETERMINED BY THE BUILDING OFFICIAL.

ADDITIONAL NOTE:
ALL WQMP BMP'S ARE CONSTRUCTED PER GRADING PLAN SETS. COMPLY WITH ALL CONDITIONS OF APPROVAL 1-3.

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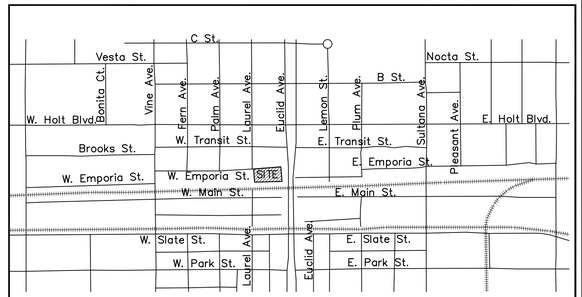
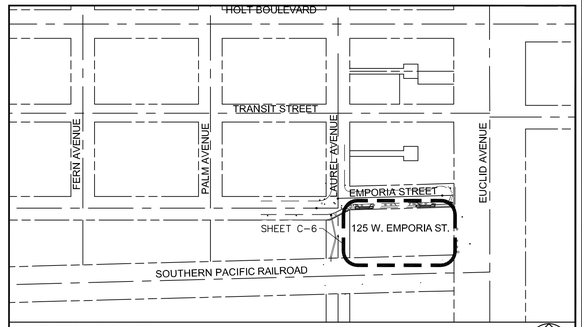


VICINITY MAP
T.G. # 602 - D - 4
SCALE: N.T.S.



INDEX MAP
SCALE: 1" = 200'

LEGENDS:

(527.63).....EXISTING ELEVATION
520.00.....PROPOSED ELEVATION
--(530)--.....EXISTING COUNTOUR
.....DRAINAGE PATTERN
530.....PROPOSED CONTOUR
.....EXISTING BLOCK WALL
SW.....SIDE WALK
.....LIGHT
.....CENTER LINE
.....PROPERTY LINE
1.....CONSTRUCTION NOTES
.....EXISTING CHAIN LINE FENCE
.....GRADING DAYLIGHT LINE
.....SANDBAG LINE
P.....POWER POLE
.....PROPOSED 2" GRIND & OVERLAY
.....PROPOSED 4" AC PAVEMENT
.....PROPOSED UTILITY TRENCH REPAIR
.....PCC CONCRETE PAVEMENT

T.C.....TOP OF CURB
F.L.....FLOW LINE
F.G.....FINISH GRADE
F.S.....FINISH SURFACE
F.F.....FINISH FLOOR
H.P.....HIGH POINT
P.P.....POWER POLE
D/W.....DRIVEWAY
W/M.....WATER METER
INV.....INVERT ELEVATION
T.G.....TOP OF GRATE
D.C.D.A.....DOUBLE CHECK DETECTOR ASSEMBLY
P.L.....PROPERTY LINE
R/W.....RIGHT OF WAY
C.L.....CENTER LINE
P.O.T.....PATH OF TRAVEL
.....LANDSCAPE AREA

SHEET INDEX:

THIS PLAN HAS BEEN REVIEWED AND CONFORMS TO THE RECOMMENDATIONS PROVIDED IN THE SOILS REPORT DATED SEPTEMBER 1, 2020.

SIGNATURE 09/26/2023 DATE

REGISTERED PROFESSIONAL ENGINEER JACK C. S. LEE 2153 Exp. 3-31-25 GEOTECHNICAL STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER JACK C. S. LEE 40870 Exp. 3-31-25 CIVIL STATE OF CALIFORNIA

CALLAND ENGINEERING, INC.
dba QUARTECH CONSULTANTS
576 E. LAMBERT ROAD, BREA, CA 92821
TEL: (714) 671-1050 FAX: (714) 671-1090

RELEASED

REVISIONS

B202206576
PDEV21-017
PMTT21-009
PM-20394

PRECISE GRADING PLAN
TITLE SHEET:
125 W. EMPORIA STREET,
ONTARIO, CA 91762

DRAWN: EYS
CHECKED: J.C.L.
DATE: 09-26-2023
JOB NO.: 20-022-029
SCALE: N.T.S.
FILE NAME: Emporia_Grading.dwg

C-1

PRECISE GRADING, DRAINAGE & EROSION CONTROL PLAN

GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN STRICT CONFORMANCE WITH THE CURRENT CITY OF ONTARIO STANDARD SPECIFICATIONS AND STANDARD DRAWINGS AND CURRENT SPPWC STANDARD SPECIFICATIONS AND STANDARD DRAWINGS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. APPLICABLE CODES: 2019 CBC/2018 IBC/2019 CPC/2018 UPC, 2019 CALGREEN.

2. ANY CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF/HERSELF WITH THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY OR INDIRECTLY FROM HIS/HER OPERATIONS, WHETHER OR NOT THE FACILITY IS SHOWN ON THIS PLANS.

3. ALL OBSTRUCTION WITHIN THE AREA TO BE IMPROVED SHALL BE REMOVED AND/OR RELOCATED AT THE DIRECTION OF THE CITY ENGINEER. UTILITIES ARE TO BE RELOCATED BY THEIR RESPECTIVE OWNERS UNLESS NOTED OTHERWISE. THE CONTRACTOR IS REFERRED TO SECTION 5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

4. UTILITY LINES LOCATION WHERE TAKEN FROM AVAILABLE RECORD DATA AND WERE NOT LOCATED IN THE FIELD UNLESS OTHERWISE NOTED ON THE PLAN. THE CONTRACTOR IS REFERRED TO SECTION 5 OF THE STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION.

5. IN CASE OF ANY ACCIDENTS INVOLVING SAFETY MATTERS COVERED BY SECTION 6409(B) OF THE CALIFORNIA LABOR CODE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE STATE DIVISION OF INDUSTRIAL SAFETY.

6. STATE LAW (SB 3019) REQUIRES THE CONTRACTOR TO CONTACT UNDERGROUND SERVICE ALERT AND OBTAIN AN IDENTIFICATION NUMBER PRIOR TO THE ISSUANCE OF CITY'S ENCROACHMENT PERMIT. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT AT 811 A MINIMUM OF 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY.

7. PRIOR TO START OF ANY WORK THE CONTRACTOR SHALL OBTAIN A BUSINESS LICENSE FROM THE CITY OF ONTARIO. THE CONTRACTOR SHALL ALSO OBTAIN AN ENCROACHMENT PERMIT FROM THE ENGINEERING DEPARTMENT NO LESS THAN 48 HOURS PRIOR TO START OF ANY CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY.

8. THE CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT 48 HOURS PRIOR TO TIME OF CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR IS REFERRED TO SECTION 7-10.3 OF THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION.

9. THE CONTRACTOR SHALL RENEW OR REPLACE ANY EXISTING TRAFFIC STRIPING AND/OR PAVEMENT MARKING, WHICH DURING HIS OPERATION HAS BEEN EITHER REMOVED OR THE EFFECTIVENESS OF WHICH HAS BEEN REDUCED. RENEWAL OF TRAFFIC STRIPING AND MARKING SHALL BE DONE USING REFLECTIVE THERMO-PLASTIC MARKING IN CONFORMANCE WITH SECTION 84 & 85 OF THE CALTRANS STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. ALL REGULATORY WARNING, AND GUIDE SIGNS SHALL HAVE 3M DIAMOND, VIP GRADE SHEETING WITH SERIES 1160 PROTECTIVE OVERLAY FILM.

10. THE LAND SURVEYOR ACT, SECTION 8771 OF THE BUSINESS & PROFESSIONAL CODE, AND SECTIONS 732.5, 1492-5, 1810-5 OF THE STREETS AND HIGHWAY CODE REQUIRE THAT SURVEY MONUMENTS SHALL BE PROTECTED AND PERPETUATED.

    "IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER OR OTHERS PERFORMING THE CONSTRUCTION WORK TO RETAIN A QUALIFIED REGISTERED CIVIL ENGINEER AND/OR LICENSED LAND SURVEYOR PRIOR TO THE START OF CONSTRUCTION TO LOCATE, REFERENCE AND FILE THE NECESSARY CORNER RECORDS WITH THE COUNTY SURVEYOR'S OFFICE FOR SURVEY CONTROL POINTS/MONUMENTS THAT EXIST AS SHOWN ON RECORDED TRACT MAPS, PARCEL MAPS, RECORDS OF SURVEYS AND HIGHWAY MAPS, AND MAY BE DISTURBED OR DAMAGED BY THE PROPOSED CONSTRUCTION."

    AFTER THE COMPLETION OF THE PROPOSED CONSTRUCTION, SAID MONUMENTS AND/OR CONTROL SURVEY POINTS SHALL BE RESET TO THE NEW SURFACE IN ACCORDANCE WITH CURRENT PROFESSIONAL LAND SURVEYING PRACTICES. CORNER RECORDS SHALL BE FILED WITH THE COUNTY SURVEYOR FOR ALL THE NEW MONUMENTS SET.

11. THE DEVELOPER SHALL PROVIDE THE CITY WITH A COMPLETE SET OF "AS BUILT", MYLAR DRAWINGS PRIOR TO THE FINAL INSPECTION.

12. A CITY ACCEPTED/APPROVED SET OF PLANS SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.

13. A PRE-CONSTRUCTION MEETING SHALL OCCUR PRIOR TO CONSTRUCTION. ATTENDEES SHALL INCLUDE A CITY REPRESENTATIVE AND THE CONTRACTOR WHO WILL PERFORM THE WORK. "CUT-SHEETS" SHALL BE PROVIDED TO THE CITY AT THIS MEETING FOR ITS REVIEW.

14. CITY ACCEPTANCE OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM RESPONSIBILITY FOR THE CORRECTION OF ERROR AND OMISSION DISCOVERED DURING CONSTRUCTION. UPON REQUEST OF THE CITY INSPECTOR, THE REQUIRED PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR REVIEW.

15. ANY REQUIRED RIGHT-OF-WAY OR EASEMENT SHALL BE DEDICATED TO AND ACCEPTED BY THE CITY PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE IMPROVEMENTS WITHIN THE REQUIRED RIGHT-OF-WAY OR EASEMENT.

16. PAVEMENT SHALL NOT BE CONSTRUCTED UNTIL ALL UNDERGROUND UTILITIES HAVE BEEN INSTALLED, TESTED, AND APPROVED BY THE CITY ENGINEER.

17. THE PAVING CONTRACTOR SHALL RAISE SEWER AND DRAINAGE MANHOLE, AND WATER VALVE TO GRADE.

18. PAVEMENT STRUCTURAL SECTION SHALL BE DETERMINED BY AS SOILS TEST PRIOR TO CONSTRUCTION. THE MAXIMUM R VALUE ALLOWED IS 50. IF THE RECOMMENDED STRUCTURAL SECTION DIFFERS FROM THE CITY MINIMUM PER STANDARD DRAWING 1011, THE THICKER SECTION OF THE TWO SHALL BE CONSTRUCTED. TI VALUES ARE TO BE PROVIDED BY THE CITY OF ONTARIO TRAFFIC SECTION.

19. IT IS THE DEVELOPER'S RESPONSIBILITY TO ENSURE ALL CURBS AND GUTTER HAVE BEEN CONSTRUCTED TO PLAN GRADE IN AREAS BELOW 0.50%. FIELD VERIFICATION FOR THOSE AREAS IS REQUIRED. THE CITY OF ONTARIO WILL REQUIRE THE REMOVAL AND CONSTRUCTION OF CURBS AND GUTTER THAT ARE NOT SATISFACTORY.

20. ALL EXISTING PUBLIC IMPROVEMENT SHALL BE PROTECTED DURING CONSTRUCTION. ANY EXISTING PUBLIC IMPROVEMENT REMOVED OR DAMAGED AS A RESULT OF THE CONSTRUCTION SHALL BE REPLACED IN KIND PER CURRENT CITY OF ONTARIO STANDARD.

21. ALL SEWER MAINS SHALL BE EXTRA STRENGTH VITRIFIED CLAY PIPE (V.C.P.) AND SHALL HAVE TYPE "G" JOINTS (BELL AND SPIGOT), PER SECTIONS 207-8 AND 208.2.3 RESPECTIVELY, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTIONS, LATEST EDITION.

22. PRIOR TO STARTING CONSTRUCTION, THE CONSTRUCTOR SHALL VERIFY LOCATION AND ELEVATION OF SEWER MAIN(S) AND NOTIFY THE DESIGN ENGINEER OF ANY VARIATION FROM DESIGN.

23. MINIMUM COVER OF ALL SEWER MAINS SHALL BE 7 FEET FROM THE FINISHED SURFACE.

24. SEWER MAIN LINE STATIONING IS PER PIPE CENTERLINE.

25. STREET CENTERLINE STATIONING IS PER THE STREET IMPROVEMENT PLANS AND PROVIDED FOR REFERENCE.

26. GRADING OVER SEWER MAINS SHALL BE DONE IN SUCH A MANNER AS TO PREVENT THE PONDING OF WATER.

27. THE TOP OF ALL MANHOLES LOCATED IN PAVEMENT SHALL BE RAISED TO PAVEMENT GRADE AFTER STREETS ARE CAPPED.

28. THE MINIMUM CLASS BEDDING FOR VCP SEWER SHALL BE CLASS "C" IN ACCORDANCE WITH CITY OF ONTARIO STANDARD DRAWING NO. 2104 & 2105.

29. SEWER CONSTRUCTOR SHALL SUCCESSFULLY PERFORM TWO AIR TEST AT NO ADDITIONAL COST TO THE CITY. THE FIRST AIR TEST SHALL BE COMPLETED IMMEDIATELY AFTER INSTALLATION, BACKFILL AND COMPACTION OF THE SEWAGE SYSTEM. THE SECOND AIR TEST SHALL BE CONDUCTED AFTER INSTALLATION OF ALL THE OTHER UTILITIES AND PRIOR TO FINAL PAVING OF THE STREETS.

30. SEWER LATERALS CROSSING EXISTING CURB & GUTTER SHALL BE BACKFILLED WITH A 1 SACK CEMENT, SAND SLURRY BACKFILL.

31. CONNECTIONS TO EXISTING PIPELINES SHALL ONLY BE MADE WITH CITY INSPECTION PRESENT. TEST PLUGS SHALL ONLY BE REMOVED UPON DIRECTION OF THE CITY.

32. SHOULD MODIFICATION AND/OR RECONSTRUCTION (INCLUDING RAISING MANHOLE TO GRADE) OF AN EXISTING MANHOLE BE REQUIRED, PRIOR TO THE REMOVAL OF THE FRAME OF THE SEWER MANHOLE, THE CHANNEL OF THE MANHOLE SHALL BE COMPLETELY COVERED WITH PLANKING OR OTHER SUITABLE MATERIAL SO AS TO PREVENT DEBRIS FROM ENTERING THE CHANNEL. AFTER THE MANHOLE RECONSTRUCTION HAS BEEN COMPLETED, ALL DEBRIS SHALL BE REMOVED FROM WITHIN THE MANHOLE AND THE COVER OVER THE CHANNEL SHALL BE REMOVED.

33. THE CONTRACTOR IS ADVISED THAT THE WORK ON THIS PROJECT MAY INVOLVE WORKING IN A CONFINED AIR SPACE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH "CONFINED AIR SPACE" ARTICLE 108. TITLE 8 CALIFORNIA ADMINISTRATIVE CODE.

34. SEPARATION REQUIREMENT BETWEEN WATER, RECYCLED WATER, AND SEWER LINES SHALL CONFORM TO THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES REQUIREMENT AND THE CITY OF ONTARIO DESIGN STANDARDS. IF CONFLICTS BETWEEN CITY AND DOHS STANDARDS EXIST, THE DOHS CRITERIA WILL CONTROL. WHEN MINIMUM SEPARATION CANNOT BE ACHIEVED, STANDARD DRAWING NO. 4001 SHALL BE STRICTLY FOLLOWED.

35. CONTRACTOR SHALL NOT BACKFILL TRENCH UNTIL THE CITY INSPECTOR HAS OBTAINED AS-BUILT STATIONING ON ALL STRUCTURES.

36. UPON COMPLETION OF ALL UTILITIES PRIOR TO PAVING, THE DEVELOPER SHALL HIRE A CITY APPROVED VIDEO COMPANY TO VIDEO TAPE THE PIPELINES. CITY SHALL REVIEW SAID VIDEOTAPES FOR POTENTIAL CONSTRUCTION DEFECTS PRIOR TO ACCEPTANCE OF THE PROJECT.

37. INSCRIBE A "S", "W", AND/OR "I" ON THE FACE OF THE CURB TO INDICATE WHERE SEWER LATERALS, WATER LATERALS AND/OR RECYCLED WATER SERVICES CROSS THE CURBLINE.

38. WATER MAINS WITHIN NEW MODEL COLONIES UP TO 16" SHALL BE C900 CLASS 200 OR C905 PVC, OR 16" 10 GAUGE CML/CMC WELDED STEEL MORTAR LINED AND COATED ONLY OR WITHIN THE OLD MODEL COLONIES SHALL BE CLASS 350 DUCTILE IRON CEMENT MORTAR LINED AND ASPHALT COATED OR 10 GAUGE CML/CMC WELDED STEEL MORTAR LINED AND COATED ONLY. WATER MAINS OVER 16" WITHIN THE NEW MODEL COLONIES SHALL BE CML/CMC AND WITHIN THE OLD MODEL COLONIES SHALL BE 350 DUCTILE IRON CEMENT MORTAR LINED AND ASPHALT COATED OR 10 GAUGE CML/CMC WELDED STEEL MORTAR LINED AND COATED ONLY.

39. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF THE EXISTING WATER MAIN(S) AND NOTIFY THE DESIGN ENGINEER OF ANY VARIATION FROM DESIGN.

40. ALL VALVE OPERATIONS SHALL BE BY CITY FORCES. THE CONTRACTOR SHALL CONTACT THE CITY A MINIMUM OF 48 HOURS PRIOR TO TIME OF THE REQUIRED VALVE OPERATIONS (909) 395-2025.

41. MINIMUM COVER OF WATER MAINS SHALL BE 42 INCHES FROM THE FINISHED SURFACE FOR PIPES UNDER 12" DIAMETER AND 48 INCHES FOR PIPES 12" DIAMETER AND LARGER, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

42. WATER MAIN LINE STATIONING IS PER PIPE CENTERLINE.

43. THE CONTRACTOR SHALL INSTALL SUITABLE THRUST BLOCKS AT EVERY VERTICAL AND/OR HORIZONTAL CHANGE OF DIRECTION IN ACCORDANCE WITH CITY OF ONTARIO STANDARD DRAWING NO. 4004, WHETHER OR NOT SPECIFICALLY CALLED FOR OR SHOWN ON THE PLAN. UPON APPROVAL BY THE CITY, CONTRACTOR MAY UTILIZE FULLY WELDED JOINTS (IN LIEU OF THRUST BLOCKS) PER CITY OF ONTARIO STANDARD DRAWING NO. 4003. THRUST RESTRAINT FOR PVC PIPE SHALL BE ACCOMPLISHED WITH THE USE OF RESTRAINED JOINTS PER STANDARD DRAWING NO. 4010.

44. ALL MATERIALS, TESTING, AND INSPECTION OF PIPE SHALL BE IN CONFORMANCE WITH THE REQUIREMENT OF CITY OF ONTARIO AND THE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS. FAILURE TO MEET ANY OF THESE REQUIREMENT WILL BE CAUSE FOR REJECTION.

45. ALL WELDED STEEL PIPE USED SHALL BE CEMENT MORTAR LINED AND COATED, 10 GAUGE (MINIMUM), UNLESS NOTED OTHERWISE.

46. ALL STEEL BENDS AND FITTING SHALL BE CEMENT MORTAR LINED AND COATED AND SHALL BE SHOP FABRICATED PER AWWA C-208. CONTRACTOR SHALL SUBMIT FABRICATION DRAWINGS FOR ALL AWWA SHOP FABRICATED FITTING TO THE CITY.

47. ALL APPURTENANCES (I.E. AV, BO, FH, SERVICES, ETC.) THAT REQUIRE RELOCATION SHALL BE RECONSTRUCTED IN ACCORDANCE WITH CURRENT CITY STANDARD. EACH APPURTENANCE TO BE RELOCATED SHALL BE EVALUATED IN THE FIELD ON A CASE BY CASE BASIS AND RECONSTRUCTED AS DIRECTED BY THE CITY. HOWEVER, UNLESS OTHERWISE APPROVED BY THE CITY, RELOCATED APPURTENANCES SHALL BE RECONSTRUCTED FROM THE MAIN TO THE PROPOSED LOCATION.

48. TEST PRESSURE SHALL BE 150% OF PIPE CLASS RATING (IE: CLASS 150=225 PSI TEST), SHALL BE UNDER CONTINUOUS INSPECTION, AND SHALL BE IN ACCORDANCE WITH CITY STANDARD PROCEDURES.

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EROSION AND SEDIMENT CONTROL AND CONTRACTOR ACTIVITY NOTES:

1. THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION SITE BY IMPLEMENTATION OF BEST MANAGEMENT PRACTICES (BMPS), TO THE MAXIMUM EXTENT PRACTICABLE, SO THAT POLLUTANTS (INCLUDING SOIL PARTICLES, BUILDING MATERIALS, WASTE AND SPILLED MATERIALS) ARE PREVENTED FROM DISCHARGE INTO THE MUNICIPAL STORMWATER SYSTEM.

2. THE CONTRACTOR SHALL PREPARE THE CONSTRUCTION SITE PRIOR TO THE ONSET OF ANY STORM AND SHALL HAVE ALL EROSION AND SEDIMENT CONTROL MEASURES IN PLACE FOR THE RAINY SEASON, PRIOR TO OCTOBER 1.

3. THE CONTRACTOR SHALL CONSIDER THE FULL RANGE OF EROSION CONTROL BEST MANAGEMENT PRACTICES FOR ALL DISTURBED SURFACES SUCH AS: BUFFER STRIPS, HYDROSEEDING, MULCHING, TRACK WALKING OR IMPRINTING, GEOTEXTILES AND MATS, SOIL STABILIZERS AND BINDERS, EARTHEN DIKES, TEMPORARY DRAINS AND SWALES FOR DIVERSION OF OFF-SITE RUNOFF, TEMPORARY SLOPE DRAINS, STORM OUTLET PROTECTION, CHECK DAMS AND SLOPE ROUGHENING AND TERRACING.

4. ALL EROSION AND SEDIMENT CONTROL BMPS SHALL BE INSTALLED ACCORDING TO THE SPECIFICATIONS IN SECTION 3 OF THE CALIFORNIA STORMWATER QUALITY ASSOCIATION BMP HANDBOOK (JANUARY 2003) FOR CONSTRUCTION ACTIVITY OR EQUIVALENT.

5. DUST CONTROL BMPS SHALL BE USED TO STABILIZE SOIL FROM WIND EROSION, AND REDUCE DUST GENERATED BY CONSTRUCTION ACTIVITIES AND MAY INCLUDE STABILIZATION OF UNPAVED CONSTRUCTION ROADS AND PARKING AND STAGING AREAS; WATER SPRAYING; CHEMICAL STABILIZATION; MULCHING; COVERING STOCKPILES WITH TARPS; RAPID CLEANUP OF SEDIMENTS DEPOSITED ON PAVED ROADS AND STABILIZATION OF CONSTRUCTION ENTRY/EXIT POINTS WITH GRAVEL.

6. THE CONTRACTOR SHALL INSTALL A 6 FOOT HIGH SCREENING FABRIC FENCE AROUND THE PERIMETER OF THE CONSTRUCTION SITE PRIOR TO THE START OF CONSTRUCTION.

7. THE CONTRACTOR SHALL CONSTRUCT SEDIMENT CONTROLS SUCH AS FIBER ROLLS, SILT FENCES, STRAW BALE BARRIERS, GRAVEL-FILLED BAG BARRIERS, BRUSH OR ROCK FILTERS, SEDIMENT BASINS AND STORM DRAIN INLET PROTECTION.

8. ALL SEDIMENT CONTROL STRUCTURES SHALL BE CONSTRUCTED PURSUANT TO THE SPECIFICATIONS IN SECTION 3 OF THE CALIFORNIA STORMWATER QUALITY ASSOCIATION BMP HANDBOOK FOR CONSTRUCTION ACTIVITY OR EQUIVALENT, UNLESS OTHERWISE REQUIRED IN THE CITY'S STANDARD CONSTRUCTION NOTES.

9. THE CONTRACTOR SHALL PROTECT ALL STORM DRAIN INLETS WHICH MAY RECEIVE STORM WATER RUNOFF FROM THE CONSTRUCTION ACTIVITIES WITH A COMBINATION OF FIBER ROLLS AND GRAVEL BAGS. FIBER ROLLS MUST BE PLACED ACROSS THE OPENING OF ALL OFF-SITE AND ON-SITE CURB-INLET CATCH BASINS WITH GRAVEL BAGS PLACED OVER THE ENDS OF THE FIBER ROLL AND OVER THE TOP OF THE ROLL, AT 3 FT INTERVALS. ALL DROP INLETS MUST BE SURROUNDED BY FIBER ROLL BARRIERS, WITH GRAVEL BAGS PLACED OVER THE ENDS OF THE ROLLS AND OVER THE TOP OF ROLL, AT 3 FOOT INTERVALS. AFTER EACH STORM EVENT, ALL FIBER ROLL/GRAVEL BAG BARRIERS MUST BE REMOVED AND CLEANED OF ALL SEDIMENT BUILDUP.

10. DURING THE RAINY SEASON, ALL GRADED SITES SHALL INSTALL AND MAINTAIN TEMPORARY SEDIMENT BASINS PURSUANT TO THE SPECIFICATIONS OF BMP FACTSHEET #SE-2 OF THE CASQA STORMWATER HANDBOOK FOR CONSTRUCTION ACTIVITIES.

11. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED BEFORE AND AFTER ALL STORMS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. QUALIFIED PERSONNEL SHALL CONDUCT INSPECTIONS OF THE CONSTRUCTION SITE PRIOR TO ANTICIPATED STORM EVENTS, DURING EXTENDED STORM EVENTS AND AFTER ACTUAL STORM EVENTS TO IDENTIFY AREAS CONTRIBUTING TO A DISCHARGE OF STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY. PRE-STORM INSPECTIONS ARE TO ENSURE THAT THE BMPS LISTED ABOVE ARE PROPERLY INSTALLED AND MAINTAINED; POST-STORM INSPECTIONS ARE TO ASSURE THAT THE BMPS HAVE FUNCTIONED ADEQUATELY. DURING EXTENDED STORM EVENTS, INSPECTIONS SHALL BE MADE DURING EACH 24-HOUR PERIOD. EQUIPMENT, MATERIALS, AND MANPOWER MUST BE MADE AVAILABLE FOR RAPID RESPONSE TO FAILURES AND EMERGENCIES. ALL CORRECTIVE MAINTENANCE TO BMPS SHALL BE PERFORMED AS SOON AS POSSIBLE, DEPENDING UPON WORKER SAFETY.

12. THE CONTRACTOR SHALL MAINTAIN A LOG AT THE CONSTRUCTION SITE OF ALL INSPECTIONS AND BMP MAINTENANCE PERFORMED. THE LOG SHALL ALSO INCLUDE ANY CORRECTIVE CHANGES TO THE BMPS OR THE EROSION AND SEDIMENT CONTROL PLAN, THE INSPECTION DATE, AND THE NAME OF THE PERSON INSPECTING THE SITE OR PERFORMING THE MAINTENANCE.

13. THE CONTRACTOR SHALL INSTALL STABILIZED CONSTRUCTION ENTRANCE(S)/EXIT(S) MEASURING A MINIMUM OF 50 FEET LONG AND 30 FEET WIDE AND CONSISTING OF A 6 INCH LAYER OF 1-3 INCH STONES PRIOR TO COMMENCEMENT OF GRADING. THE LOCATION OF THE ENTRANCES MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING OR LEAVING A CONSTRUCTION SITE, TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING AREA, MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCE(S). THE STABILIZED CONSTRUCTION ENTRANCE(S) SHALL REMAIN IN PLACE UNTIL THE ROAD BASE ROCK COURSE IS COMPLETED. WHEEL WASH OVER A WASH RACK IS RECOMMENDED FOR CLAY SOILS.

14. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE SWEPT AT THE END OF EACH WORKING DAY. WASHING OF ACCUMULATED SEDIMENT INTO THE STORM DRAIN IS PROHIBITED.

15. IN ALL AREAS WHERE BARE SOIL IS EXPOSED TO WATER OR WIND EROSION, ACCEPTABLE SOIL STABILIZATION MATERIALS ARE REQUIRED TO BE APPLIED.

16. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL DISTURBED AREAS ARE STABILIZED. THE ADEQUACY OF POST CONSTRUCTION SOIL STABILIZATION SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE CITY ENGINEERING DEPARTMENT. ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS THAT ARE OVER AND ABOVE THE BMPS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHEET AND THE SWPPP, MAY BE REQUIRED TO BE IMPLEMENTED IN ORDER TO MEET FIELD CONDITIONS. IT IS THE RESPONSIBILITY OF THE CONSTRUCTION SUPERINTENDENT TO DETERMINE WHAT ADDITIONAL MEASURES ARE NECESSARY AND TO INSTALL THOSE ADDITIONAL BMPS AS NECESSARY.

17. THE CONTRACTOR SHALL REPORT THE FOLLOWING INCIDENTS:

    A. IF THERE IS AN ACCIDENTAL DISCHARGE OF NON-STORM WATER OR STORM WATER CONTAINING POLLUTANTS THAT HAS THE POTENTIAL TO ENTER OR ENTERS A CITY STORM DRAIN OR A FLOOD CONTROL CHANNEL, THE CONTRACTOR SHALL NOTIFY THE CITY'S STORM WATER COORDINATOR AS SOON AS POSSIBLE AT (909) 395-2389 OR AT (909) 395-2143. IF THE DISCHARGE OCCURS AFTER BUSINESS HOURS, THE FIRE DEPARTMENT SHALL BE NOTIFIED AT 911.

    B. IF THERE IS A RELEASE OR THREATENED RELEASE OF A HAZARDOUS MATERIAL, THE CONTRACTOR SHALL ALSO NOTIFY THE FIRE DEPARTMENT AT 911, THE SAN BERNARDINO COUNTY FIRE DEPARTMENT HAZARDOUS MATERIAL DIVISION AT (800) 33-TOXIC OR (909) 387-3044, THE STATE OF CALIFORNIA OFFICE OF EMERGENCY SERVICES AT (800) 852-7550 AND, FOR A REPORTABLE QUANTITY, THE NATIONAL RESPONSE CENTER AT (800) 424-8802.

    C. IF THERE WILL BE A DISCHARGE OF WATER FROM WATER LINE OR TANK FLUSHING OR TESTING INTO THE STORM DRAIN SYSTEM, THE CITY REQUIRES THE CONTRACTOR TO FAX A "NON-STORM WATER DISCHARGE NOTIFICATION" FORM (AVAILABLE FROM THE CITY OF ONTARIO'S ENGINEERING COUNTER) TO THE ENGINEERING DEPARTMENT AT (909) 395-2122, FIVE DAYS PRIOR TO A PLANNED DISCHARGE OR AS SOON AS POSSIBLE FOR UNPLANNED DISCHARGE. SAMPLING DURING THE FIRST 30 MINUTES IS REQUIRED. CHLORINATED WATER MUST BE DE-CHLORINATED TO <0.1 PPM AND SUSPENDED SOLIDS MUST BE REDUCED TO <75 PPM PRIOR TO DISCHARGE TO THE STORM DRAIN SYSTEM.

    D. THE REGIONAL WATER QUALITY CONTROL BOARD SHALL BE NOTIFIED BY TELEPHONE AS SOON AS POSSIBLE, BUT NO LATER THAN 48 HOURS, AFTER IT IS DETERMINED THAT STORM WATER DISCHARGE AND/OR AUTHORIZED NON-STORM WATER DISCHARGES ARE CAUSING OR CONTRIBUTING TO AN EXCEEDANCE OF AN APPLICABLE WATER QUALITY STANDARD AT (909) 782-4130. THE NOTIFICATION SHALL BE FOLLOWED BY A REPORT WITHIN 14-CALENDAR DAYS DESCRIBING: (1) THE NATURE AND CAUSE OF THE WATER QUALITY EXCEEDANCE; (2) THE BMPS CURRENTLY BEING IMPLEMENTED; (3) ANY ADDITIONAL BMPS WHICH WILL BE IMPLEMENTED TO PREVENT OR REDUCE POLLUTANTS THAT ARE CAUSING OR CONTRIBUTING TO THE WATER EXCEEDANCE AND A SCHEDULE FOR THEIR IMPLEMENTATION; AND (4) ANY MAINTENANCE OR REPAIR OF BMPS.

18. ALL CONTRACTOR ACTIVITY BMPS SHALL BE IMPLEMENTED ACCORDING TO THE SPECIFICATIONS IN CHAPTER 4 OF THE CALIFORNIA BMP HANDBOOK FOR CONSTRUCTION ACTIVITY OR EQUIVALENT. AT A MINIMUM, THE CONTRACTOR SHALL IMPLEMENT THE FOLLOWING CONTRACTOR ACTIVITY BMPS:

    A. PROVIDE EMPLOYEE/SUBCONTRACTOR TRAINING IN CONSTRUCTION BMPS:
    OBTAIN APPROPRIATE CONSTRUCTION BEST MANAGEMENT PRACTICE FACT SHEETS FROM THE "CALIFORNIA STORM WATER BMP HANDBOOK FOR CONSTRUCTION" OR EQUIVALENT AND PROVIDE COPIES AND TRAINING ON THESE BMPS TO EMPLOYEES AND SUBCONTRACTORS PRIOR TO THE BEGINNING OF WORK.

    B. LIQUID AND SOLID WASTE MANAGEMENT:
    PROVIDE A SUFFICIENT NUMBER OF DESIGNATED WASTE COLLECTION AREAS, PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUN-OFF, WITH LIDDED CONTAINERS. ARRANGE FOR THEIR REGULAR REMOVAL AND DISPOSAL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. CLEAR SITE OF TRASH, INCLUDING ORGANIC DEBRIS, PACKAGING MATERIALS, SCRAP OR SURPLUS BUILDING MATERIALS AND DOMESTIC WASTE DAILY.

    C. CHEMICAL AND MATERIAL DELIVERY AND STORAGE:
    PROVIDE A DESIGNATED CHEMICALS STORAGE AREA, LOCATED NEAR THE CONSTRUCTION ENTRANCES, AWAY FROM DRAINAGE COURSES, WHICH HAS A TEMPORARY SECONDARY SPILL CONTAINMENT SYSTEM. STORE ALL CHEMICALS IN SEALED AND LABELED CONTAINERS. PROVIDE A SPILL CLEANUP KIT AND TARPS FOR COVERING STOCKPILED MATERIALS WHEN RAIN IS PREDICTED. RELOCATE CHEMICAL STORAGE AREA INTO A TRAILER OR BUILDING SHELL WHEN POSSIBLE. INSPECT AREA WEEKLY FOR LEAKS AND SPILLS.

    D. CONCRETE WASTE:
    CONDUCT CONCRETE WASHOUT OFF-SITE OR PROVIDE A DESIGNATED AREA FOR A TEMPORARY PIT TO BE USED FOR CONCRETE TRUCK WASH OUT THAT IS AT LEAST 50 FEET FROM ANY STORM DRAIN OR DRAINAGE CHANNEL. REQUIRE DISPOSAL OF HARDENED CONCRETE OFFSITE. AT NO TIME SHALL A CONCRETE TRUCK DUMP ITS WASTE AND CLEAN ITS TRUCK INTO THE CITY STORM DRAINS VIA CURB AND GUTTER. INSPECT DAILY TO CONTROL RUNOFF, AND WEEKLY FOR REMOVAL OF HARDENED CONCRETE.

    E. PAINTING AND DRYWALL WORK:
    PROVIDE INSTRUCTION TO EMPLOYEES AND SUBCONTRACTORS BEFORE THEY START WORK, REGARDING REDUCTION OF POLLUTANTS INCLUDING MATERIAL STORAGE, USE, AND CLEAN UP. DRYWALL EQUIPMENT, PAINTBRUSHES, AND ROLLERS CANNOT BE WASHED INTO THE STREET OR STORM DRAIN SYSTEM.

    F. VEHICLE FUELING, MAINTENANCE AND CLEANING:
    IF FUELING MUST OCCUR ON-SITE, PROVIDE A DESIGNATED FUELING AREA, LOCATED AWAY FROM DRAINAGE COURSES, WITH SECONDARY SPILL CONTAINMENT. ENSURE THAT THE FUEL TANK AND NOZZLES ARE KEPT INSIDE OF THE CONTAINMENT AREA. DO NOT ALLOW MOBILE FUELING OF EQUIPMENT. INSPECT FUELING AREA WEEKLY FOR LEAKS OR SPILLS. PROVIDE DRIP PANS FOR LEAKING EQUIPMENT OR EMERGENCY EQUIPMENT MAINTENANCE. RESTRICT ONSITE MAINTENANCE OF EQUIPMENT TO A MINIMUM. DO NOT ALLOW WASHING OF VEHICLES OR EQUIPMENT INTO THE STREET OR STORM DRAIN SYSTEM.

    G. ASPHALT, SAWCUTTING, CORING, AND GRINDING ACTIVITIES:
    INFORM EMPLOYEES AND SUBCONTRACTORS TO PROTECT CATCH BASINS WHEN APPLYING ASPHALT SEAL COAT, SLURRY SEAL OR FOG SEAL, AND TO PREVENT SAWCUTTING SLURRIES, CORING OR AC GRINDING WASTES FROM ENTERING THE STORM DRAIN SYSTEM.

    H. BLASTING BLASTING AND CLEANING:
    PROVIDE INSTRUCTION TO EMPLOYEES AND SUBCONTRACTORS, BEFORE THEY START A JOB, TO ENSURE THAT BLAST RESIDUE FROM HIGH-PRESSURE WASHING OF BUILDINGS IS NOT ALLOWED TO ENTER THE STORM DRAIN SYSTEM. IF PAINT REMOVAL INVOLVES HAZARDOUS SUBSTANCES SUCH AS LEAD AND MERCURY, THE WASTE MUST BE PREVENTED FROM PERCOLATING INTO THE GROUND AND MUST BE HAULED OFF-SITE AS A HAZARDOUS WASTE.

    I. CEMENT, GROUT AND MORTAR WORK, AND CLEAN UP:
    ENSURE THAT EMPLOYEES AND SUBCONTRACTORS PREVENT CEMENT, GROUT AND MORTAR SOLIDS, AND CLEAN UP WATER FROM ENTERING THE STORM DRAIN SYSTEM.

    J. SANITARY AND SEPTIC WASTES:
    SEWAGE IS PROHIBITED IN THE STORM DRAIN SYSTEM. ENSURE THAT THE SEPTIC TANK SERVICE COMPANY IS INFORMED THAT SEWAGE AND WASTEWATER GENERATED FROM THE DISINFECTION AND WASH DOWN OF SEPTIC TANKS CANNOT BE DISCHARGED TO THE STORM DRAIN SYSTEM.

    K. WATER LINE DISINFECTION, FLUSHING, DEWATERING, AND OTHER NON-STORM WATER DISCHARGES:
    UNLESS EXEMPTED OR AUTHORIZED BY AN NPDES PERMIT, ALL NON-STORM WATER DISCHARGES REQUIRE PRIOR APPROVAL BY THE CITY OR THE REGIONAL WATER QUALITY CONTROL BOARD. THE DEVELOPER OR CONTRACTOR SHALL NOTIFY THE CITY'S STORM WATER COORDINATOR AT (909) 395-2389 OR (909) 395-2143, OR THE REGIONAL WATER QUALITY CONTROL BOARD AT (909)782-4379, A MINIMUM OF FIVE DAYS PRIOR TO ANY DISCHARGE TO THE STORM DRAIN SYSTEM FOR PLANNED DISCHARGES, OR AS SOON AS POSSIBLE, FOR UNPLANNED DISCHARGES. DEWATERING OF CONTAMINATED GROUNDWATER, OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED. IF POSSIBLE, ATTEMPT TO CONTAIN ALL WATER LINE FLUSHING WASTES IN A TEMPORARY PIT, ON SITE.

    L. HAZARDOUS WASTE MANAGEMENT:
    PROVIDE A DESIGNATED HAZARDOUS WASTE STORAGE AREA SUCH AS A TRAILER OR TEMPORARY SECONDARY CONTAINMENT AREA THAT IS PHYSICALLY SEPARATED FROM STORM WATER DRAINAGE CHANNELS. STORE HAZARDOUS WASTE IN SEALED AND LABELLED CONTAINERS. PROVIDE A SPILL CLEAN UP KIT AND TARPS FOR COVERING STOCKPILED MATERIALS WHEN RAIN IS PREDICTED. RELOCATE STORAGE AREA INTO TRAILER OR BUILDING SHELL WHEN POSSIBLE. INSPECT AREA WEEKLY. PREVENT THE DISCHARGE OF POLLUTANTS FROM HAZARDOUS WASTES TO THE DRAINAGE SYSTEM BY TRAINING EMPLOYEES AND SUBCONTRACTORS ON PROPER MATERIALS USE, LABELING, STORAGE, CLEAN UP, AND WASTE DISPOSAL.
    HAZARDOUS WASTES COMMONLY FOUND ON CONSTRUCTION SITES INCLUDE, BUT ARE NOT LIMITED TO: PVC PIPE GLUES, WOOD STAINS AND PRESERVATIVES, LIME AND CONCRETE CURING COMPOUNDS, BATTERY FLUIDS, WASTE OIL, FUEL, ASBESTOS, OIL BASED AND LEAD BASED PAINTS, SOLVENTS, ASPHALT AND OTHER PETROLEUM BASED PRODUCTS, FERTILIZERS, HERBICIDES AND PESTICIDES, AND SOME SOIL STABILIZATION PRODUCTS.

    M. PROHIBITED DISCHARGES:
    THE FOLLOWING DISCHARGES INTO THE STORM DRAIN SYSTEM ARE PROHIBITED: DISCHARGES THAT COULD HAVE AN IMPACT ON HUMAN HEALTH AND THE ENVIRONMENT, CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; DISCHARGES THAT EXCEED ANY WATER QUALITY STANDARD CONTAINED IN THE STATEWIDE WATER QUALITY CONTROL PLAN OR LOCAL BASIN PLAN; AND DISCHARGES CONTAINING A HAZARDOUS SUBSTANCE EQUAL TO OR IN EXCESS OF A REPORTABLE QUANTITY LISTED IN THE FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302.
    MATERIALS THAT CAN CAUSE OR CONTRIBUTE TO POLLUTION OR A VIOLATION OF ANY APPLICABLE WATER QUALITY STANDARD INCLUDE, BUT ARE NOT LIMITED TO: SEDIMENTS, CONTAMINATED SOIL, SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES OR HERBICIDES, WOOD PRESERVATIVES OR SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, OR HYDRAULIC, RADIATOR AND BATTERY FLUIDS; FERTILIZERS; VEHICLE/EQUIPMENT WASHWATER OR CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; CONTAMINATED GROUNDWATER AND CHLORINATED POTABLE WATER LINE FLUSHING.

ADDITIONAL NOTES:

- SEPARATE PERMIT IS REQUIRED FOR TRASH ENCLOSURE, RETAINING WALL, FENCE, DEMOLITION.
- SPECIAL HIGH WIND REGION (105 MPH WIND): YES
- ALL OF THE GRADING PROCEDURES, RECOMMENDATIONS AND SPECIFICATIONS THAT ARE INDICATED ON THE GEOTECHNICAL UPDATE REPORT NO. 20-022-029, DATED SEPTEMBER 1, 2020, PREPARED BY CALLAND ENGINEERING, INC. MUST BE ADHERED TO.
- NO GRADING PERMIT WILL BE ISSUED UNTIL THE BUILDING DEPARTMENT APPROVES THE SOIL IMPORTATION/EXPORTATION LOCATION.
- PUBLIC SYSTEMS AND ANY PROPOSED WORK IN THE PUBLIC RIGHT OF WAYS ARE NOT PART OF THE CITY OF ONTARIO, BUILDING DEPARTMENT REVIEW OR APPROVAL.
- CITY OF ONTARIO REQUIRES ALL NEW BUILDINGS, AND DEMOLITION/RENOVATION/TENANT IMPROVEMENT PERMIT APPLICATIONS WITH PROJECT VALUATION OF $100,000.00 OR MORE TO PREPARE A CONSTRUCTION AND DEMOLITION RECYCLING PLAN (CDRP). FILL OUT "FORM CDRP" AND SUBMIT TO ONTARIO MUNUCIPAL UTILITIES COMPANY – SOLID WASTE DEPARTMENT FOR APPROVAL.

EXCAVATION AND FILL NOTES:

- THE PERSON MAKING OR CAUSING AN EXCAVATION TO BE MADE SHALL PROVIDE WRITTEN NOTICE TO THE OWNERS OF ADJOINING BUILDINGS ADVISING THEM THAT THE EXCAVATION IS TO BE MADE AND THAT THE ADJOINING BUILDING SHOULD BE PROTECTED. SAID NOTIFICATION SHALL BE DELIVERED NOT LESS THAN 10-DAYS PRIOR TO THE SCHEDULED STARTING DATE OF THE EXCAVATION.
- EXCAVATIONS FOR ANY PURPOSE SHALL NOT REMOVE LATERAL SUPPORT FROM ANY FOOTING OR FOUNDATION WITHOUT FIRST UNDERPINNING OR PROTECTING THE FOOTING OR FOUNDATION AGAINST SETTLEMENT OR LATERAL TRANSLATION.
- THE EXCAVATION OUTSIDE THE FOUNDATION SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ORGANIC MATERIAL, CONSTRUCTION DEBRIS, COBBLES AND BOULDERS, OR A CONTROLLED LOW-STRENGTH MATERIAL (CLSM).
- THE FILL MATERIAL SHALL NOT INCLUDE ORGANIC OR OTHER DELETERIOUS MATERIALS.
- NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL GREATER THAN 12", OR AS INDICATED IN THE SOIL REPORT, (WHICHEVER IS SMALLER), IN ANY DIMENSION SHALL BE INCLUDED IN FILLS.
- ALL FILL MATERIAL SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM 1557, MODIFIED PROCTOR, IN LIFTS NOT EXCEEDING 12" IN DEPTH, OR AS INDICATED IN THE SOIL REPORT, WHICHEVER IS MORE CONSERVATIVE.
- THE GROUND SURFACE SHALL BE PREPARED TO RECEIVE FILL BE REMOVING VEGETATION, TOPSOIL, AND OTHER UNSUITABLE MATERIALS, AND SCARIFYING THE GROUND TO PROVIDE A BOND WITH THE FILL MATERIAL.
- PROVIDE BENCHING WHERE EXISTING GRADE IS AT A SLOPE STEEPER THAN 5 HORIZONTAL TO 1 VERTICAL (20%) AND THE DEPTH OF THE FILL EXCEEDS 5', AND MUST BE IN ACCORDANCE WITH CBC FIGURE J107.3.
- THE REQUIRED PERMANENT EROSION CONTROL DEVICES AND/OR METHODS SHALL BE INSTALLED AS SOON AS PRACTICABLE AND PRIOR TO CALLING FOR FINAL INSPECTIONS. (FOR CLSM REQUIREMENTS SEE ITS DEFINITION IN CHAPTER 2 AND THE PROVISIONS CBC 1803.5.9).

BEFORE FOUNDATION APPROVALS:

- BEFORE FOUNDATION APPROVALS, THE SOIL ENGINEER OF RECORD SHALL CERTIFY TO THE BUILDING DEPARTMENT IN WRITING THAT THE COMPACTION, TRANSITION LINES, AND DESIGN PARAMETERS HAVE BEEN FOLLOWED OR INDICATE CORRECTIVE RECOMMENDATIONS THAT HAVE BEEN MADE.
- BEFORE FOUNDATION APPROVALS, THE CIVIL ENGINEER SHALL CERTIFY TO THE BUILDING DEPARTMENT IN WRITING THAT THE ROUGH GRADES AND DRAINAGE WERE DONE IN CONFORMANCE WITH THE APPROVED GRADING PLANS.
- BEFORE FOUNDATION APPROVALS, THE CIVIL ENGINEER SHALL CERTIFY TO THE BUILDING DEPARTMENT IN WRITING THAT THE FOUNDATION FORMS ARE PLACED PER THE APPROVED BUILDING SETBACKS.

SPECIAL INSPECTION STATEMENT:

PRESENTED BELOW ARE RECOMMENDATIONS FOR THE STATEMENT OF SPECIAL INSPECTIONS THAT IS TYPICALLY REQUIRED BY MUNICIPALITIES TO CONFORM WITH THE 2019 CALIFORNIA BUILDING CODE (CBC).

SPECIAL INSPECTION OF SOILS AND FOUNDATION RELATED IMPROVEMENTS SHOULD BE PERFORMED BY THE PROJECT GEOTECHNICAL ENGINEER, THE SPECIAL INSPECTIONS SHOULD INCLUDE, BUT NOT NECESSARILY BE LIMITED TO THE FOLLOWING ITEMS:

PREPARATION OF THE SOIL SUBGRADES PRIOR TO PLACEMENT OF COMPACTED FILL.

TESTING OF MATERIALS TO BE USED AS COMPACTED FILL.

PLACEMENT AND COMPACTION OF FILL SOILS.

TESTING OF FOUNDATION AND FLOOR SLAB SUBGRADE SOILS TO DETERMINE THEIR SUITABILITY TO SUPPORT THE PROPOSED IMPROVEMENT.

TESTING AND OBSERVATION OF RETAINING WALL BACKFILL PROCEDURES, INCLUDING ANY RECOMMENDED DRAINAGE DEVICES.

THE FOLLOWING TABLE REPRESENTS THE VERIFICATION AND INSPECTION TASKS THAT ARE REQUIRED BY SECTION 1704 OF THE 2019 CBC:

BEFORE FINAL INSPECTION:

- PRIOR TO BUILDING DEPARTMENT FINAL INSPECTION, THE CIVIL ENGINEER OF RECORD SHALL CERTIFY TO THE BUILDING DEPARTMENT IN WRITING THAT FINAL GRADING AND DRAINAGE DEVICES WERE DONE IN CONFORMANCE WITH THE APPROVED GRADING PLANS.

THIS PLAN HAS BEEN REVIEWED AND CONFORMS TO THE RECOMMENDATIONS PROVIDED IN THE SOILS REPORT DATED SEPTEMBER 1, 2020.

09/26/2023

SIGNATURE DATE

JACK C. S. LEE
2153
Exp. 3-31-25
GEOTECHNICAL

JACK C. S. LEE
40870
Exp. 3-31-25
CIVIL

CALLAND ENGINEERING, INC.
dba QUARTECH CONSULTANTS
576 E. LAMBERT ROAD, BREA, CA 92821
TEL: (714) 671-1050 FAX: (714) 671-1090

RELEASED

REVISIONS

B202206576
PDEV21-017
PMTT21-009
PM-20394

PRECISE GRADING PLAN
STANDARD NOTES:
125 W. EMPORIA STREET,
ONTARIO, CA 91762

DRAWN: EYS
CHECKED: J.C.L.
DATE: 09-26-2023
JOB NO.: 20-022-029
SCALE: N.T.S.
FILE NAME: Emporia_Grading.dwg

C-2

SHEET 2 OF 14 SHT.

CITY OF ONTARIO
PLANNING DEPARTMENT
303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

LAND DEVELOPMENT DIVISION CONDITIONS OF APPROVAL

Date Prepared: 1/27/2022

File Nos: PMTT21-009 / TPM 20394 and PDEV21-017

Related Files: PUD22-001 and PHP21-021

Project Description: A Tentative Parcel Map (File No. PMTT21-009 / TPM 20394) to subdivide 0.86-acre of land into 22 commercial airspace condominium units and a Development Plan (File No. PDEV21-017) to construct two commercial buildings totaling 30,971 square feet, located at 125 West Emporia Street, within the MU-1 (Downtown Mixed-Use: LUA-2N (Arts District – North)) and EA (Euclid Avenue Overlay) zoning districts. (APN: 1049-059-14); **submitted by RWSS Development LLC.**

Prepared By: Jeanie Irene Aguilo, Associate Planner
Phone: 909.395.2418 (direct)
Email: jaguilo@ontarioca.gov

The Planning Department, Land Development Section, conditions of approval applicable to the above-described Project, are listed below. The Project shall comply with each condition of approval listed below:

1.0 Standard Conditions of Approval. The project shall comply with the *Standard Conditions for New Development*, adopted by City Council Resolution No. 2017-027 on April 18, 2017. A copy of the *Standard Conditions for New Development* may be obtained from the Planning Department or City Clerk/Records Management Department.

2.0 Special Conditions of Approval. In addition to the *Standard Conditions for New Development* identified in condition no. 1.0, above, the project shall comply with the following special conditions of approval:

2.1 Time Limits.

(a) Tentative Parcel/Tract Map approval shall become null and void 2 years following the effective date of application approval, unless the final parcel/tract map has been recorded, or a time extension has been approved by the Planning Commission pursuant to Development Code Section 2.02.025 (Time Limits and Extensions). This Permit does not supersede any individual time limits specified herein for performance of specific conditions or improvements.

(b) Development Plan approval shall become null and void 2 years following the effective date of application approval, unless a building permit is issued and construction is commenced, and diligently pursued toward completion, or a time extension has been approved by the Planning Director. This condition does not supersede any individual time limits specified herein, or any other departmental conditions of approval applicable to the Project, for the performance of specific conditions or improvements.

2.2 Subdivision Map.

(a) The Final Parcel Map shall be in conformance with the approved Tentative Tract/Parcel Map on file with the City. Variations rom the approved Tentative Tract/Parcel Map may be reviewed and approved by the Planning Department. A substantial variation from the approved Tentative Tract/Parcel Map may require review and approval by the Planning Commission, as determined by the Planning Director.

(b) Tentative Parcel Map approval shall be subject to all conditions, requirements and recommendations from all other departments/agencies provided on the attached reports/memorandums.

(c) The subject Tentative Parcel Map for condominium purposes shall require the recordation of a condominium plan concurrent with the recordation of the Final Tract/Parcel Map and CC&Rs.

(d) Pursuant to California Government Section 66474.9, the subdivider agrees that it will defend, indemnify, and hold harmless the City of Ontario or its agents, officers and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul any approval of the City of Ontario, whether by its City Council, Planning Commission or other authorized board or officer of this subdivision, which action is brought within the time period provided for in Government Code Section 66499.37. The City of Ontario shall promptly notify the subdivider of any such claim, action or proceeding and the City of Ontario shall cooperate fully in the defense.

2.3 General Requirements. The Project shall comply with the following general requirements:

(a) All construction documentation shall be coordinated for consistency, including, but not limited to, architectural, structural, mechanical, electrical, plumbing, landscape and irrigation, grading, utility and street improvement plans. All such plans shall be consistent with the approved entitlement plans on file with the Planning Department.

(b) The project site shall be developed in conformance with the approved plans on file with the City. Any variation from the approved plans must be reviewed and approved by the Planning Department prior to building permit issuance.

(c) The herein-listed conditions of approval from all City departments shall be included in the construction plan set for project, which shall be maintained on site during project construction.

2.4 Landscaping.

(a) The Project shall provide and continuously maintain landscaping and irrigation systems in compliance with the provisions of Ontario Development Code Division 6.05 (Landscaping).

(b) Comply with the conditions of approval of the Planning Department; Landscape Planning Division.

(c) Landscaping shall not be installed until the Landscape and Irrigation Construction Documentation Plans required by Ontario Development Code Division 6.05 (Landscaping) have been approved by the Landscape Planning Division.

(d) Changes to approved Landscape and Irrigation Construction Documentation Plans, which affect the character or quantity of the plant material or irrigation system design, shall be resubmitted for approval of the revision by the Landscape Planning Division, prior to the commencement of the changes.

2.5 Walls and Fences. All Project walls and fences shall comply with the requirements of Ontario Development Code Division 6.02 (Walls, Fences and Obstructions).

2.6 Parking, Circulation and Access.

(a) The Project shall comply with the applicable off-street parking, loading and lighting requirements of City of Ontario Development Code Division 6.03 (Off-Street Parking and Loading).

(b) All drive approaches shall be provided with an enhanced pavement treatment. The enhanced paving shall extend from the back of the approach apron, into the site, to the first intersecting drive aisle or parking space.

(c) Areas provided to meet the City's parking requirements, including off-street parking and loading spaces, access drives, and maneuvering areas, shall not be used for the outdoor storage of materials and equipment, nor shall it be used for any other purpose than parking.

(d) The required number of off-street parking spaces and/or loading spaces shall be provided at the time of site and/or building occupancy. All parking and loading spaces shall be maintained in good condition for the duration of the building or use.

(e) Parking spaces specifically designated and conveniently located for use by the physically disabled shall be provided pursuant to current accessibility regulations contained in State law (CCR Title 24, Part 2, Chapters 2B71, and CVC Section 22507.8).

(f) Bicycle parking facilities, including bicycle racks, lockers, and other secure facilities, shall be provided in conjunction with development projects pursuant to current regulations contained in CALGreen (CAC Title 24, Part 11).

2.7 Site Lighting.

(a) All off-street parking facilities shall be provided with nighttime security lighting pursuant to Ontario Municipal Code Section 4-11.08 (Special Residential Building Provisions) and Section 4-11.09 (Special Commercial/Industrial Building Provisions), designed to confine emitted light to the parking areas. Parking facilities shall be lighted from sunset until sunrise, daily, and shall be operated by a photocell switch.

(b) Unless intended as part of a master lighting program, no operation, activity, or lighting fixture shall create illumination on any adjacent property.

2.8 Mechanical and Rooftop Equipment.

(a) All exterior roof-mounted mechanical, heating and air conditioning equipment, and all appurtenances thereto, shall be completely screened from public view by parapet walls or roof screens that are architecturally treated so as to be consistent with the building architecture.

(b) All ground-mounted utility equipment and structures, such as tanks, transformers, HVAC equipment, and backflow prevention devices, shall be located out of view from a public street, or adequately screened through the use of landscaping and/or decorative low garden walls.

2.9 Security Standards. The Project shall comply with all applicable requirements of Ontario Municipal Code Title 4 (Public Safety), Chapter 11 (Security Standards for Buildings).

2.10 Signs. All Project signage shall comply with the requirements of Ontario Development Code Division 8.1 (Sign Regulations).

2.11 Sound Attenuation. The Project shall be constructed and operated in a manner so as not to exceed the maximum interior and exterior noised levels set forth in Ontario Municipal Code Title 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).

2.12 Covenants, Conditions and Restrictions (CC&Rs)/Mutual Access and Maintenance Agreements.

(a) CC&Rs shall be prepared for the Project and shall be recorded prior to the issuance of a building permit.

(b) The CC&Rs shall be in a form and contain provisions satisfactory to the City. The articles of incorporation for the property owner's association and the CC&Rs shall be reviewed and approved by the City.

(c) CC&Rs shall ensure reciprocal parking and access between parcels.

(d) CC&Rs shall ensure reciprocal parking and access between parcels, and common maintenance of:

(i) Landscaping and irrigation systems within common areas;
(ii) Landscaping and irrigation systems within parkways adjacent to the project site, including that portion of any public highway right-of-way between the property line or right-of-way boundary line and the curb line and also the area enclosed within the curb lines of a median divider (Ontario Municipal Code Section 7-3.03), pursuant to Ontario Municipal Code Section 5-22-02;
(iii) Shared parking facilities and access drives; and
(iv) Utility and drainage easements.

(e) CC&Rs shall include authorization for the City's local law enforcement officers to enforce City and State traffic and penal codes within the project area.

(f) The CC&Rs shall grant the City of Ontario the right of enforcement of the CC&R provisions.
(g) A specific methodology/procedure shall be established within the CC&Rs for enforcement of its provisions by the City of Ontario, if adequate maintenance of the development does not occur, such as, but not limited to, provisions that would grant the City the right of access to correct maintenance issues and assess the property owners association for all costs incurred.

2.13 Environmental Review.

(a) The proposed project is categorically exempt from the requirements of the California Environmental Quality Act of 1970 (CEQA), as amended, and the Guidelines promulgated thereunder, pursuant to Section 15332 (Class 32, In-Fill Development Projects) of the CEQA Guidelines, and meets all of the following conditions:

(i) The Project is consistent with the applicable general plan designation and all applicable general plan policies, as well as the applicable zoning designation and regulations;
(ii) The proposed development occurs within city limits, on a project site of no more than five acres, and is substantially surrounded by urban uses;
(iii) The project site has no value as habitat for endangered, rare, or threatened species;
(iv) Approval of the Project will not result in any significant effects relating to traffic, noise, air quality, or water quality; and
(v) The Project site can be adequately served by all required utilities and public services.

(b) If human remains are found during project grading/excavation/construction activities, the area shall not be disturbed until any required investigation is completed by the County Coroner and Native American consultation has been completed (if deemed applicable).

(c) If any archeological or paleontological resources are found during project grading/excavation/construction, the area shall not be disturbed until the significance of the resource is determined. If determined to be significant, the resource shall be recovered by a qualified archeologist or paleontologist consistent with current standards and guidelines, or other appropriate measures implemented.

2.14 Indemnification. The applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul any approval of the City of Ontario, whether by its City Council, Planning Commission or other authorized board or officer. The City of Ontario shall promptly notify the applicant of any such claim, action or proceeding, and the City of Ontario shall cooperate fully in the defense.

2.15 Additional Fees.

(a) Within 5 days following final application approval, the Notice of Determination ("NOD") filing fee shall be provided to the Planning Department. The fee shall be paid by check, made payable to the "Clerk of the Board of Supervisors", which shall be forwarded to the San Bernardino County Clerk of the Board of Supervisors, along with all applicable environmental forms/notices, pursuant to the requirements of the California Environmental Quality Act ("CEQA"). failure to provide said fee within the time specified will result in the extension of the statute of limitations for the filing of a CEQA lawsuit from 30 days to 180 days.

(b) Within 5 days following final application approval, the Notice of Exemption ("NOE") filing fee shall be provided to the Planning Department. The fee shall be paid by check, made payable to the "Clerk of the Board of Supervisors", which shall be forwarded to the San Bernardino County Clerk of the Board of Supervisors, along with all applicable environmental forms/notices, pursuant to the requirements of the California Environmental Quality Act ("CEQA"). The filing of an NOE is voluntary; however, failure to provide said fee within the time specified will result in the extension of the statute of limitations for the filing of a CEQA lawsuit from 30 days to 180 days.

(c) After the Project's entitlement approval, and prior to issuance of final building permits, the Planning Department's Plan Check and Inspection fees shall be paid at the rate established by resolution of the City Council.

2.16 Additional Requirements.

(a) The taproom shall be subject to the approval of an Administrative Use Permit for Alcohol Beverage Sales for On-Premises Consumption.

(b) The parking and landscape planter on the northeast corner of the project site shall be adjusted accordingly to allow adequate room for the sliding gate and mechanical equipment, as necessary. The final design shall require Planning Director review and approval.

(c) Tentative Parcel Map (File No. PMTT21-009 / TPM 20394) and Development Plan (File No. PDEV21-017) approval shall not be final and conclusive until such time that File No. PUD22-001 (Art District West Planned Unit Development) has been approved and enacted by action of the City Council of the City of Ontario.

CITY OF ONTARIO

ENGINEERING DEPARTMENT CONDITIONS OF APPROVAL

(Engineering Services Division [Land Development Section and Environmental Section], Traffic & Transportation Division, Ontario Municipal Utilities Company and Broadband Operations & Investment and Revenue Resources Department Conditions incorporated)

☒ **DEVELOPMENT PLAN**
☐ OTHER
☒ **PARCEL MAP**
☐ TRACT MAP
☒ **FOR CONDOMINIUM PURPOSES**

PROJECT FILE NO. PM-20394

RELATED FILE NO(S). PMTT21-009, PDEV21-017

☒ **ORIGINAL** ☐ REVISED: __/__/__

CITY PROJECT ENGINEER & PHONE NO: **Miguel Sotomayor, P.E., 909-395-2108** MS

CITY PROJECT PLANNER & PHONE NO: **Jeanie Aguilo, 909-395-2418**

DAB MEETING DATE: **February 7, 2022**

PROJECT NAME / DESCRIPTION: **A Tentative Parcel Map to subdivide 0.86-acre of land into 22 commercial airspace condominium units located within LAU-2N (Arts District - North) of the MU-1 (Downtown Mixed Use) zoning district (APN: 1049-059-14).**

LOCATION: **125 West Emporia Street**

APPLICANT: **RWSS Development LLC**

REVIEWED BY: Raymond Lee 2/3/22
Raymond Lee, P.E.
Assistant City Engineer
Date

APPROVED BY: 2-3-22
Khoi Do, P.E.
City Engineer
Date

Last Revised: 2/3/2022

THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN THE GENERAL STANDARD CONDITIONS OF APPROVAL ADOPTED BY THE CITY COUNCIL (RESOLUTION NO. 2017-027) AND THE PROJECT SPECIFIC CONDITIONS OF APPROVAL SPECIFIED IN HEREIN. ONLY APPLICABLE CONDITIONS OF APPROVAL ARE CHECKED. THE APPLICANT SHALL BE RESPONSIBLE FOR THE COMPLETION OF ALL APPLICABLE CONDITIONS OF APPROVAL PRIOR TO PARCEL MAP APPROVAL, ISSUANCE OF PERMITS AND/OR OCCUPANCY CLEARANCE, AS SPECIFIED IN THIS REPORT.

1. PRIOR TO PARCEL MAP APPROVAL, APPLICANT SHALL:

Check When Complete

☐ 1.01 Dedicate to the City of Ontario, the right-of-way, described below: ☐
________ feet on ________________
Property line corner 'cut-back' required at the intersection of ____________ and ____________.

☐ 1.02 Dedicate to the City of Ontario, the following easement(s): ____________ ☐

☐ 1.03 Restrict vehicular access to the site as follows: ____________ ☐

☐ 1.04 Vacate the following street(s) and/or easement(s): ☐
A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference letter from affected owner/utility company.

☐ 1.05 Submit a copy of a recorded private reciprocal use agreement or easement. The agreement or easement shall ensure, at a minimum, common ingress and egress and joint maintenance of all common access areas and drive aisles. ☐

☒ **1.06 Provide (original document) Covenants, Conditions and Restrictions (CC&Rs) as applicable to the project and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&Rs shall provide for, but not be limited to, common ingress and egress, joint maintenance responsibility for all common access improvements, common facilities, parking areas, utilities, median and landscaping improvements and drive approaches, in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project. The CC&Rs shall also address the maintenance and repair responsibility for public improvements/utilities (sewer, water, storm drain, recycled water, etc.) located within open space/easements. In the event of any maintenance or repair of these facilities, the City shall only restore disturbed areas to current City Standards.** ☐

☐ 1.07 For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at *http://tceplumecleanup.com/*), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at *http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658*. ☐

☐ 1.08 File an application for Reapportionment of Assessment, together with payment of a reapportionment processing fee, for each existing assessment district listed below. Contact the Financial Services Department at (909) 395-2124 regarding this requirement. ☐
(1) ____________
(2) ____________

☒ **1.09 Prepare a fully executed Subdivision Agreement (on City approved format and forms) with accompanying security as required, or complete all public improvements.** ☐

☒ **1.10 Provide a monument bond (i.e. cash deposit) in an amount calculated by the City's approved cost estimate spreadsheet (available for download on the City's website: www.ci.ontario.ca.us) or as specified in writing by the applicant's Registered Engineer or Licensed Land Surveyor of Record and approved by the City Engineer, whichever is greater.** ☐

☒ **1.11 Provide a preliminary title report current to within 30 days.** ☐

☐ 1.12 File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Investment and Revenue Resources at (909) 395-2341 to initiate the CFD application process. ☐

☐ 1.13 Ontario Ranch Developments: ☐
☐ 1) Provide evidence of final cancellation of Williamson Act contracts associated with this tract, prior to approval of any final subdivision map. Cancellation of contracts shall have been approved by the City Council.
☐ 2) Provide evidence of sufficient storm water capacity availability equivalents (Certificate of Storm Water Treatment Equivalents).
☐ 3) Provide evidence of sufficient water availability equivalents (Certificate of Net MDD Availability).

☐ 1.14 Other conditions: ____________ ☐

2. PRIOR TO ISSUANCE OF ANY PERMITS, APPLICANT SHALL:

A. GENERAL
(Permits includes Grading, Building, Demolition and Encroachment)

☒ **2.01 Record Parcel Map No. 20394 pursuant to the Subdivision Map Act and in accordance with the City of Ontario Municipal Code.** ☐

☒ **2.02 Submit a PDF of the recorded map to the City Engineer's office.** ☐

☐ 2.03 Note that the subject parcel is a recognized parcel in the City of Ontario per____________. ☐

☐ 2.04 Note that the subject parcel is an 'unrecognized' parcel in the City of Ontario and shall require a Certificate of Compliance to be processed unless a deed is provided confirming the existence of the parcel prior to the date of March 4, 1972. ☐

☐ 2.05 Apply for a: ☐
☐ Certificate of Compliance with a Record of Survey;
☐ Lot Line Adjustment (Record a Conforming Deed with the County of San Bernardino within six months of the recordation of the Lot Line Adjustment to conform the new LLA legal description. Submit a copy of the recorded Conforming Deed to the Engineering Department.);

☐ Make a Dedication of Easement.

☐ 2.06 Provide (original document) Covenants, Conditions and Restrictions (CC&R's), as applicable to the project, and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&R's shall provide for, but not be limited to, common ingress and egress, joint maintenance of all common access improvements, common facilities, parking areas, utilities and drive approaches in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project. ☐

☐ 2.07 For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at *http://tceplumecleanup.com/*), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at *http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658*. ☐

☒ **2.08 Submit a soils/geology report.** ☐

☒ **2.09 Other Agency Permit/Approval: Submit a copy of the approved permit and/or other form of approval of the project from the following agency or agencies:** ☐
☒ **State of California Department of Transportation (Caltrans) – for water main connection at Euclid**
☐ San Bernardino County Road Department (SBCRD)
☐ San Bernardino County Flood Control District (SBCFCD)
☐ Federal Emergency Management Agency (FEMA)
☐ Cucamonga Valley Water District (CVWD) for sewer/water service
☐ United States Army Corps of Engineers (USACE)
☐ California Department of Fish & Game
☐ Inland Empire Utilities Agency (IEUA)
☒ **Other: Non-interference letter from any easement holders listed on title report**

☐ 2.10 Dedicate to the City of Ontario the right-of-way described below: ☐
________ feet on ________________
Property line corner 'cut-back' required at the intersection of ____________ and ____________.

☐ 2.11 Dedicate to the City of Ontario the following easement(s):____________ ☐

☐ 2.12 Vacate the following street(s) and/or easement(s): ☐
A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference letter from affected owner/utility company.

☐ 2.13 Ontario Ranch Developments: ☐
☐ 1) Submit a copy of the permit from the San Bernardino County Health Department to the Engineering Department and the Ontario Municipal Utilities Company (OMUC) for the destruction/abandonment of the on-site water well. The well shall be destroyed/abandoned in accordance with the San Bernardino County Health Department guidelines.

☐ 2) Make a formal request to the City of Ontario Engineering Department for the proposed temporary use of an existing agricultural water well for purposes other than agriculture, such as grading, dust control, etc. Upon approval, the Applicant shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by said agreement.
☐ 3) Design proposed retaining walls to retain up to a maximum of three (3) feet of earth. In no case shall a wall exceed an overall height of nine (9) feet (i.e. maximum 6-foot high wall on top of a maximum 3-foot high retaining wall.

☐ 2.14 Submit a security deposit to the Engineering Department to guarantee construction of the public improvements required herein valued at _____% of the approved construction cost estimate. Security deposit shall be in accordance with the City of Ontario Municipal Code. Security deposit will be eligible for release, in accordance with City procedure, upon completion and acceptance of said public improvements. ☐

☐ 2.15 The applicant/developer shall submit all necessary survey documents prepared by a Licensed Surveyor registered in the State of California detailing all existing survey monuments in and around the project site. These documents are to be reviewed and approved by the City Survey Office. ☐

☒ **2.16 Pay all Development Impact Fees (DIF) to the Building Department. Storm Drain Development Impact Fee, approximately $23,239.75, shall be paid to the Building Department. Final fee shall be determined based on the approved site plan.** ☐

☒ **2.17 Other conditions:** ☐
a. **As part of the precise grading plans submittal, provide a Final Utilities Systems Map that shows all existing and proposed Utilities (Potable Water, Recycled Water, Sewer, Storm Drain, and other utilities) including each of the City's public utilities' points of connection to the existing systems.**

B. PUBLIC IMPROVEMENTS
(See attached Exhibit 'A' for plan check submittal requirements.)

☒ **2.17 Design and construct full public improvements in accordance with the City of Ontario Municipal Code, current City standards and specifications, master plans and the adopted specific plan for the area, if any. These public improvements shall include, but not be limited to, the following (checked boxes):** ☐

Improvement	Emporia Street	Palm Avenue	Laurel Avenue	Transit Street
Curb and Gutter	☐ New; ___ ft. from C/L ☐ Replace damaged ☒ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace
AC Pavement (see 2.18)	☐ Replacement ☒ 2" grind and overlay	☐ Replacement ☒ 2" grind and overlay	☐ Replacement ☒ 2" grind and overlay	☐ Replacement ☒ 2" grind and overlay
PCC Pavement (Truck Route Only)	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Drive Approach (see Sec. 2.17a and 2.37b)	☒ New ☒ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Sidewalk (see Sec. 2.17b)	☐ New ☒ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
ADA Access Ramp	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Parkway	☒ Trees ☒ Landscaping (w/irrigation)	☐ Trees ☐ Landscaping (w/irrigation)	☐ Trees ☐ Landscaping (w/irrigation)	☐ Trees ☐ Landscaping (w/irrigation)
Raised Landscaped Median	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Fire Hydrant	☒ One New & One Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation
Sewer (see Sec. 2.C)	☐ Main ☒ Lateral	☐ Main ☐ Lateral	☐ Main ☐ Lateral	☐ Main ☐ Lateral
Water (see Sec. 2.D)	☒ Main ☒ Service	☒ Main ☒ Service	☒ Main ☒ Service	☒ Main ☒ Service
Recycled Water (see Sec. 2.E)	☐ Main ☐ Service	☐ Main ☐ Service	☐ Main ☐ Service	☐ Main ☐ Service
Traffic Signal System (see Sec. 2.F)	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Traffic Signing and Striping (see Sec. 2.F)	☒ New ☐ Modify existing	☒ New ☐ Modify existing	☒ New ☐ Modify existing	☒ New ☐ Modify existing
Street Light (see Sec. 2.F)	☒ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation
Bus Stop Pad or Turn-out (see Sec. 2.F)	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Storm Drain (see Sec. 2G)	☐ Main ☐ Lateral	☐ Main ☐ Lateral	☐ Main ☐ Lateral	☐ Main ☐ Lateral
Fiber Optics (see Sec. 2K)	☒ Conduit / Appurtenances	☐ Conduit / Appurtenances	☐ Conduit / Appurtenances	☐ Conduit / Appurtenances
Overhead Utilities	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate
Removal of Improvements				
Other Improvements				

Specific notes for improvements listed in item no. 2.17, above:

a. **The applicant/developer shall design and construct sidewalk, curb, gutter and landscape parkway including irrigation where existing drive approaches are being removed.**

b. **The applicant/developer shall remove and replace the existing sidewalk along the project frontage. Sidewalk shall be reconstructed right of way adjacent.**

☒ **2.18 Construct a 2" asphalt concrete (AC) grind and overlay on the following street(s):** ☐
a. **Palm Avenue from Emporia Street to Holt Boulevard (curb to curb)**
b. **Laurel Avenue from Emporia Street to Holt Boulevard (curb to curb)**
c. **Transit Street from Fern Avenue to Laurel Avenue (curb to curb)**
d. **Emporia Avenue from Fern Avenue to end of cul-de-sac east of Laurel Avenue (curb to curb)**

☐ 2.19 Reconstruction of the full pavement structural section, per City of Ontario Standard Drawing number 1011, may be required based on the existing pavement condition and final street design. Minimum limits of reconstruction shall be along property frontage, from street centerline to curb/gutter. ☐

☐ 2.20 Make arrangements with the Cucamonga Valley Water District (CVWD) to provide ☐ water service ☐ sewer service to the site. This property is within the area served by the CVWD and Applicant shall provide documentation to the City verifying that all required CVWD fees have been paid. ☐

☐ 2.21 Overhead utilities shall be under-grounded, in accordance with Title 7 of the City's Municipal Code (Ordinance No. 2804 and 2892). Developer may pay in-lieu fee, approximately ________, for undergrounding of utilities in accordance with Section 7-7.302.e of the City's Municipal Code. ☐

☐ 2.22 Other conditions: ____________ ☐

C. SEWER

☒ **2.23 A 8 inch sewer main is available for connection by this project in Emporia Street (Ref: Sewer plan bar code: S10890)** ☐

☐ 2.24 Design and construct a sewer main extension. A sewer main is not available for direct connection. The closest main is approximately _____ feet away. ☐

☐ 2.25 Submit documentation that shows expected peak loading values for modeling the impact of the subject project to the existing sewer system. The project site is within a deficient public sewer system area. Applicant shall be responsible for all costs associated with the preparation of the model. Based on the results of the analysis, Applicant may be required to mitigate the project impact to the deficient public sewer system, including, but not limited to, upgrading of existing sewer main(s), construction of new sewer main(s) or diversion of sewer discharge to another sewer. ☐

☒ **2.26 Other conditions:** ☐
a. **The applicant/developer shall apply for a Wastewater Discharge Permit for their establishment and shall comply will all the requirements of the Wastewater Discharge Permit. The application can be downloaded from the City's Utilities website in the drop-down of the "Pretreatment" section (www.ontarioca.gov/OMUC/Utilities). Please select the appropriate application that applies to your type of business. Requirements of the Wastewater Discharge Permit may include, but not limited to: Installation of wastewater pretreatment equipment, such as grease interceptors or clarifiers. For wastewater permit application questions, please contact:**

Michael Birmelin, Environmental Programs Manager
omucenvironmental@ontarioca.gov
Phone: (909) 395-2661.

D. WATER

☐ 2.27 A ______inch water main is available for connection by this project in ____________ (Ref: Water plan bar code: ________) ☐

☐ 2.28 Design and construct a water main extension. A water main is not available for direct connection. The closest main is approximately _____ feet away. ☐

☒ **2.29 Other conditions:** ☐
a. **Existing Water Mains Upsizing: Upgrade all existing water mains in the area to 12" water mains and connect and construct all services, fire hydrants (with 300' maximum spacing between fire hydrants), backflow, DCDA and all other appurtenances to city's current standards and guidelines in additions to what have been mentioned above. The construction of all water mains may be eligible for reimbursement by the City of Ontario under separate agreement.**
The limits of water mains upgrade as follow:
i. **Transit Street: From Fern Avenue to Laurel Avenue.**
ii. **Emporia Street: From Fern Avenue to Euclid Avenue.**
iii. **Palm Avenue: From Holt Boulevard to Emporia Street.**
iv. **Laurel Avenue: From Holt Boulevard to Emporia Street**
b. **All offsite fire hydrant locations and appropriate main sizes shall be established and approved by Engineering and Fire Department.**

E. RECYCLED WATER

☐ 2.30 A ______inch recycled water main is available for connection by this project in ____________. (Ref: Recycled Water plan bar code:________) ☐

☐ 2.31 Design and construct an on-site recycled water system for this project. A recycled water main does exist in the vicinity of this project. ☐

☐ 2.32 Design and construct an on-site recycled water ready system for this project. A recycled water main does not currently exist in the vicinity of this project, but is planned for the near future. If Applicant would like to connect to this recycled water main when it becomes available, the cost for the connection shall be borne solely by the Applicant. ☐

☐ 2.33 Submit two (2) hard copies and one (1) electronic copy, in PDF format, of the Engineering Report (ER), for the use of recycled water, to the OMUC for review and subsequent submittal to the California Department of Public Health (CDPH) for final approval. ☐

Note: The OMUC and the CDPH review and approval process will be approximately three (3) months. Contact the Ontario Municipal Utilities Company at (909) 395-2647 regarding this requirement.

☐ 2.34 Other conditions: ____________ ☐

F. TRAFFIC / TRANSPORTATION

☐ 2.35 Submit a focused traffic impact study, prepared and signed by a Traffic/Civil Engineer registered in the State of California. The study shall address, but not be limited to, the following issues as required by the City Engineer: ☐
1. On-site and off-site circulation
2. Traffic level of service (LOS) at 'build-out' and future years
3. Impact at specific intersections as selected by the City Engineer

☐ 2.36 New traffic signal installations shall be added to Southern California Edison (SCE) customer account number # 2-20-044-3877. ☐

☒ **2.37 Other conditions:** ☐
a. **The applicant/developer shall provide a truck turning exhibits for ingress/egress and site circulation using the site specific design vehicle. Show RVs capable of making inbound right turns in from the curbside lane. The site plan will need to be redesigned if proper site circulation cannot be met which may require a new submittal and re-entitlement. Truck turning template shall be submitted for review prior to grading approval.**

b. **The applicant/developer shall design and construct proposed driveways on Emporia Street in accordance with City of Ontario Standard Drawing No. 1204 for Commercial Driveway. Depict curb return radii and driveway widths on the plans.**
c. **The applicant/developer shall be responsible to replace any existing street light fixtures along its project frontage of Emporia Street with the current City approved LED equivalent fixture per the Traffic and Transportation Design Guidelines.**
d. **Emporia Street shall be signed "No Parking Anytime" along the property frontage.**
e. **The applicant/developer shall restore the striping due to the required 2" grind and overlay per 2.18 above.**
f. **The applicant/developer's engineer-of-record shall meet with City Engineering staff prior to starting signing/striping and street lighting design plans.**

G. DRAINAGE / HYDROLOGY

☐ 2.38 A ______inch storm drain main is available to accept flows from this project in ____________. (Ref: Storm Drain plan bar code:________) ☐

☒ **2.39 Submit a hydrology study and drainage analysis, prepared and signed by a Civil Engineer registered in the State of California. The study shall be prepared in accordance with the San Bernardino County Hydrology Manual and City of Ontario standards and guidelines. Additional drainage facilities, including, but not limited to, improvements beyond the project frontage, may be required to be designed and constructed, by Applicant, as a result of the findings of this study.** ☐

☒ **2.40 An adequate drainage facility to accept additional runoff from the site does not currently exist downstream of the project. Design and construct a storm water detention facility on the project site. 100 year post-development peak flow shall be attenuated such that it does not exceed 80% of pre-development peak flows, in accordance with the approved hydrology study and improvement plans.** ☐

☐ 2.41 Submit a copy of a recorded private drainage easement or drainage acceptance agreement to the Engineering Department for the acceptance of any increase to volume and/or concentration of historical drainage flows onto adjacent property, prior to approval of the grading plan for the project. ☐

☐ 2.42 Comply with the City of Ontario Flood Damage Prevention Ordinance (Ordinance No. 2409). The project site or a portion of the project site is within the Special Flood Hazard Area (SFHA) as indicated on the Flood Insurance Rate Map (FIRM) and is subject to flooding during a 100 year frequency storm. The site plan shall be subject to the provisions of the National Flood Insurance Program. ☐

☐ 2.43 Other conditions: ____________ ☐

H. STORM WATER QUALITY / NATIONAL POLLUTANT DISCHARGE AND ELIMINATION SYSTEM (NPDES)

☐ 2.44 401 Water Quality Certification/404 Permit – Submit a copy of any applicable 401 Certification or 404 Permit for the subject project to the City project engineer. Development that will affect any body of surface water (i.e. lake, creek, open drainage channel, etc.) may require a 401 Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) and a 404 Permit from the United States Army Corps of Engineers (USACE). The groups of water bodies classified in these requirements are perennial (flow year round) and ephemeral (flow during rain conditions, only) and include, but are not limited to, direct connections into San Bernardino County Flood Control District (SBCFCD) channels. ☐
If a 401 Certification and/or a 404 Permit are not required, a letter confirming this from Applicant's engineer shall be submitted.
Contact information: USACE (Los Angeles District) (213) 452-3414; RWQCB (951) 782-4130.

☒ **2.45 Submit a Water Quality Management Plan (WQMP). This plan shall be approved by the Engineering Department prior to approval of any grading plan. The WQMP shall be submitted, utilizing the current San Bernardino County Stormwater Program template, available at: http://www.sbcounty.gov/dpw/land/npdes.asp.** ☐

☒ **2.46 Design and construct a Connector Pipe Trash Screen or equivalent Trash Treatment Control Device, per catch basin located within or accepting flows tributary of a Priority Land Use (PLU) area that meets the Full Capture System definition and specifications, and is on the Certified List of the State Water Resources Control Board. The device shall be adequately sized per catch basin and include a deflector screen with vector control access for abatement application, vertical support bars, and removable component to facilitate maintenance and cleaning.** ☐

☐ 2.47 Other conditions: ____________ ☐

J. SPECIAL DISTRICTS

☐ 2.48 File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Investment and Revenue Resources at (909) 395-2341 to initiate the CFD application process. ☐

☐ 2.49 Other conditions: ____________ ☐

K. FIBER OPTIC

☐ 2.50 A ______ fiber optic line is available for connection by this project in ____________. (Ref: Fiber Optic plan bar code:________) ☐

☒ **2.51 Design and construct fiber optic system to provide access to the City's conduit and fiber optic system per the City's Fiber Optic Master Plan. Building entrance conduits shall start from the closest OntarioNet hand hole constructed along the project frontage in the ROW and shall terminate in the main telecommunications room for each building. Conduit infrastructure shall interconnect with the primary and/or secondary backbone fiber optic conduit system at the nearest OntarioNet hand hole. Generally located on Laurel Avenue approximately 50 feet north of Emporia Avenue.** ☐

☒ **2.52 Refer to the City's Fiber Optic Master Plan for design and layout guidelines. Contact the Broadband Operations Department at (909) 395-2000, regarding this requirement.** ☐

L. INTEGRATED WASTE

☒ **2.52 Onsite solid waste shall be designed in accordance with the City's Refuse & Recycling Planning Manual located at:** ☐
https://www.ontarioca.gov/OMUC/IntegratedWaste

☐ 2.53 Other conditions: ____________ ☐

JACK C. S. LEE
40870
Exp. 3-31-25
CIVIL

Underground Service Alert
Call: TOLL FREE
811
TWO WORKING DAYS
BEFORE YOU DIG

CALLAND ENGINEERING, INC.
dba QUARTECH CONSULTANTS
576 E. LAMBERT ROAD, BREA, CA 92821
TEL: (714) 671-1050 FAX: (714) 671-1090

RELEASED

REVISIONS

B202206576
PDEV21-017
PMTT21-009
PM-20394

PRECISE GRADING PLAN
CONDITION OF APPROVAL:
125 W. EMPORIA STREET,
ONTARIO, CA 91762

DRAWN: EYS
CHECKED: J.C.L.
DATE: 09-26-2023
JOB NO.: 20-022-029
SCALE: N.T.S.
FILE NAME: Emporia_Grading.dwg

C-3

Project File No. PMTT21-009, PM-20394, PDEV21-017
Project Engineer: Miguel Solomavor
Date: February 7, 2022

3. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, APPLICANT SHALL:

☒ **3.01** **Set new monuments in place of any monuments that have been damaged or destroyed as a result of construction of the subject project. Monuments shall be set in accordance with City of Ontario standards and to the satisfaction of the City Engineer.** ☐

☐ 3.02 Complete all requirements for recycled water usage. ☐

☐ 1) Procure from the OMUC a copy of the letter of confirmation from the California Department of Public Health (CDPH) that the Engineering Report (ER) has been reviewed and the subject site is approved for the use of recycled water;

☐ 2) Obtain clearance from the OMUC confirming completion of recycled water improvements and passing of shutdown tests and cross connection inspection, upon availability/usage of recycled water.

☐ 3) Complete education training of on-site personnel in the use of recycled water, in accordance with the ER, upon availability/usage of recycled water.

☒ **3.03** **The applicant/developer shall submit all final survey documents prepared by a Licensed Surveyor registered in the State of California detailing all survey monuments that have been preserved, revised, adjusted or set along with any maps, corner records or Records of Survey needed to comply with three Conditions of Approvals and the latest edition of the California Professional Land Survey Act. These documents are to be reviewed and approved by the City Survey Office.** ☐

☐ 3.04 Ontario Ranch Projects: For developments located at an intersection of any two collector or arterial streets, the applicant/developer shall set a monument if one does not already exist at that intersection. Contact the City Survey office for information on reference benchmarks, acceptable methodology and required submittals. ☐

☒ **3.05** **Confirm payment of all Development Impact Fees (DIF) to the Building Department.** ☐

☒ **3.06** **Submit electronic copies (PDF and Auto CAD format) of all approved improvement plans, studies and reports (i.e. hydrology, traffic, WQMP, etc.).** ☐

4. PRIOR TO FINAL ACCEPTANCE, APPLICANT SHALL:

☒ **4.01** **Complete all Conditions of Approval listed under Sections 1-3 above.** ☐

☒ **4.02** **Pay all outstanding fees pursuant to the City of Ontario Municipal Code, including but not limited to, plan check fees, inspection fees and Development Impact Fees.** ☐

☒ **4.03** **The applicant/developer shall submit a written request for the City's final acceptance of the project addressed to the City Project Engineer. The request shall include a completed Acceptance and Bond Release Checklist, state that all Conditions of Approval have been completed and shall be signed by the applicant/developer. Upon receipt of the request, review of the request shall be a minimum of 10 business days. Conditions of Approval that are deemed incomplete by the City will cause delays in the acceptance process.** ☐

☒ **4.04** **Submit record drawings (PDF) for all public improvements identified within Section 2 of these Conditions of Approval.** ☐

EXHIBIT 'A'

ENGINEERING DEPARTMENT
First Plan Check Submittal Checklist

Project Number: PDEV21-017, and/or Parcel Map No. 20394

The following items are required to be included with the first plan check submittal:

1. ☒ **A copy of this check list**
2. ☒ **Payment of fee for Plan Checking**
3. ☒ **One (1) copy of Engineering Cost Estimate (on City form) with engineer's wet signature and stamp.**
4. ☒ **One (1) copy of project Conditions of Approval**
5. ☒ **Include a PDF (electronic submittal) of each required improvement plan at every submittal.**
6. ☐ Two (2) sets of Potable and Recycled Water demand calculations (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size).
7. ☐ Three (3) sets of Public Street improvement plan with street cross-sections
8. ☒ **Four (4) sets of Public Water improvement plan (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size)**
9. ☐ Four (4) sets of Recycled Water improvement plan (include recycled water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size and an exhibit showing the limits of areas being irrigated by each recycled water meter)
10. ☐ Four (4) sets of Public Sewer improvement plan
11. ☐ Five (5) sets of Public Storm Drain improvement plan
12. ☒ **Three (3) sets of Public Street Light improvement plan**
13. ☒ **Three (3) sets of Signing and Striping improvement plan**
14. ☒ **Three (3) sets of Fiber Optic plan (include Auto CAD electronic submittal)**
15. ☐ Three (3) sets of Dry Utility plans within public right-of-way (at a minimum the plans must show existing and ultimate right-of-way, curb and gutter, proposed utility location including centerline dimensions, wall to wall clearances between proposed utility and adjacent public line, street work repaired per Standard Drawing No. 1306. Include Auto CAD electronic submittal)
16. ☐ Three (3) sets of Traffic Signal improvement plan and One (1) copy of Traffic Signal Specifications with modified Special Provisions. Please contact the Traffic Division at (909) 395-2154 to obtain Traffic Signal Specifications.
17. ☒ **Two (2) copies of Water Quality Management Plan (WQMP), including one (1) copy of the approved Preliminary WQMP (PWQMP).**
18. ☒ **One (1) copy of Hydrology/Drainage study**
19. ☒ **One (1) copy of Soils/Geology report**
20. ☒ **Payment for Final Map/Parcel Map processing fee**
21. ☒ **Three (3) copies of Final Map/Parcel Map**
22. ☒ **One (1) copy of approved Tentative Map**
23. ☒ **One (1) copy of Preliminary Title Report (current within 30 days)**
24. ☒ **One (1) copy of Traverse Closure Calculations**
25. ☒ **One (1) set of supporting documents and maps (legible copies): referenced improvement plans (full size), referenced record final maps/parcel maps (full size, 18"x36"), Assessor's Parcel map (full size, 11"x17"), recorded documents such as deeds, lot line adjustments, easements, etc.**
26. ☐ Two (2) copies of Engineering Report and an electronic file (include PDF format electronic submittal) for recycled water use
27. ☐ Other: _____

3.0 WATER SUPPLY

☒ 3.1 The required fire flow per Fire Department standards, based on the 2019 California Fire Code, Appendix B, is 1500 gallons per minute (g.p.m.) for 2 hours at a minimum of 20 pounds per square inch (p.s.i.) residual operating pressure.

☒ 3.2 Off-site (public) fire hydrants are required to be installed on all frontage streets, at a minimum spacing of three hundred foot (300') apart, per Engineering Department specifications.

☒ 3.4 The public water supply, including water mains and fire hydrants, shall be tested and approved by the Engineering Department and Fire Department prior to combustible construction to assure availability and reliability for firefighting purposes.

4.0 FIRE PROTECTION SYSTEMS

☒ 4.3 An automatic fire sprinkler system is required. The system design shall be in accordance with National Fire Protection Association (NFPA) Standard 13. All new fire sprinkler systems, except those in single family dwellings, which contain twenty (20) sprinkler heads or more shall be monitored by an approved listed supervising station. An application along with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

5.0 BUILDING CONSTRUCTION FEATURES

☒ 5.1 The developer/general contractor is to be responsible for reasonable periodic cleanup of the development during construction to avoid hazardous accumulations of combustible trash and debris both on and off the site.

☒ 5.2 Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Homes that do not front street shall be provided with an address entry sign at the street. Address numbers shall contrast with their background. See Section 9-1 6.06 of the Ontario Municipal Code and Standards #H-003 and #H-002

☒ 5.6 Knox ® brand key-box(es) shall be installed in location(s) acceptable to the Fire Department. All Knox boxes shall be monitored for tamper by the building fire alarm system. See Standard #H-001 for specific requirements.

AIRPORT LAND USE COMPATIBILITY PLANNING
CONSISTENCY DETERMINATION REPORT

ONTARIO INTERNATIONAL AIRPORT

Project File No.: PDEV21-017 & PMTT21-009
Address: 125 West Emporia Street
APN: 1049-059-14
Existing Land Use: Parking Lot
Proposed Land Use: Development Plan to construct 2 commercial buildings totaling 30,971 SF and Tentative Parcel Map for condominium purposes to create 22 units
Site Acreage: 0.86 — Proposed Structure Height: 30 FT
ONT-IAC Project Review: n/a
Airport Influence Area: ONT

Reviewed By: Lorena Mejia
Contact Info: 909-395-2276
Project Planner: Jeanie Aguilo
Date: July 6, 2021
CD No.: 2021-029
PALU No.: n/a

The project is impacted by the following ONT ALUCP Compatibility Zones:

Safety	Noise Impact	Airspace Protection	Overflight Notification
○ Zone 1	○ 75+ dB CNEL	☐ High Terrain Zone	☐ Avigation Easement Dedication
○ Zone 1A	○ 70 - 75 dB CNEL	☑ FAA Notification Surfaces	☑ Recorded Overflight Notification
○ Zone 2	☐ 65 - 70 dB CNEL	☑ Airspace Obstruction Surfaces	○ Real Estate Transaction Disclosure
☐ Zone 3	☑ 60 - 65 dB CNEL	☑ Airspace Avigation Easement Area	
○ Zone 4		Allowable Height: 85 FT	
○ Zone 5			

The project is impacted by the following Chino ALUCP Safety Zones:

☐ Zone 1 ○ Zone 2 ○ Zone 3 ○ Zone 4 ○ Zone 5 ○ Zone 6

Allowable Height: _____

CONSISTENCY DETERMINATION

This proposed Project is: ◉ Exempt from the ALUCP ◉ Consistent ○ Consistent with Conditions ○ Inconsistent

The proposed project is located within the Airport Influence Area of Ontario International Airport (ONT) and was evaluated and found to be consistent with the policies and criteria of the Airport Land Use Compatibility Plan (ALUCP) for ONT.

Airport Planner Signature: _____

Page 1 — Form Updated: March 23, 2018 — Item B - 40 of 53

CITY OF ONTARIO
MEMORANDUM

TO: Scott Murphy, Community Development Director
Rudy Zeledon, Planning Director (Copy of memo only)
Diane Ayala, Advanced Planning Division (Copy of memo only)
Charity Hernandez, Economic Development
Matt Montiel, Building Department
Raymond Lee, Engineering Department
Jamie Richardson, Landscape Planning Division
Dennis Mejia, Municipal Utility Company
Gabriel Gutierrez, Police Department
Mike Gerken, Deputy Fire Chief/Fire Marshal
Jay Bautista, T. E., Traffic/Transportation Manager
Lorena Mejia, Airport Planning
Eric Woosley, Engineering/NPDES
Angela Magana, Community Improvement (Copy of memo only)
Jimmy Chang , IPA Department

FROM: Jeanie Irene Aguilo, Associate Planner

DATE: April 29, 2021

SUBJECT: FILE #: PMTT21-009 — Finance Acct#:

The following project has been submitted for review. Please send one (1) copy and email one (1) copy of your DAB report to the Planning Department by .

Note:
- ☐ Only DAB action is required
- ☐ Both DAB and Planning Commission actions are required
- ☐ Only Planning Commission action is required
- ☑ DAB, Planning Commission and City Council actions are required
- ☐ Only Zoning Administrator action is required

PROJECT DESCRIPTION: A Tentative Parcel/Tract Map for condominium purposes to create 22 condominium units on 0.86 acres of land located at 125 West Emporia Street within LAU-2N (Arts District - North) of the Downtown Mixed Use Zoning District (APN(s): 1049-059-14). Related File(s): PMTT21-009.

☒ The plan does adequately address the departmental concerns at this time.
- ☑ No comments
- ☐ Report attached (1 copy and email 1 copy)
- ☑ Standard Conditions of Approval apply

☐ The plan does not adequately address the departmental concerns.
- ☐ The conditions contained in the attached report must be met prior to scheduling for Development Advisory Board.

POLICE — POLICE OFFICER — 4/28/21

CONDITIONS OF APPROVAL:

1.0 GENERAL

☒ 1.1 The following are the Ontario Fire Department ("Fire Department") requirements for this development project, based on the current edition of the California Fire Code (CFC), and the current versions of the Fire Prevention Standards ("Standards.") It is recommended that the applicant or developer transmit a copy of these requirements to the on-site contractor(s) and that all questions or concerns be directed to the Bureau of Fire Prevention, at (909) 395-2029. For copies of Ontario Fire Department Standards please access the City of Ontario web site at www.ontarioca.gov/Fire/Prevention.

☒ 1.2 These Fire Department conditions of approval are to be included on any and all construction drawings.

2.0 FIRE DEPARTMENT ACCESS

☒ 2.1 Fire Department vehicle access roadways shall be provided to within 150 ft. of all portions of the exterior walls of the first story of any building, unless specifically approved. Roadways shall be paved with an all-weather surface and shall be a minimum of twenty-four (24) ft. wide. See Standard #B-004

☒ 2.2 In order to allow for adequate turning radius for emergency fire apparatus, all turns shall be designed to meet the minimum twenty five feet (25') inside and forty-five feet (45') outside turning radius per Standard #B-005.

☒ 2.3 Fire Department access roadways that exceed one hundred and fifty feet (150') in length shall have an approved turn-around per Standard #B-002.

☒ 2.4 Access drive aisles which cross property lines shall be provided with CC&Rs, access easements, or reciprocating agreements, and shall be recorded on the titles of affected properties, and copies of same shall be provided at the time of building plan check.

☒ 2.5 "No Parking-Fire Lane" signs and /or red painted curbs with lettering are required to be installed in interior access roadways, in locations where vehicle parking would obstruct the minimum clear width requirement. Installation shall be per Standard #B-001.

☒ 2.6 Security gates or other barriers on fire access roadways shall be provided with a Knox brand key switch or padlock to allow Fire Department access. See Standards #B-003, B-004 and H-001.

☒ 2.7 Any time PRIOR to on-site combustible construction and/or storage, a minimum twenty-four (24) ft. wide circulating all weather access roads shall be provided to within 150 ft. of all portions of the exterior walls of the first story of any building, unless specifically approved by fire department and other emergency services.

3.0 WATER SUPPLY

☒ 3.1 The required fire flow per Fire Department standards, based on the 2019 California Fire Code, Appendix B, is 1500 gallons per minute (g.p.m.) for 2 hours at a minimum of 20 pounds per square inch (p.s.i.) residual operating pressure.

☒ 3.2 Off-site (public) fire hydrants are required to be installed on all frontage streets, at a minimum spacing of three hundred foot (300') apart, per Engineering Department specifications.

☒ 3.4 The water supply, including water mains and fire hydrants, shall be tested and approved by the Engineering Department and Fire Department prior to combustible construction to assure availability and reliability for firefighting purposes.

4.0 FIRE PROTECTION SYSTEMS

☒ 4.2 Underground fire mains which cross property lines shall be provided with CC & R, easements, or reciprocating agreements, and shall be recorded on the titles of affected properties, and copies of same shall be provided at the time of fire department plan check. The shared use of private fire mains or fire pumps is allowable only between immediately adjacent properties and shall not cross any public street.

☒ 4.3 An automatic fire sprinkler system is required. The system design shall be in accordance with National Fire Protection Association (NFPA) Standard 13. All new fire sprinkler systems, except those in single family dwellings, which contain twenty (20) sprinkler heads or more shall be monitored by an approved listed supervising station. An application along with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.4 Wood frame buildings that are to be sprinkled shall have these systems in service (but not necessarily finaled) before the building is enclosed.

☒ 4.5 Fire Department Connections (FDC) shall be located on the address side of the building within one hundred fifty feet (150') of a public fire hydrant on the same side of the street. Provide identification for all fire sprinkler control valves and fire department connections per Standard #D-007. Raised curbs adjacent to Fire Department connection(s) shall be painted red, five feet either side, per City standards.

☒ 4.6 A fire alarm system is required. The system design shall be in accordance with National Fire Protection Association (NFPA) Standard 72. An application along with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.7 Portable fire extinguishers are required to be installed prior to occupancy per Standard #C-001. Please contact the Fire Prevention Bureau to determine the exact number, type and placement required.

5.0 BUILDING CONSTRUCTION FEATURES

☒ 5.1 The developer/general contractor is to be responsible for reasonable periodic cleanup of the development during construction to avoid hazardous accumulations of combustible trash and debris both on and off the site.

☒ 5.2 Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Multi-tenant or building projects shall have addresses and/or suite numbers provided on the rear of the building. Address numbers shall contrast with their background. See Section 9-1 6.06 of the Ontario Municipal Code and Standards #H-003 and #H-002.

☒ 5.6 Knox ® brand key-box(es) shall be installed in location(s) acceptable to the Fire Department. All Knox boxes shall be monitored for tamper by the building fire alarm system. See Standard #H-001 for specific requirements.

☒ 5.7 Placards shall be installed in acceptable locations on buildings that store, use or handle hazardous materials in excess of the quantities specified in the CFC. Placards shall meet the requirements of National Fire Protection Association (NFPA) Standard 704.

CITY OF ONTARIO
MEMORANDUM

TO: Scott Murphy, Community Development Director
Rudy Zeledon, Planning Director (Copy of memo only)
Diane Ayala, Advanced Planning Division (Copy of memo only)
Charity Hernandez, Economic Development
Matt Montiel, Building Department
Raymond Lee, Engineering Department
Jamie Richardson, Landscape Planning Division
Dennis Mejia, Municipal Utility Company
Gabriel Gutierrez, Police Department
Mike Gerken, Deputy Fire Chief/Fire Marshal
Jay Bautista, T. E., Traffic/Transportation Manager
Lorena Mejia, Airport Planning
Eric Woosley, Engineering/NPDES
Angela Magana, Community Improvement (Copy of memo only)
Jimmy Chang , IPA Department

FROM: Jeanie Irene Aguilo, Associate Planner

DATE: October 20, 2021

SUBJECT: FILE #: PMTT21-009 — Finance Acct#:

REVISION NO. 1

The following project has been resubmitted for review. Please send one (1) copy and email one (1) copy of your DAB report to the Planning Department by .

PROJECT DESCRIPTION: A Tentative Parcel Map to subdivide 0.86-acre of land into 22 commercial airspace condominium units located at 125 West Emporia Street, within LAU-2N (Arts District - North) of the MU-1 (Downtown Mixed Use) zoning district (APN: 1049-059-14). Related File: PDEV21-017.

☑ The plan does adequately address the departmental concerns at this time.
- ☐ No comments
- ☐ See previous report for Conditions
- ☐ Report attached (1 copy and email 1 copy)
- ☑ Standard Conditions of Approval apply

☐ The plan does not adequately address the departmental concerns.
- ☐ The conditions contained in the attached report must be met prior to scheduling for Development Advisory Board.

Landscape Planning Division — Landscape Planner — 11/16/21
Department — Signature — Title — Date

CITY OF ONTARIO
LANDSCAPE PLANNING DIVISION
303 East "B" Street, Ontario, CA 91764

CONDITIONS OF APPROVAL
Sign Off: Jamie Richardson, Sr. Landscape Planner — 1/31/2022 — Date

Reviewer's Name: **Jamie Richardson, Sr. Landscape Planner** — Phone: **(909) 395-2615**
D.A.B. File No.: PDEV21-017 — Case Planner: Jeanie Aguilo
Project Name and Location: 2 Commercial Bldgs. 125 W Emporia
Applicant/Representative: RWSS Development LLC 1405 Fairplex Dr. 83 La Verne, CA 91750

☒ **Preliminary Plans (dated 1/31/2022) meets the Standard Conditions for New Development and has been approved with the consideration that the following conditions below be met upon submittal of the landscape construction documents.**

☐ **Preliminary Plans (dated) has not been approved. Corrections noted below are required prior to Preliminary Landscape Plan approval.**

A RESPONSE SHEET IS REQUIRED WITH RESUBMITTAL OR PLANS WILL BE RETURNED AS INCOMPLETE.
Landscape construction plans with plan check number may be emailed to: landscapeplancheck@ontarioca.gov

PREVIOUS CORRECTIONS – 6/2/2021 & 11/16/2021 Not Complete

Civil/ Site Plans
1. Provide an arborist report and tree inventory for existing trees include genus, species, trunk diameter, canopy width and condition. Show and note existing trees in good condition to remain and note trees proposed to be removed. Include existing trees within 15' of adjacent property that would be affected by new walls, footings or on-site tree planting. Add tree protection notes on construction and demo plans to protect trees to remain. Replacement and mitigation for removed trees shall be equal to trunk diameter of heritage trees removed per the Development Code Tree Preservation Policy and Protection Measures, section 6.05.020.
2. Show on demo plans and landscape construction plans trees to be preserved, removed or mitigation measures for trees removed, such as:
   a. New 15 gallon trees min 1" diameter trunk, in addition to trees required.
   b. New 24" box trees min 1.5" diameter trunk, in addition to trees required.
   c. Upsizing trees on the plan one size larger such as 15 gallon to 24" box, or 24" to 36" box size.
   d. Monetary value of the trees removed as identified in the "Guide for Plant Appraisal", approved certified arborist plant appraiser, or may be equal to the value of the installation cost of planting, fertilizing, staking and irrigating 15 gallon trees, (100$ each) to the City of Ontario Historic Preservation Fund for city tree planting or city approved combination of the above items.
3. Parkway tree locations shall be shown on all tract maps and plans where utilities are proposed. Parkway trees are to be 30' apart.
4. Storm water infiltration devices located in landscape areas shall be reviewed and plans approved by the Landscape Planning Division prior to permit issuance. Any storm water devices in parkway areas shall not displace street trees.
5. Note decorative paving at entry.
6. Show transformers set back 5' from paving all sides. Coordinate with landscape plans.
7. Show backflow devices set back 4' from paving all sides. Locate on level grade.
8. Identify the 3' space behind the sidewalk. Show right of way improvements; trees protected, landscape and irrigation repaired or replaced.
9. Locate utilities including light standards, fire hydrants, water, drain and sewer lines to not conflict with required tree locations. Coordinate civil plans with landscape plans.
10. Note for compaction to be no greater than 85% at landscape areas. All finished grades at 1 ½" below finished surfaces. Slopes to be maximum 3:1.
11. Dimension all planters to have a minimum 5' wide inside dimension.
12. Dimension, show and call out for step-outs at parking spaces adjacent to planters; a 12" wide monolithic concrete curb, DG paving or pavers with edging.
13. Add Note to Grading and Landscape Plans: Landscape areas where compaction has occurred due to grading activities and where trees or storm water infiltration areas are located shall be loosened by soil fracturing. For trees a 12'x12'x18" deep area; for storm water infiltration the entire area shall be loosened. Add the following information on the plans: The back hoe method of soil fracturing shall be used to break up compaction. A 4" layer of Compost is spread over the soil surface before fracturing is begun. The back hoe shall dig into the soil lifting and then drop the soil immediately back into the hole. The bucket then moves to the adjacent soil and repeats. The Compost falls into the spaces between the soil chunks created. Fracturing shall leave the soil surface quite rough with large soil clods. These must be broken by additional tilling. Tilling in more Compost to the surface after fracturing per the soil report will help create an A horizon soil. Imported or reused Topsoil can be added on top of the fractured soil as needed for grading. The Landscape Architect shall be present during this process and provide certification of the soil fracturing. For additional reference see Urban Tree Foundation – Planting Soil Specifications.

Landscape Plans
14. Provide an arborist report and tree inventory as noted in #1.
15. Show backflow devices with 36" high strappy leaf shrub screening and trash enclosures and transformers, a 4'-5' high evergreen hedge screening. Do not encircle utility, show as masses and duplicate masses in other locations on regular intervals.
16. Locate light standards, fire hydrants, water and sewer lines to not conflict with required tree locations. Coordinate civil plans with landscape plans
17. Show all utilities on the landscape plans. Coordinate so utilities are clear of tree locations.
18. Show all easements and identify.
19. Note on landscape plans: for compaction to be no greater than 85% at landscape areas. All finished grades at 1 ½" below finished surfaces. Slopes to be maximum 3:1.
20. Dimension all planters to have a minimum 5' wide inside dimension with 6" curbs and 12" wide curbs where parking spaces are adjacent to planters.
21. Show landscaping in the perimeter planters and trees spaced 30' apart.
22. Show parkway landscape max 18" high: such as Baccharis, Lonicera, etc. and street trees spaced 30' apart.
23. Street trees for this project are: Washingtonia filifera and Grevillea robusta alternating. Use background trees and triangularly space between them.
24. Locate trees for shade on buildings, parking lots, seating areas and paving, screen blank walls and adjacent properties where missing, accent trees to entries and driveways, provide visibility to signs, windows and doors. Locate trees 50% of canopy width from walls, buildings, and existing trees.
25. Call out type of proposed irrigation system (dripline and pop up stream spray tree bubblers with PCS). Include preliminary MAWA calcs. Proposed water use must meet water budget.
26. Show landscape hydrozones on plan or legend with plants per WUCOLS. Moderate water plants may be used for part shade north and east facing locations, low water plants everywhere else.
27. Overhead spray systems shall be designed for plant material less than the height of the spray head.
28. Show 25% of trees as California native (Platanus racemosa, Quercus agrifolia, Quercus wislizenii, Quercus douglasii, Cercis occidentalis etc.) in appropriate locations.
29. Show 6" diameter of mulch only at new trees; 8" around Oaks and existing. Detail irrigation dripline outside of mulched root zone.
30. Designer or developer to provide agronomical soil testing and include report on landscape construction plans.
31. Hardscape materials such as DG, gravel, cobble shall be limited to accent areas and 5% of the total landscape area. Plant material shall be designed to fill into 100% of landscape areas with no bare soil.
32. Call out all fences and walls, materials proposed and heights.
33. Show concrete mewstrips to identify property lines along open areas or to separate ownership or between maintenance areas.
34. Show minimum on-site tree sizes per the Landscape Development standards, see the Landscape Planning website. 5% 48" box, 10% 36 box, 30% 24" box, 55% 15 gallon.
35. Show 25% of trees as California native (Platanus racemosa, Quercus agrifolia, Quercus wislizenii, Quercus douglasii, Cercis occidentalis etc.) in appropriate locations.
36. Landscape construction plans shall meet the requirements of the Landscape Development Guidelines. See http://www.ontarioca.gov/landscape-planning/standards
37. After a project's entitlement approval, the applicant shall pay all applicable fees for landscape plan check and inspections at a rate established by resolution of the City Council.

CITY OF ONTARIO
MEMORANDUM

TO: **Jeanie Irene Aguilo, Associate Planner**
Planning Department

FROM: **Mike Gerken, Deputy Fire Chief/Fire Marshal**
Fire Department

DATE: **May 12, 2021**

SUBJECT: **PMTT21-009 - A Tentative Parcel Map to subdivide 0.86-acre of land into 22 commercial airspace condominium units located at 125 West Emporia Street, within LAU-2N (Arts District - North) of the MU-1 (Downtown Mixed Use) zoning district (APN: 1049-059-14). Related File: PDEV21-017.**

☒ The plan **does** adequately address Fire Department requirements at this time.
- ☒ Standard Conditions of Approval apply, as stated below.

SITE AND BUILDING FEATURES:

A. 2019 CBC Type of Construction: IIIB

B. Type of Roof Materials: Ordinary

C. Ground Floor Area(s): Varies

D. Number of Stories: 2 Stories

E. Total Square Footage: Varies 1,511 Sq. Ft. – 12,647 Sq. Ft. (4 Buildings)

F. 2019 CBC Occupancy Classification(s): B-2 & S1

CITY OF ONTARIO
MEMORANDUM

TO: **Jeanie Irene Aguilo, Associate Planner**

FROM: **Tony Galban, Police Department**

DATE: **October 20, 2021**

SUBJECT: **PDEV21-017- A DEVELOPMENT PLAN TO CONSRUCT TWO (2) COMMERCIAL BUILDINGS TOTALING 30,971 SQUARE FEET LOCATED AT 125 WEST EMPORIA STREET.**

The "Standard Conditions of Approval" contained in Resolution No. 2017-027 apply. The applicant shall read and be thoroughly familiar with these conditions, including, but not limited to, the requirements below.

- Required lighting for all walkways, driveways, doorways, parking lots, hallways and other areas used by the public shall be provided. Lights shall operate via photosensor. Photometrics shall be provided to the Police Department and include the types of fixtures proposed and demonstrate that such fixtures meet the vandal-resistant requirement. Planned landscaping shall not obstruct lighting.
- Rooftop addresses shall be installed on the buildings as stated in the Standard Conditions. The numbers shall be at a minimum 6 feet tall and 2 foot wide, in reflective white paint on a flat black background, and oriented with the bottom of the numbers towards the addressed street. Associated letters shall also be included.
- The Applicant shall comply with construction site security requirements as stated in the Standard Conditions.

The Applicant is invited to contact Officer Tony Galban at (909) 408-1006 with any questions or concerns regarding these conditions.

REGISTERED PROFESSIONAL ENGINEER — JACK C. S. LEE — 40870 — Exp. 3-31-25 — CIVIL — STATE OF CALIFORNIA

Underground Service Alert
DIG ALERT BEFORE YOU DIG
Call: TOLL FREE
811
TWO WORKING DAYS BEFORE YOU DIG

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dba QUARTECH CONSULTANTS
576 E. LAMBERT ROAD, BREA, CA 92821
TEL: (714) 671-1050 FAX: (714) 671-1090

RELEASED

REVISIONS

B202206576
PDEV21-017
PMTT21-009
PM-20394

PRECISE GRADING PLAN
CONDITION OF APPROVAL:
125 W. EMPORIA STREET,
ONTARIO, CA 91762

DRAWN: EYS
CHECKED: J.C.L.
DATE: 09-26-2023
JOB NO.: 20-022-029
SCALE: N.T.S.
FILE NAME: Emporia_Grading.dwg

C-4

SHEET 4 OF 14 SHT.

DEMOLITION PLAN

DEMOLITION NOTES:

(D1) REMOVE EXISTING STREET TREES
(D2) EXISTING STREET TREES TO REMAIN AND PROTECTED IN PLACE
(D3) REMOVE EXISTING ASPHALT PAVEMENT
(D4) EXISTING CHAIN LINK FENCE TO REMAIN AND PROTECTED IN PLACE
(D5) REMOVE EXISTING PARKING STALL LIGHT
(D6) REMOVE EXISTING CONCRETE CURB
(D7) REMOVE EXISTING CHAIN LINK FENCE

ADDITIONAL NOTES:

PUBLIC SYSTEMS AND ANY PROPOSED WORK IN THE PUBLIC RIGHT OF WAYS ARE NOT PART OF THE CITY OF ONTARIO, BUILDING DEPARTMENT REVIEW OR APPROVAL.

ADDITIONAL NOTES:

ALL WORK WITHIN THE PUBLIC R/W REQUIRED A SEPARATE ENCROACHMENT PERMIT

SCALE: 1"=10'

W. EMPORIA STREET

8" SEWER MAIN
ELECTRICAL MAIN
6" WATER MAIN
3" GAS MAIN
STREET LIGHT LINE

N 87°56'24" E
290.82'
N 00°30'55" W
134.00'
N 89°59'57" E
290.85'
N 00°30'00" W
133.70'
(VACATED)

LAUREL AVENUE
APN: 1049-059-21

EUCLID AVENUE

SOUTHERN PACIFIC RAILROAD
APN: 1049-059-15

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PRECISE GRADING PLAN
DEMOLITION PLAN:
125 W. EMPORIA STREET,
ONTARIO, CA 91762

DRAWN: EYS
CHECKED: J.C.L.
DATE: 09-26-2023
JOB NO.: 20-022-029
SCALE: 1" = 10'
FILE NAME: Emporia_Grading.dwg

C-5

GRADING AND DRAINAGE PLAN

CONSTRUCTION NOTES:

1. CONSTRUCT NEW BUILDING PER ARCHITECTURAL PLAN
2. CONSTRUCT ASPHALT DRIVEWAY PAVEMENT, 4" A.C. OVER 6" C.A.B.
3. CONSTRUCT 24" WIDE CONCRETE "V" GUTTER PER DETAIL ON SHEET C-8
4. CONSTRUCT 24" X 24" CATCH BASIN WITH FOSSIL FILTER PER DETAIL ON SHEET C-8
5. CONSTRUCT 6" CONCRETE CURB ONLY PER DETAIL ON SHEET C-8
6. INSTALL ADS-PIPE STORMTECH CHAMBER SC-740 OR EQUIVALENT PER DETAIL ON SHEET C-9
7. INSTALL 6" ø C.I. PIPE WITH 1% MIN. SLOPE OR EQUIVALENT
8. INSTALL 8" ø C.I. PIPE WITH 1% MIN. SLOPE OR EQUIVALENT
9. INSTALL 12" ø C.I. PIPE WITH 1% MIN. SLOPE OR EQUIVALENT
10. CONSTRUCT 4' X 4' X 4.5' (DEEP) PRE-FAB SUMP PUMP CONTAINMENT BASIN, BY BARNES PUMP 4SE5024L, ONE PHASE 5.00 HP OR EQUIVALENT, SEE DETAIL ON SHEET C-8 FOR SUMP PIT & PUMP DETAIL (CATCH BASIN STENCILING WITH PHRASE "NO DUMPING-DRAINS TO OCEAN")
11. CONSTRUCT 36" X 24" CATCH BASIN ON SHEET C-8
12. INSTALL 6" ø PVC PIPE WITH 1% MIN. SLOPE OR EQUIVALENT
13. PROVIDE 12" WIDE CURB OPENING FOR OVERFLOW DRAINAGE PURPOSES
14. CONSTRUCT CONCRETE WALKWAY PAVEMENT, 4" PCC OVER COMPACTED FILL
15. CONSTRUCT DECORATIVE PAVEMENT PER ARCHITECTURAL PLAN

ADDITIONAL NOTES:

ALL THE PEDESTRIAN WALKING SURFACES THAT ARE PART OF AN ACCESSIBLE ROUTE WITH ENHANCED SURFACES MUST BE ACCESSIBLE TYPE FOR THE DISABLED PER CBC 11B-302.1, 11B-403.

ONLY APPROVED DSA-AC DETECTABLE WARNING PRODUCTS (TRUNCATED DOMES) AND DIRECTIONAL SURFACES SHALL BE INSTALLED AS PROVIDED IN THE CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 1, CHAPTER 5, ARTICLES 2, 3, AND 4. REFER TO CCR TITLE 24, PART 12, CHAPTERS 11B, SECTION 12-11B.205, FOR BUILDING AND FACILITY ACCESS SPECIFICATIONS FOR PRODUCT APPROVAL FOR DETECTABLE WARNING PRODUCTS AND DIRECTIONAL SURFACES. [CBC 11B-705.3]

THE FOOTING FOR WALLS SHALL NOT INTERFERE WITH LANDSCAPE PLANTER AREAS; 2' IN FRONT OF THE WALL AND A MINIMUM OF 18" OF COVER.

COMPACTION TO BE NO GREATER THAN 85% IN LANDSCAPE AREAS. ALL FINISHED GRADES AT 1-11/2" BELOW FINISHED SURFACES. SLOPE TO BE MAXIMUM 3:1.

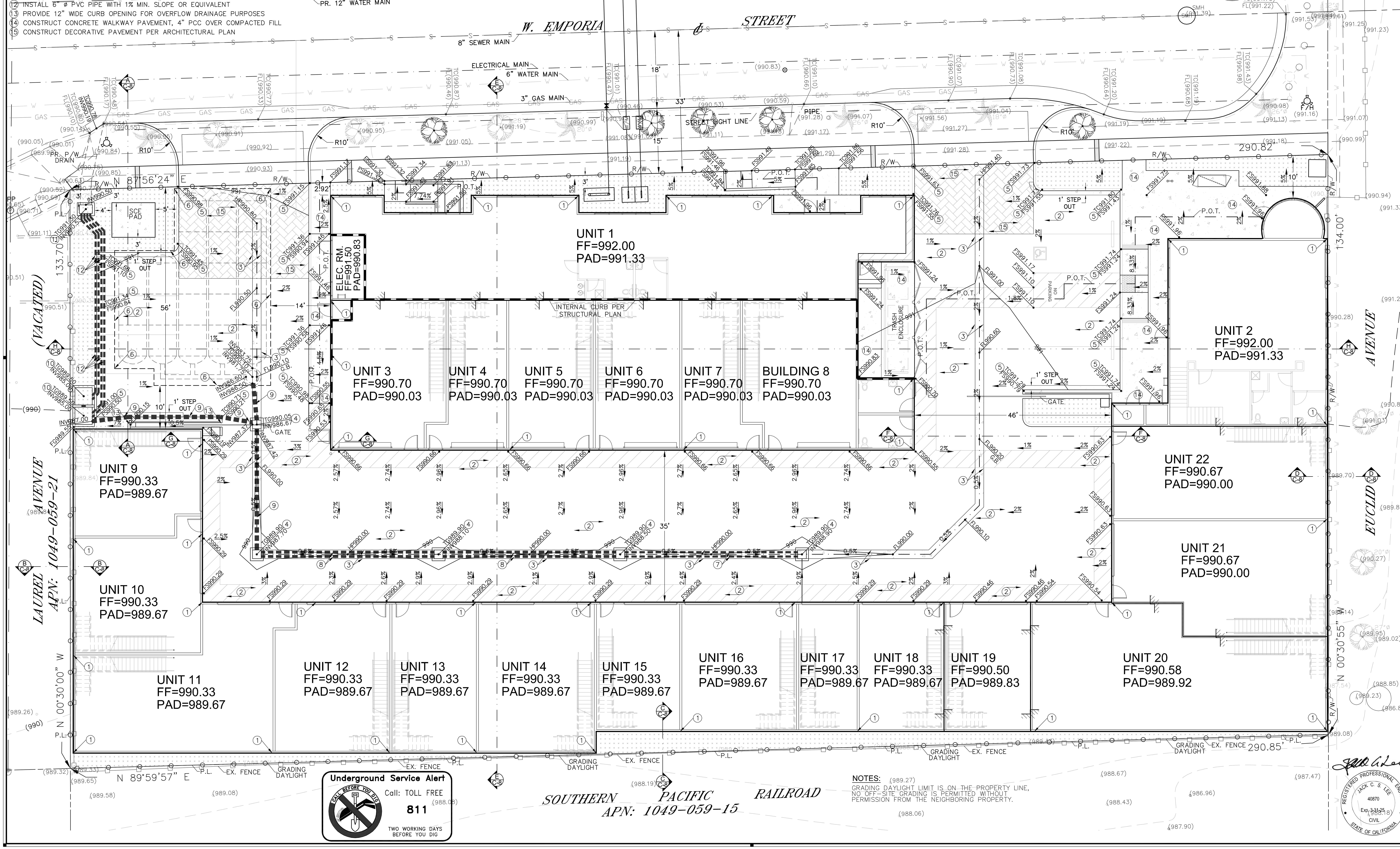
LANDSCAPE AREAS WHERE COMPACTION HAS OCCURRED DUE TO GRADING ACTIVITIES AND WHERE TREES OR STORMWATER INFILTRATION AREAS ARE LOCATED SHALL BE LOOSENED BY SOIL FRACTURING. FOR TREES, A 12'X12'X18" DEEP AREA; FOR STORMWATER INFILTRATION, THE ENTIRE AREA SHALL BE LOOSENED. THE BACKHOE METHOD OF SOIL FRACTURING SHALL BE USED TO BREAK UP COMPACTION. A 4" LAYER OF COMPOST IS SPREAD OVER THE SOIL SURFACE BEFORE FRACTURING IS BEGUN. THE BACKHOE SHALL DIG INTO THE SOIL LIFTING AND THEN DROP THE SOIL IMMEDIATELY BACK INTO THE HOLE. THE BUCKET THEN MOVES TO THE ADJACENT SOIL AND REPEATS. THE COMPOST FALLS INTO THE SPACES BETWEEN THE SOIL CHUNKS CREATED. FRACTURING SHALL LEAVE THE SOIL SURFACE QUITE ROUGH WITH LARGE SOIL CLODS. THERE MUST BE BROKEN BY ADDITIONAL TILLING. TILLING IN MORE COMPOST TO THE SURFACE AFTER FRACTURING PER THE SOIL REPORT WILL HELP CREATE AN A HORIZON SOIL. IMPORTED OR REUSED TOPSOIL CAN BE ADDED ON TOP OF THE FRACTURE SOIL AS NEEDED FOR GRADING. THE LANDSCAPE ARCHITECT SHALL BE PRESENT DURING THIS PROCESS AND PROVIDE CERTIFICATION OF THE SOILS FRACTURING. FOR ADDITIONAL REFERENCE, SEE URBAN TREE FOUNDATION - PLANTING SOIL SPECIFICATION.

THIS PLAN HAS BEEN REVIEWED AND CONFORMS TO THE RECOMMENDATIONS PROVIDED IN THE SOILS REPORT DATED SEPTEMBER 1, 2020.

09/26/2023
SIGNATURE DATE

REGISTERED PROFESSIONAL ENGINEER JACK C. S. LEE 2153 Exp. 3-31-25 GEOTECHNICAL STATE OF CALIFORNIA

SCALE: 1"=10'



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NOTES:
GRADING DAYLIGHT LIMIT IS ON THE PROPERTY LINE, NO OFF-SITE GRADING IS PERMITTED WITHOUT PERMISSION FROM THE NEIGHBORING PROPERTY.

REGISTERED PROFESSIONAL ENGINEER JACK C. S. LEE 40870 Exp. 3-31-25 CIVIL STATE OF CALIFORNIA

CALLAND ENGINEERING, INC.
dba QUARTECH CONSULTANTS
576 E. LAMBERT ROAD, BREA, CA 92821
TEL: (714) 671-1050 FAX: (714) 671-1090

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REVISIONS

B202206576
PDEV21-017
PMTT21-009
PM-20394

PRECISE GRADING PLAN
GRADING AND DRAINAGE PLAN:
125 W. EMPORIA STREET,
ONTARIO, CA 91762

DRAWN:	EYS
CHECKED:	J.C.L.
DATE:	09-26-2023
JOB NO.:	20-022-029
SCALE:	1" = 10'
FILE NAME:	Emporia_Grading.dwg

C-6

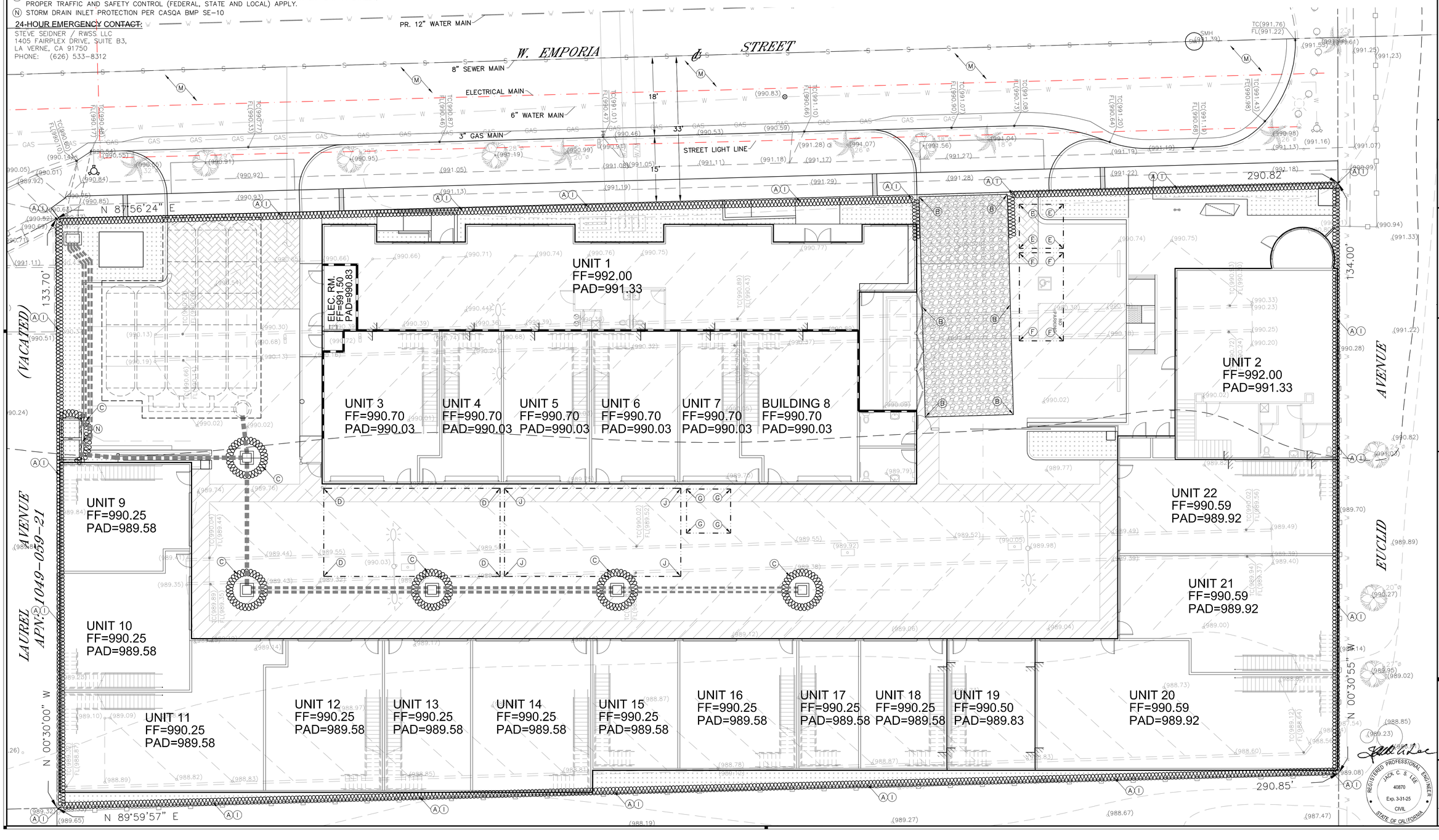
EROSION AND SEDIMENT CONTROL PLAN

EROSION CONTROL NOTES:

- (A) INSTALL SANDBAG BARRIER ALONG PERIMETER OF THE PROJECT WITHOUT WALL PER CASQA BMP SE-8, SEE DETAIL A / SHEET C-4
- (B) STABILIZED CONSTRUCTION ENTRANCE PER CASQA BMP TC-1, SEE DETAIL B / SHEET C-4
- (C) INSTALL TEMPORARY SEDIMENT TRAP SANDBAG PER CASQA SE-3
- (D) INSTALL MATERIAL STORAGE AREA PER CASQA BMP WM-1
- (E) INSTALL CONCRETE WASH OUT WASTE MANAGEMENT PER CASQA BMP WM-8
- (F) INSTALL TRASH DISPOSAL AREA, TRASH RECEPTACLES SHALL BE COVERED AT THE END OF THE DAY AND DURING RAINY EVENTS PER CASQA BMP WM-5
- (G) INSTALL PORTABLE TOILET FOR WORKERS PER CASQA BMP WM-9
- (H) APPLY WATERING OF EXPOSED SOIL ON ENTIRE SITE PER CASQA BMP WE-1
- (I) INSTALL TEMPORARY PERIMETER CHAIN LINK FENCE WITH LOCKABLE CHAIN LINK FENCE GATE AND GREEN FABRIC SCREEN ON THE PROJECT SITE
- (J) INSTALL TEMPORARY VEHICLE AND EQUIPMENT CLEANING, FUELING AND MAINTENANCE AREA PER CASQA BMP NS-8, 9 & 10
- (K) IMPLEMENT STOCKPILE MANAGEMENT USING EC-7, PLASTIC SHEETING & SURROUND WITH SE-6 GRAVEL BAGS PER CASQA BMP WM-3
- (L) IMPLEMENT SPILL PREVENTION BY STORING CLEAN-UP MATERIAL PER CASQA BMP WM-4
- (M) APPLY DRY SWEEPING ALL TRACKING OF SEDIMENT PER SE-7 THAT OCCURS ON CITY'S MAIN STREET, PROPER TRAFFIC AND SAFETY CONTROL (FEDERAL, STATE AND LOCAL) APPLY.
- (N) STORM DRAIN INLET PROTECTION PER CASQA BMP SE-10

24-HOUR EMERGENCY CONTACT:

STEVE SEIDNER / RWSS LLC
1405 FAIRPLEX DRIVE, SUITE B3,
LA VERNE, CA 91750
PHONE: (626) 533-8312



SCALE: 1"=10'

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dba QUARTECH CONSULTANTS
576 E. LAMBERT ROAD, BREA, CA 92821
TEL: (714) 671-1050 FAX: (714) 671-1090

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PDEV21-017
PMTT21-009
PM-20394

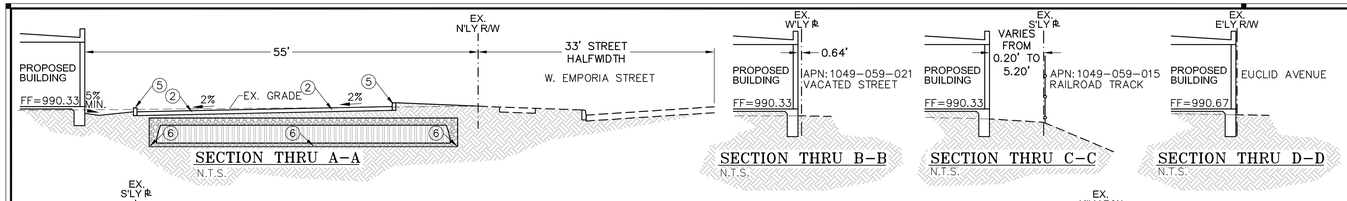
PRECISE GRADING PLAN
EROSION AND SEDIMENT CONTROL PLAN
125 W. EMPORIA STREET,
ONTARIO, CA 91762

DRAWN: EYS
CHECKED: J.C.L.
DATE: 09-26-2023
JOB NO.: 20-022-029
SCALE: 1" = 10'
FILE NAME: Emporia_Grading.dwg

REGISTERED PROFESSIONAL ENGINEER
JACK C. S. LEE
40870
Exp. 3-31-25
CIVIL
STATE OF CALIFORNIA

C-7

SHEET 7 OF 14 SHT.

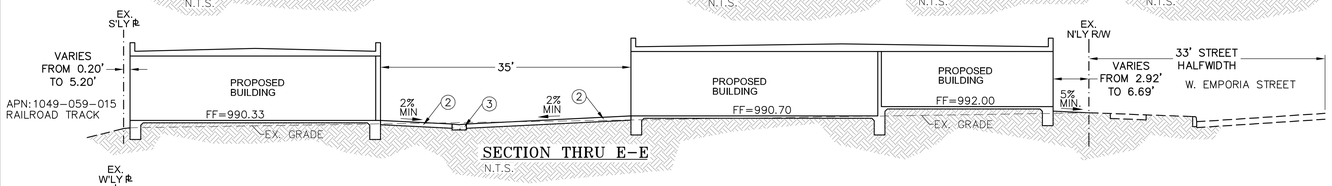


SECTION THRU A–A
N.T.S.

SECTION THRU B–B
N.T.S.

SECTION THRU C–C
N.T.S.

SECTION THRU D–D
N.T.S.



SECTION THRU E–E
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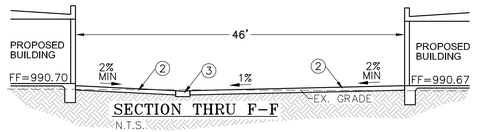

SECTION THRU F–F
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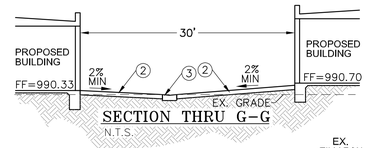
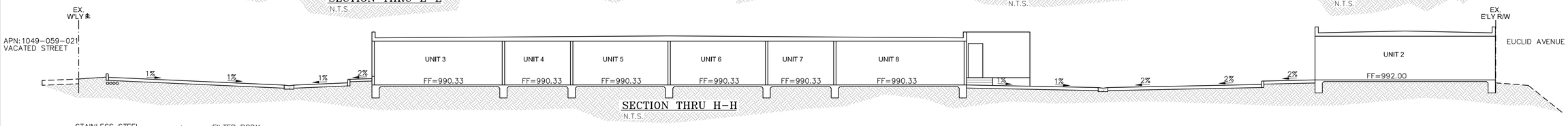
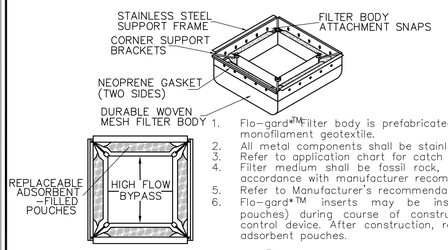


SECTION THRU G–G
N.T.S.

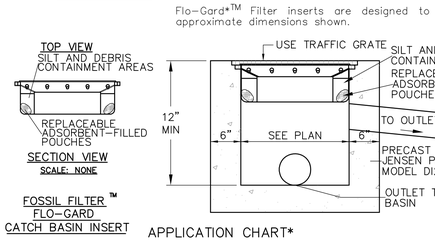


SECTION THRU H–H
N.T.S.



1. Flo-gard*™ Filter body is prefabricated from polypropylene woven monofilament geotextile.
2. All metal components shall be stainless steel (Type 304).
3. Refer to application chart for catch basin and filter sizing.
4. Filter medium shall be fossil rock, installed and maintained in accordance with manufacturer recommendations.
5. Refer to Manufacturer's recommendations for maintenance.
6. Flo-gard*™ inserts may be installed (without adsorbent pouches) during course of construction as a sedimentation control device. After construction, remove sediment and install adsorbent pouches.

Flo-Gard*™ Filter inserts are designed to fit catch basins with approximate dimensions shown.

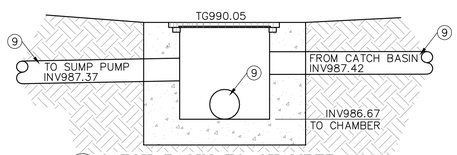


FOSSIL FILTER ™
FLO–GARD
CATCH BASIN INSERT

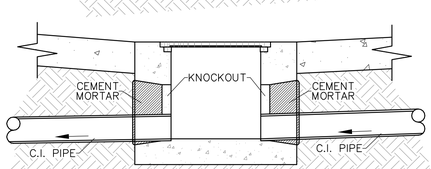
APPLICATION CHART*

MODEL NO.	Inlet I.D.	Grate O.D.	COMMENTS
FGP–24F8	24" x 24"	24" x 27"	GRATED INLET

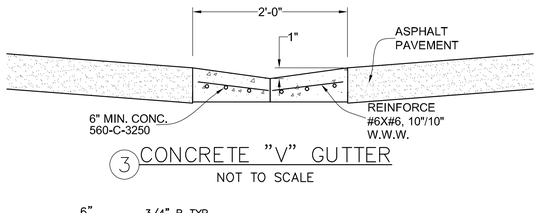
4 CATCH BASIN W/ FOSSIL FILTER (TYP.)
NOT TO SCALE



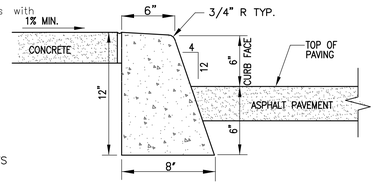
4 CATCH BASIN TO CHAMBER
N.T.S.



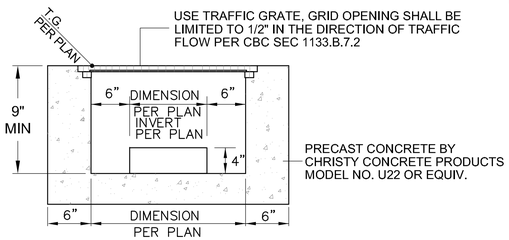
PIPE TO CONCRETE CATCH BASIN CONNECTION
N.T.S.



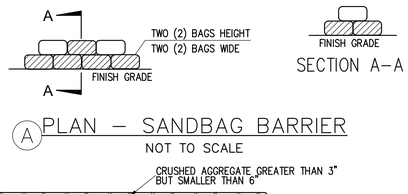
3 CONCRETE "V" GUTTER
NOT TO SCALE



5 CONCRETE CURB ONLY
NOT TO SCALE

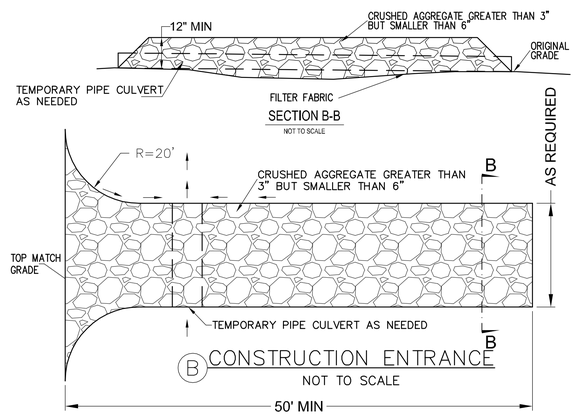


11 CATCH BASIN (TYP.)
NOT TO SCALE



A PLAN – SANDBAG BARRIER
NOT TO SCALE

FINISH GRADE
SECTION A–A

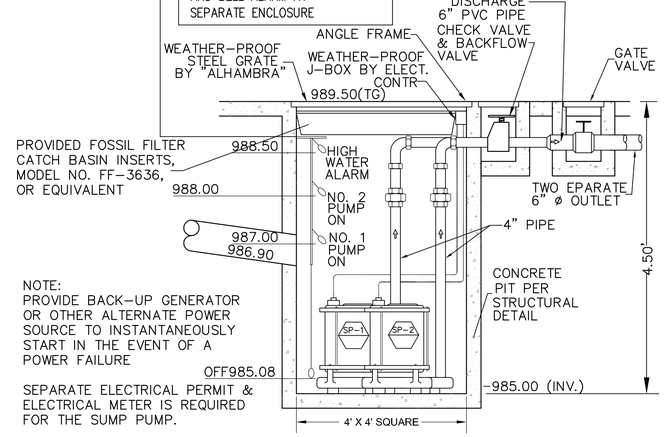


B CONSTRUCTION ENTRANCE
NOT TO SCALE

CONTROL BOX

INCLUDES CIRCUIT BREAKER FOR EACH PUMP; MAGNETIC STARTER WITH 3 LEG PROTECTION FOR EACH PUMP; HAND–OFF–AUTO SWITCHES AND RUN LIGHTS FOR EACH PUMP; AND BELL ALARM AT SEPARATE ENCLOSURE

TWO SUMP PUMPS IN ONE PIT, BARNES PUMP 4SE4564L; THREE PHASE, 4.50 HP OR EQUIVALENT



10 DUPLEX SUBMERSIBLE SUMP PUMP (WEST)
NOT TO SCALE

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PRECISE GRADING PLAN
DETAILS:
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REGISTERED PROFESSIONAL ENGINEER
JACK C. S. LEE
40870
Exp. 3-31-25
CIVIL
STATE OF CALIFORNIA

C-8

SHEET 8 OF 14 SHT.

User Inputs

Chamber Model:	MC3500
Outlet Control Structure:	Yes
Project Name:	Emporia
Engineer:	Erik Sy
Project Location:	California
Measurement Type:	Imperial
Required Storage Volume:	4510 cubic ft.
Stone Porosity:	40%
Stone Foundation Depth:	9 in.
Stone Above Chambers:	12 in.
Average Cover Over Chambers:	18 in.
Design Constraint Dimensions:	(37 ft. x 46 ft.)

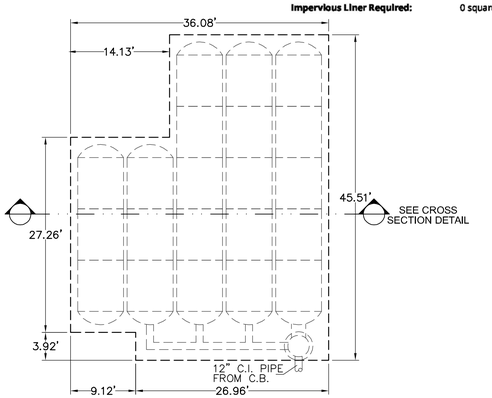
Results

System Volume and Bed Size

Installed Storage Volume:	4565.78 cubic ft.
Storage Volume Per Chamber:	109.90 cubic ft.
Number Of Chambers Required:	21
Number Of End Caps Required:	10
Chamber Rows:	5
Maximum Length:	45.51 ft.
Maximum Width:	36.08 ft.
Approx. Bed Size Required:	1405.29 square ft.

System Components

Amount Of Stone Required:	196 cubic yards
Volume Of Excavation (Not Including Fill):	287 cubic yards
Total Non-woven Geotextile Required:	495 square yards
Woven Geotextile Required (excluding Isolator Row):	51 square yards
Woven Geotextile Required (Isolator Row):	47 square yards
Total Woven Geotextile Required:	97 square yards
Impervious Liner Required:	0 square yards



DRYWELL AND STORAGE SYSTEM	DMA A & DMA B
REQUIRED STORAGE VOLUME (DCV)	4,506 C.F.
PROVIDED STORAGE VOLUME	4,566 C.F.
PROVIDED 48 HOURS INFILTRATION VOLUME	5,621 C.F.
TOTAL TIME TO EMPTY SYSTEM	38.99 HR
INFILTRATION RATE PER PERCOLATION TEST	1.00 IN/HR
CHAMBER INFILTRATION SURFACE AREA	1,405.29 S.F.
GRAVEL INFILTRATION HEIGHT	5.50'

NOTES:
ALL WATER QUALITY BMPS AND CONSTRUCTION DETAILS SHOULD COMPLY WITH THE FINAL APPROVED WQMP REPORT.

6 ADS-PIPE SC-740 STORMWATER CHAMBER
NOT TO SCALE

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS 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 PLUS 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 PLUS ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS 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 PLUS 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.

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73°F/23°C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

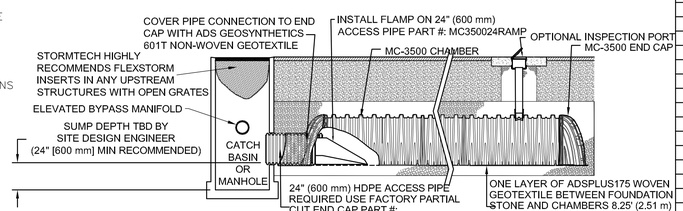
1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
   STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM – 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

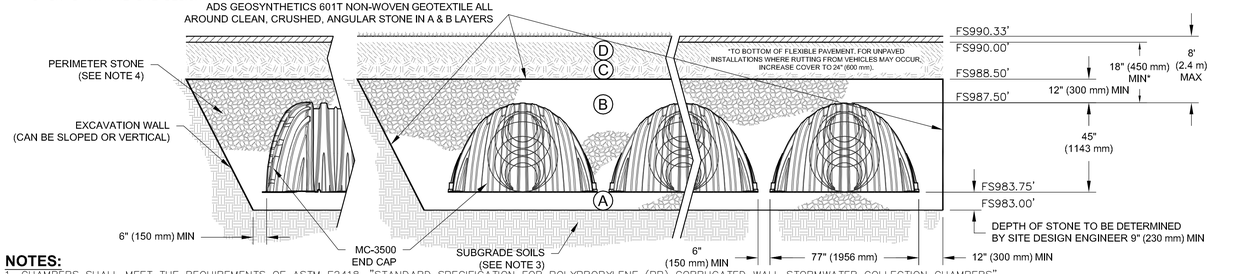


MC-3500 ISOLATOR ROW PLUS DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 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 24" (600 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 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

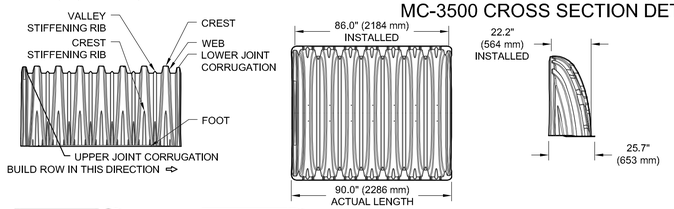
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 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.
4. 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.



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. 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.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/% AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

MC-3500 CROSS SECTION DETAIL



ADDITIONAL NOTES:

CONTRACTOR TO VERIFY INFILTRATION RATES WITH SOIL ENGINEER AFTER THE GRADING OPERATION AND PRIOR TO INSTALLATION OF THE UNDERGROUND CHAMBERS. THE CITY SHALL BE NOTIFIED IF THE INFILTRATION RATES DEVIATE FROM THE ORIGINAL INFILTRATION REPORT. THE SUB-GRADE SOILS WITHIN PROPOSED INFILTRATION SYSTEM AREAS SHOULD NOT BE OVER-EXCAVATED, UNDERCUT OR COMPACTED IN ANY SIGNIFICANT MANNER.

NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0"X45.0"X86.0"	(1956mm X 1143mm X 2184mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

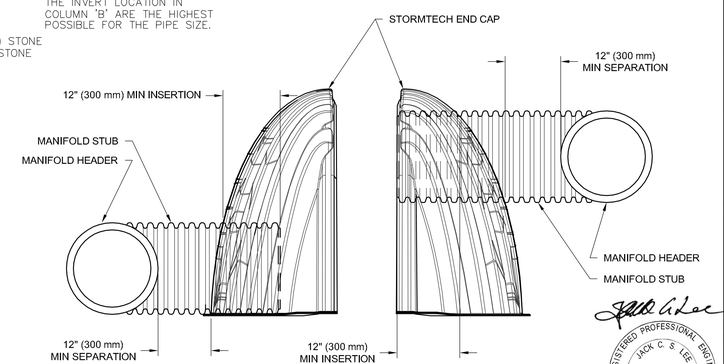
SIZE (W X H X INSTALLED LENGTH)	75.0"X45.0"X22.2"	(1905mm X 1143mm X 564mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" (152 mm) STONE BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.
PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"

CUSTOM PARTIAL CUT INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

MC-3500 TECHNICAL SPECIFICATIONS

CALLAND ENGINEERING, INC.
dba QUARTECH CONSULTANTS
576 E. LAMBERT ROAD, BREA, CA 92821
TEL: (714) 671-1050 FAX: (714) 671-1090

RELEASED

REVISIONS

B20220576
PDEV21-017
PMTT21-009
PM-20394

PRECISE GRADING PLAN
STORMTECH MC-3500
CHAMBER SYSTEM DETAIL:
125 W. EMPORIA STREET,
ONTARIO, CA 91762

DRAWN: EYS
CHECKED: J.C.L.
DATE: 09-26-2023
JOB NO.: 20-022-029
SCALE: N.T.S.
FILE NAME: Emporia_Grading.dwg

REGISTERED PROFESSIONAL ENGINEER
JACK C. S. LEE
40870
Exp. 3-31-25
CIVIL
STATE OF CALIFORNIA

C-9

SHEET 9 OF 14 SHT.

HORIZONTAL CONTROL PLAN

SCALE: 1"=10'

W. EMPORIA STREET

UNIT 1
FF=992.00
PAD=991.33

ELEC. RM.
FF=991.50
PAD=990.83

UNIT 2
FF=992.00
PAD=991.33

UNIT 3
FF=990.70
PAD=990.03

UNIT 4
FF=990.70
PAD=990.03

UNIT 5
FF=990.70
PAD=990.03

UNIT 6
FF=990.70
PAD=990.03

UNIT 7
FF=990.70
PAD=990.03

BUILDING 8
FF=990.70
PAD=990.03

UNIT 9
FF=990.33
PAD=989.67

UNIT 10
FF=990.33
PAD=989.67

UNIT 11
FF=990.33
PAD=989.67

UNIT 12
FF=990.33
PAD=989.67

UNIT 13
FF=990.33
PAD=989.67

UNIT 14
FF=990.33
PAD=989.67

UNIT 15
FF=990.33
PAD=989.67

UNIT 16
FF=990.33
PAD=989.67

UNIT 17
FF=990.33
PAD=989.67

UNIT 18
FF=990.33
PAD=989.67

UNIT 19
FF=990.50
PAD=989.83

UNIT 20
FF=990.58
PAD=989.92

UNIT 21
FF=990.67
PAD=990.00

UNIT 22
FF=990.67
PAD=990.00

TRUCK TURNING RADIUS

PIPE

SMH

FH

LAUREL AVENUE
APN: 1049-059-21

EUCLID AVENUE

(VACATED)

SOUTHERN PACIFIC RAILROAD
APN: 1049-059-15

N 87°56'24" E

N 89°59'57" E

N 00°30'00" W

N 00°30'55" W

290.82

290.85

133.70'

134.00'

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TEL: (714) 671-1050 FAX: (714) 671-1090

RELEASED

REVISIONS

B202206576
PDEV21-017
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PRECISE GRADING PLAN
HORIZONTAL CONTROL PLAN:
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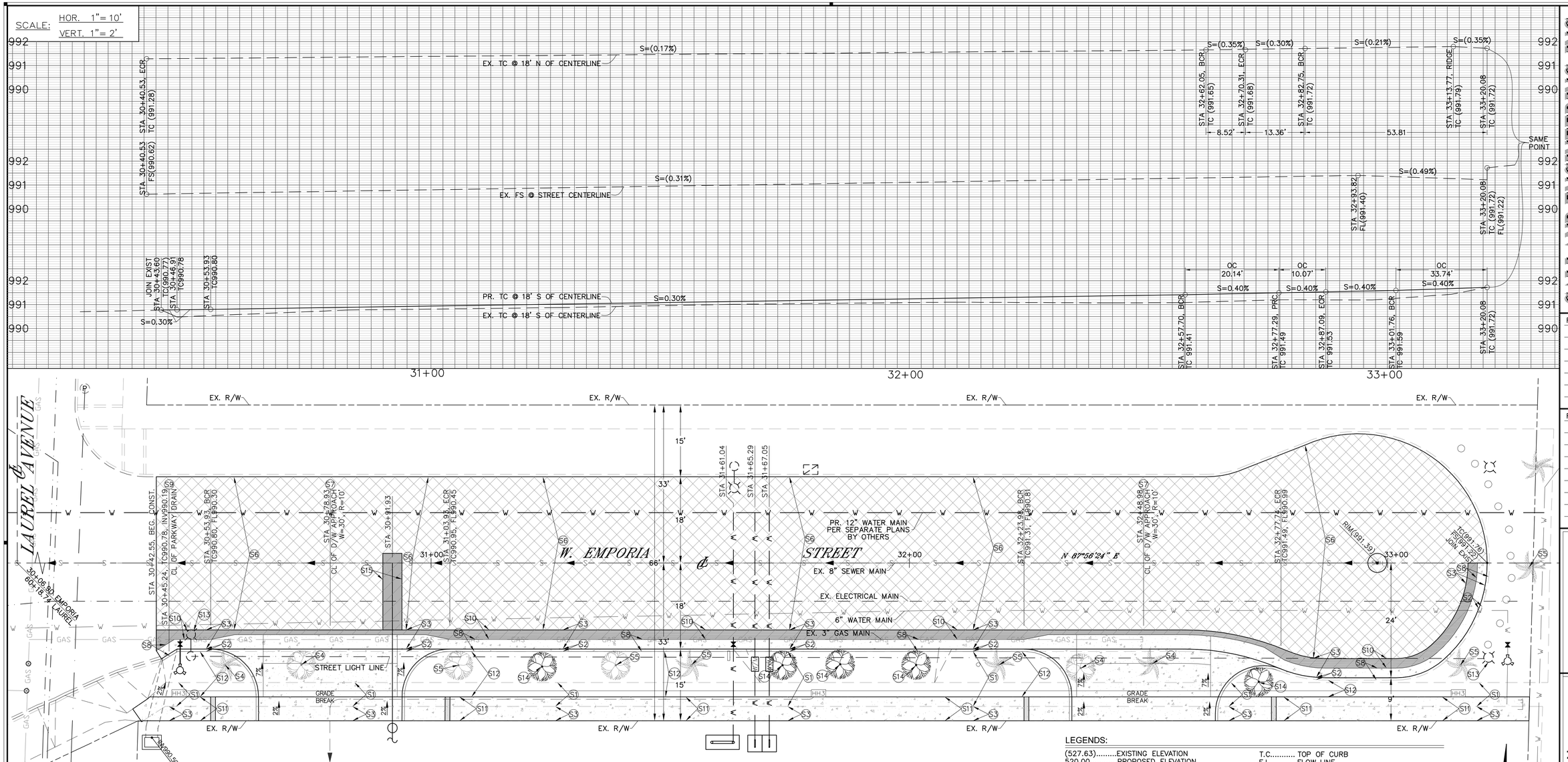
40870
Exp. 3-31-25
CIVIL
STATE OF CALIFORNIA

C-10

SHEET 10 OF 14 SHT.

SCALE: HOR. 1"= 10'
VERT. 1"= 2'



ADDITIONAL NOTES:

THE IMPROVEMENT REQUIRED PER CONDITION OF APPROVAL 2.18 FOR GRIND AND OVERLAY OF PALM AVENUE, LAUREL AVENUE AND TRANSIT STREET ARE SHOWN ON A SEPARATE WATER IMPROVEMENT PLAN PREPARED BY ARDURRA.

STREET IMPROVEMENT CONSTRUCTION NOTES:

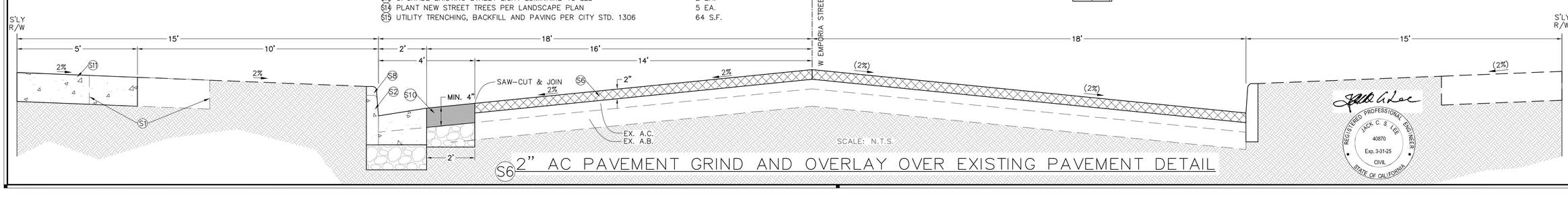
		QUANTITIES:
S1	SAW-CUT & REMOVE EXISTING CONCRETE FLATWORK(DRIVEWAY, SIDEWALK)	1,716 S.F.
S2	REMOVE EXISTING CONCRETE CURB ONLY	247 L.F.
S3	SAW-CUT & REMOVE EXISTING A.C. PAVEMENT	2,030 S.F.
S4	REMOVE EXISTING STREET TREES	4 EA.
S5	EXISTING STREET TREES TO REMAIN AND PROTECTED IN PLACE	6 EA.
S6	GRIND AND OVERLAY 2" A.C. PAVEMENT PER DETAIL S6 HEREON	3,970 S.F.
S7	CONSTRUCT COMMERCIAL DRIVEWAY APPROACH PER CITY STD. 1204	1,352 S.F.
S8	CONSTRUCT 6" CURB & GUTTER, TYPE B PER CITY STD. 1201	189 L.F.
S9	CONSTRUCT 30" WIDE SIDEWALK DRAIN PER CITY STD. 3013	1 EA.
S10	CONSTRUCT MIN. 4" A.C. PAVEMENT OR AC+1", WHICHEVER IS GREATER	487 S.F.
S11	CONSTRUCT CONCRETE SIDEWALK PAVEMENT PER CITY STD. 1209	1,141 S.F.
S12	PLANT LANDSCAPE PER LANDSCAPING PLAN	1,707 S.F.
S13	UPGRADE EXISTING STREET LIGHT LUMINAIRE TO LED	2 EA.
S14	PLANT NEW STREET TREES PER LANDSCAPE PLAN	5 EA.
S15	UTILITY TRENCHING, BACKFILL AND PAVING PER CITY STD. 1306	64 S.F.

CURB CURVE DATA				
SYMBOL	DELTA	RADIUS	LENGHT	TANGENT
A	24°23'40"	20'	8.52'	4.32'
B	162°47'18"	27'	76.71'	178.41'
C	41°24'35"	15'	10.84'	5.67'
D	23°04'26"	25'	10.07'	5.10'
D	23°04'26"	50'	20.14'	10.21'

LEGENDS:

(527.63)	EXISTING ELEVATION
520.00	PROPOSED ELEVATION
--(530)--	EXISTING COUNTOUR
	DRAINAGE PATTERN
530	PROPOSED CONTOUR
	EXISTING BLOCK WALL
SW	SIDE WALK
	LIGHT
	CENTER LINE
	PROPERTY LINE
(1)	CONSTRUCTION NOTES
	SANDBAG LINE
(P)	POWER POLE
	PROPOSED 2" GRIND & OVERLAY
	PROPOSED 4" AC PAVEMENT
	AC PAVEMENT REMOVAL
	PCC CONCRETE PAVEMENT
T.C.	TOP OF CURB
F.L.	FLOW LINE
F.G.	FINISH GRADE
F.S.	FINISH SURFACE
F.F.	FINISH FLOOR
H.P.	HIGH POINT
P.P.	POWER POLE
D/W	DRIVEWAY
W/M	WATER METER
INV.	INVERT ELEVATION
T.G.	TOP OF GRATE
D.C.D.A.	DOUBLE CHECK DETECTOR ASSEMBLY
P.L.	PROPERTY LINE
R/W	RIGHT OF WAY
C.L.	CENTER LINE
P.O.T.	PATH OF TRAVEL
	LANDSCAPE AREA

0 10 20
SCALE: 1"=10'



S6 2" AC PAVEMENT GRIND AND OVERLAY OVER EXISTING PAVEMENT DETAIL

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Exp. 3-31-25
CIVIL
STATE OF CALIFORNIA

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576 E. LAMBERT ROAD, BREA, CA 92821
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RELEASED

REVISIONS

B20220657G
PDEV21-017
PMTT21-009
PM-20394

PRECISE GRADING PLAN
STREET IMPROVEMENT PLAN:
125 W. EMPORIA STREET,
ONTARIO, CA 91762

DRAWN: EYS
CHECKED: J.C.L.
DATE: 09-26-2023
JOB NO.: 20-022-029
SCALE: N.T.S.
FILE NAME: Emporia_Grading.dwg

C-11

SHEET 11 OF 14 SHT.

FINAL UTILITIES SYSTEM MAP

UTILITY CONSTRUCTION NOTES:

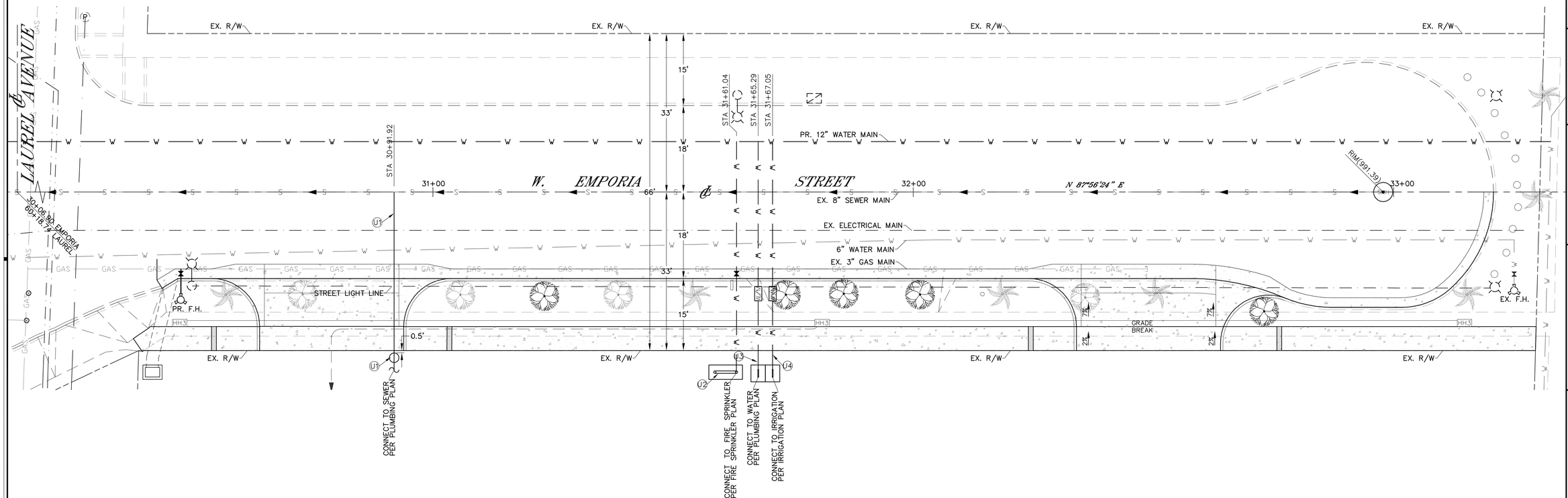
		QUANTITIES:
(U1)	INSTALL 6" SEWER LATERAL WITH CLEAN OUT PER CITY STD. 2003	33 L.F.
(U2)	INSTALL 6" DCDA BACKFLOW DEVICE PER CITY STD. 4208	1 EA.
(U3)	INSTALL 2" SERVICE AND 2" REDUCE PRESSURE BACKFLOW DEVICE PER CITY STD. 4206	1 EA.
(U4)	INSTALL 1" SERVICE AND 1" REDUCE PRESSURE BACKFLOW DEVICE PER CITY STD. 4206	1 EA.

LEGENDS:

(527.63).....EXISTING ELEVATION
520.00.....PROPOSED ELEVATION
--(530)--...EXISTING COUNTOUR
...DRAINAGE PATTERN
530 ...PROPOSED CONTOUR
...EXISTING BLOCK WALL
SW.....SIDE WALK
.....LIGHT
.....CENTER LINE
.....PROPERTY LINE
.....CONSTRUCTION NOTES
.....SANDBAG LINE
.....POWER POLE
.....PROPOSED 2" GRIND & OVERLAY
.....PROPOSED 4" AC PAVEMENT
.....AC PAVEMENT REMOVAL
.....PCC CONCRETE PAVEMENT

T.C..... TOP OF CURB
F.L..... FLOW LINE
F.G..... FINISH GRADE
F.S..... FINISH SURFACE
F.F..... FINISH FLOOR
H.P..... HIGH POINT
P.P..... POWER POLE
D/W..... DRIVEWAY
W/M..... WATER METER
INV..... INVERT ELEVATION
T.G..... TOP OF GRATE
D.C.D.A..... DOUBLE CHECK DETECTOR ASSEMBLY
P.L..... PROPERTY LINE
R/W..... RIGHT OF WAY
C.L..... CENTER LINE
P.O.T..... PATH OF TRAVEL
.....LANDSCAPE AREA

0 10 20
SCALE: 1"=10'



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PRECISE GRADING PLAN
FINAL UTILITIES SYSTEM MAP
125 W. EMPORIA STREET,
ONTARIO, CA 91762

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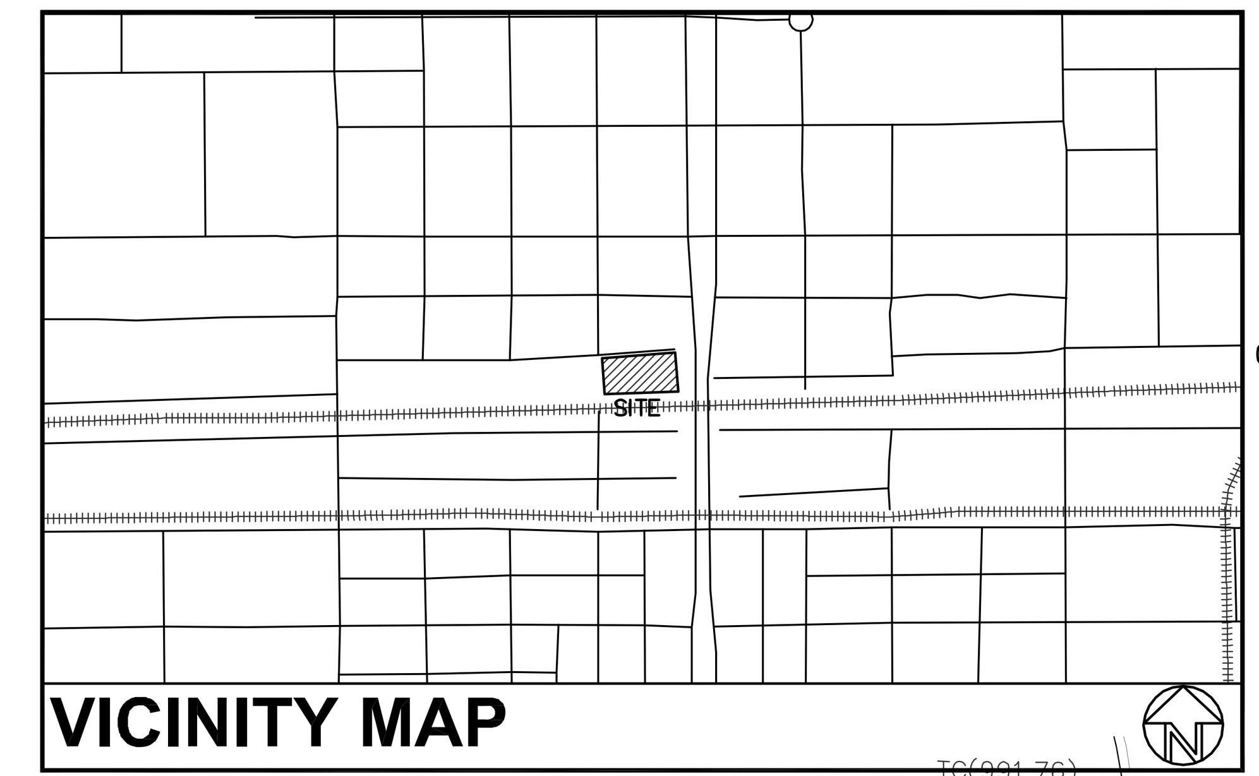
C-12

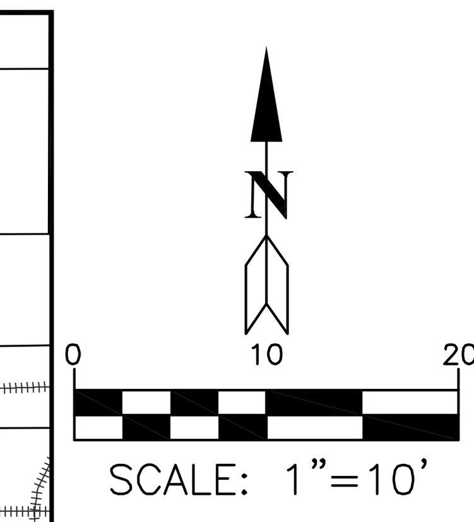
SHEET 12 OF 14 SHT.

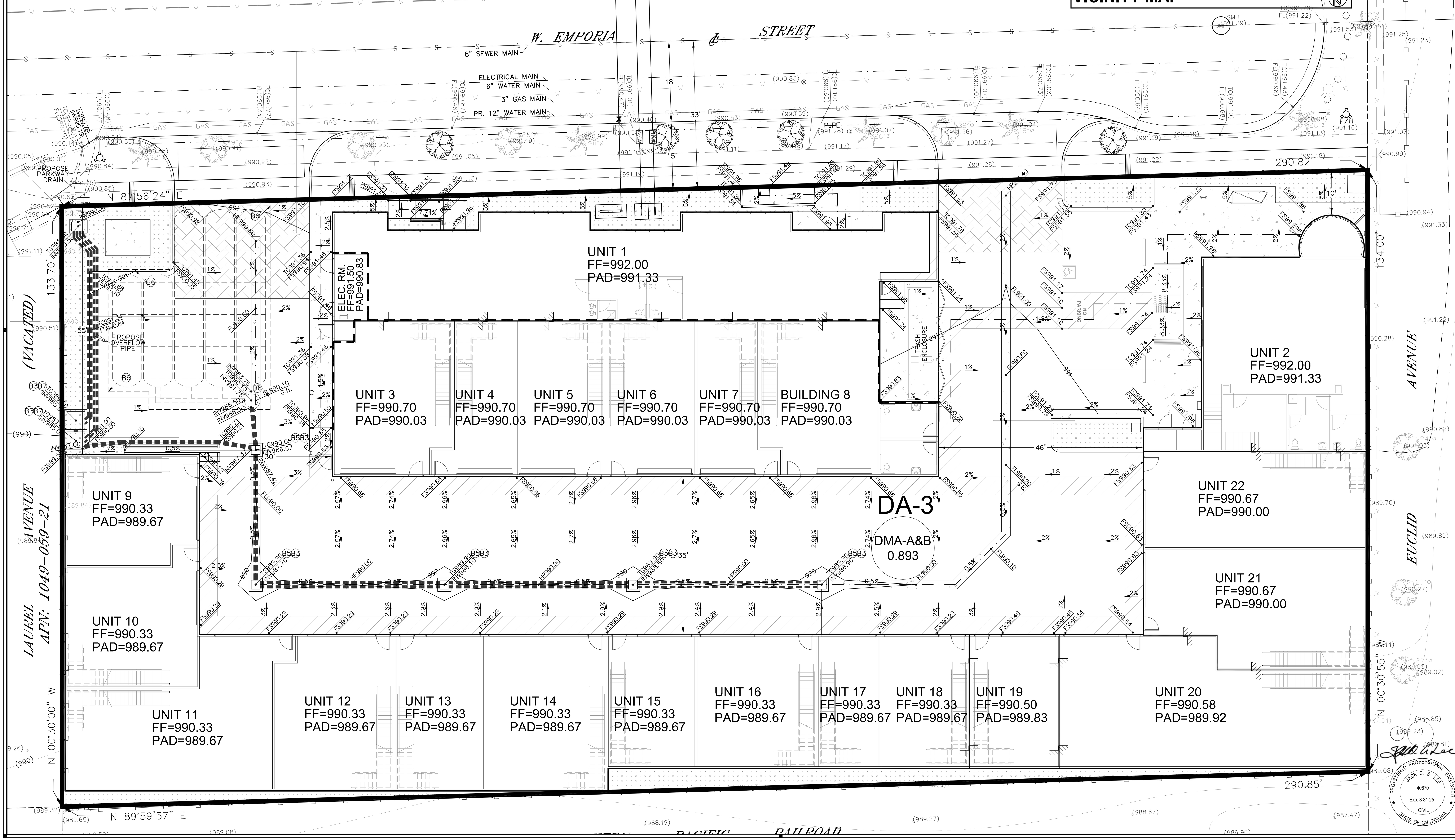
WQMP EXHIBIT MAP - PRECISE GRADING PLAN

LID BMP CONSTRUCTION NOTES:

- B1 CONNECT ROOF RUN-OFF TO DRAINAGE PIPE SYSTEM THAT CONNECTS TO THE CHAMBERS
- B2 APPLY SITE DESIGN AND LANDSCAPE PLANNING ON LANDSCAPE AREAS WHERE APPLICABLE
- B3 APPLY STORM DRAIN STENCILS TO CATCH BASIN
- B4 INSTALL SMART IRRIGATION CONTROL
- B5 INSTALL OLDCASTLE FLOGARD +PLUS FOSSIL FILTER
- B6 INSTALL ADS-PIPE STORM TECH CHAMBER MC-3500 PER GRADING PLAN
- B7 INSTALL OVERFLOW SUMP PUMP







W. EMPORIA STREET
8" SEWER MAIN
ELECTRICAL MAIN
6" WATER MAIN
3" GAS MAIN
PR. 12" WATER MAIN
N 87°56'24" E
290.82'
134.00'
133.70'
N 00°30'00" W
N 00°30'55" W
N 89°59'57" E
290.85'
LAUREL AVENUE (VACATED)
APN: 1049-059-21
EUCLID AVENUE
PACIFIC RAILROAD
PROPOSE PARKWAY DRAIN
PROPOSE OVERFLOW PIPE
ELEC. RM. FF=991.50 PAD=990.83
TRASH ENCLOSURE
UNIT 1 FF=992.00 PAD=991.33
UNIT 2 FF=992.00 PAD=991.33
UNIT 3 FF=990.70 PAD=990.03
UNIT 4 FF=990.70 PAD=990.03
UNIT 5 FF=990.70 PAD=990.03
UNIT 6 FF=990.70 PAD=990.03
UNIT 7 FF=990.70 PAD=990.03
BUILDING 8 FF=990.70 PAD=990.03
UNIT 9 FF=990.33 PAD=989.67
UNIT 10 FF=990.33 PAD=989.67
UNIT 11 FF=990.33 PAD=989.67
UNIT 12 FF=990.33 PAD=989.67
UNIT 13 FF=990.33 PAD=989.67
UNIT 14 FF=990.33 PAD=989.67
UNIT 15 FF=990.33 PAD=989.67
UNIT 16 FF=990.33 PAD=989.67
UNIT 17 FF=990.33 PAD=989.67
UNIT 18 FF=990.33 PAD=989.67
UNIT 19 FF=990.50 PAD=989.83
UNIT 20 FF=990.58 PAD=989.92
UNIT 21 FF=990.67 PAD=990.00
UNIT 22 FF=990.67 PAD=990.00
DA-3
DMA-A&B 0.893

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FILE NAME: Emporia_Grading.dwg

REGISTERED PROFESSIONAL ENGINEER JACK C. S. LEE 40870 Exp. 3-31-25 CIVIL STATE OF CALIFORNIA

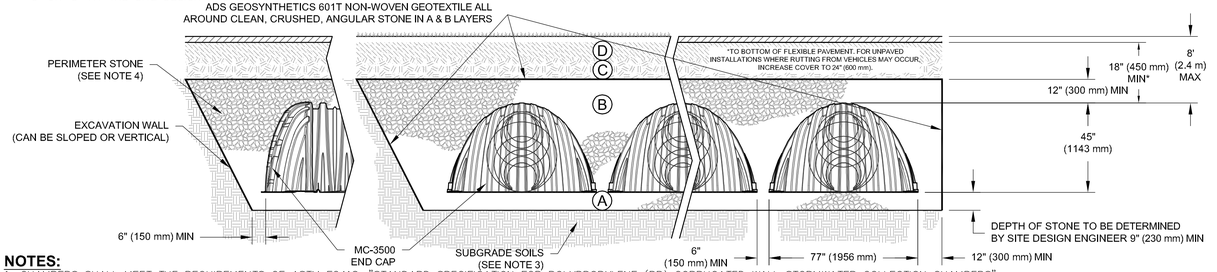
W-1

WQMP EXHIBIT MAP - CONCEPTUAL GRADING PLAN

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

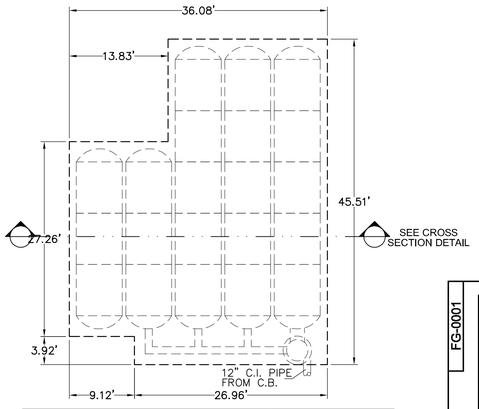
	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY 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 24" (600 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 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	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 9" (230 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.
4. 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.



NOTES:
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. 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.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/% AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

B6 ADS-PIPE SC-700 STORMWATER CHAMBER
NOT TO SCALE



DRYWELL AND STORAGE SYSTEM	DMA A & DMA B
REQUIRED STORAGE VOLUME (DCV)	4,506 C.F.
PROVIDED STORAGE VOLUME	4,566 C.F.
PROVIDED 48 HOURS INFILTRATION VOLUME	5,621 C.F.
TOTAL TIME TO EMPTY SYSTEM	38.99 HR
INFILTRATION RATE PER PERCOLATION TEST	1.00 IN/HR
CHAMBER INFILTRATION SURFACE AREA	1,405.29 S.F.
GRAVEL INFILTRATION HEIGHT	5.50'

NOTES:
ALL WATER QUALITY BMPS AND CONSTRUCTION DETAILS SHOULD COMPLY WITH THE FINAL APPROVED WQMP REPORT.

ADS

User Inputs

Chamber Model:	MC-3500
Outlet Control Structure:	Yes
Project Name:	Emporia
Engineer:	Erik Sy
Project Location:	California
Measurement Type:	Imperial
Required Storage Volume:	4510 cubic ft.
Stone Porosity:	40%
Stone Foundation Depth:	9 in.
Stone Above Chambers:	12 in.
Average Cover Over Chambers:	18 in.
Design Constraint Dimensions:	(37 ft. x 46 ft.)

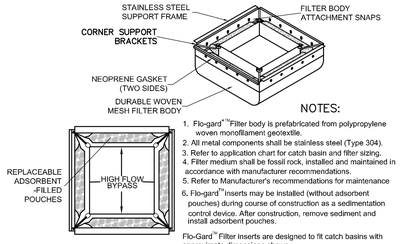
Results

System Volume and Bed Size

Installed Storage Volume:	4565.78 cubic ft.
Storage Volume Per Chamber:	109.90 cubic ft.
Number Of Chambers Required:	21
Number Of End Caps Required:	10
Chamber Rows:	5
Maximum Length:	45.51 ft.
Maximum Width:	36.08 ft.
Approx. Bed Size Required:	1405.29 square ft.

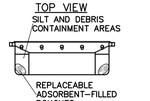
System Components

Amount Of Stone Required:	196 cubic yards
Volume Of Excavation (Not Including Fill):	287 cubic yards
Total Non-woven Geotextile Required:	495 square yards
Woven Geotextile Required (excluding Isolator Row):	51 square yards
Woven Geotextile Required (Isolator Row):	47 square yards
Total Woven Geotextile Required:	97 square yards
Impervious Liner Required:	0 square yards

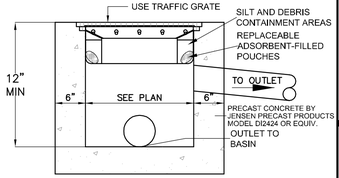


NOTES:
1. Flo-gard™ Filter body is prefabricated from polypropylene woven monofilament geotextile.
2. All metal components shall be stainless steel (Type 304).
3. Refer to application chart for catch basin and filter sizing.
4. Filter medium shall be fossil rock, installed and maintained in accordance with manufacturer recommendations.
5. Refer to Manufacturer's recommendations for maintenance
6. Flo-gard™ inserts may be installed (without adsorbent pouches) during course of construction as a sedimentation control device. After construction, remove sediment and install adsorbent pouches.

Flo-Gard™ Filter inserts are designed to fit catch basins with approximate dimensions shown.



FOSSIL FILTER ™ FLO-GARD CATCH BASIN INSERT



APPLICATION CHART*

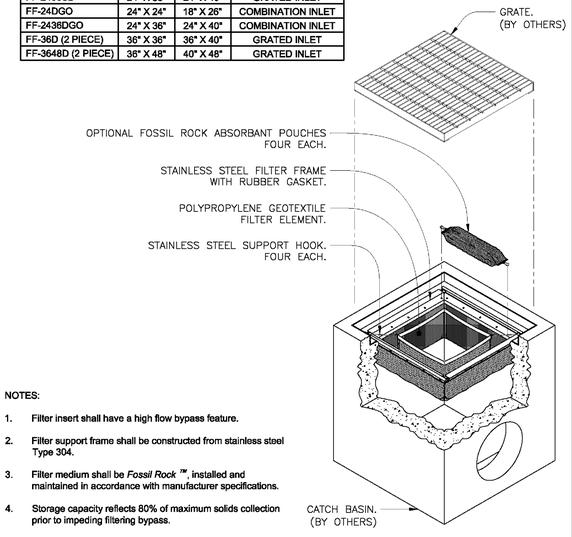
MODEL NO.	Inlet I.D.	Grate O.D.	COMMENTS
FGP-24F8	24" x 24"	24" x 27"	GRATED INLET

B5 CATCH BASIN W/ FOSSIL FILTER (TYP.)
NOT TO SCALE

B3 CATCH BASIN STENCILS
NOT TO SCALE

FG-0001

SPECIFIER CHART			
MODEL	INLET ID	GRATE OD	COMMENTS
FF-12D	12" X 12"	15" X 15"	GRATED INLET
FF-16D	16" X 16"	18" X 18"	GRATED INLET
FF-18D	18" X 18"	20" X 20"	GRATED INLET
FF-1836SD	18" X 36"	18" X 40"	GRATED INLET
FF-1838DGO	18" X 36"	18" X 40"	COMBINATION INLET
FF-24D	24" X 24"	26" X 28"	GRATED INLET
FF-2436SD	24" X 36"	24" X 40"	GRATED INLET
FF-24DGO	24" X 24"	18" X 26"	COMBINATION INLET
FF-2436DGO	24" X 36"	24" X 40"	COMBINATION INLET
FF-36D (2 PIECE)	36" X 36"	36" X 40"	GRATED INLET
FF-3648D (2 PIECE)	36" X 48"	40" X 48"	GRATED INLET



NOTES:
1. **Filter insert shall have a high flow bypass feature.**
2. **Filter support frame shall be constructed from stainless steel Type 304.**
3. **Filter medium shall be *Fossil Rock ™*, installed and maintained in accordance with manufacturer specifications.**
4. **Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.**

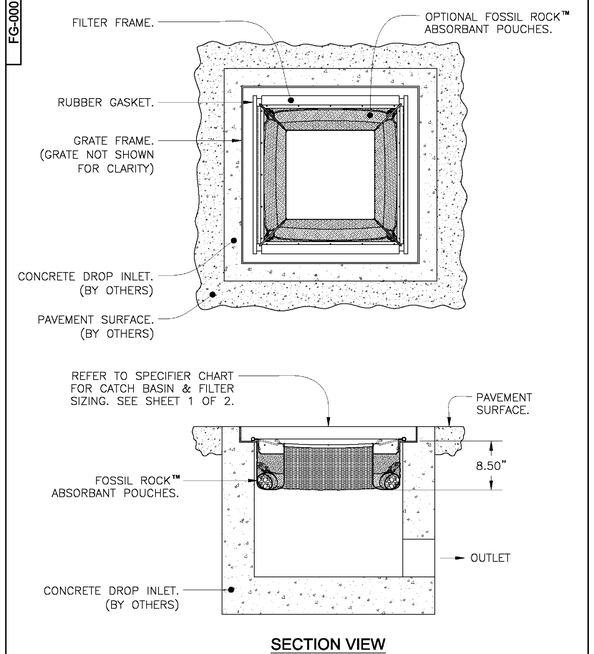
FloGard®
Catch Basin Insert Filter
Grated Inlet Style

Oldcastle® Stormwater Solutions
7921 Southpark Plaza, Suite 200 | Littleton, CO | 80120 | Ph: 800.579.8819 | oldcastlestormwater.com

DRAWING NO.	REV	ECO	DATE
FG-0001	E	ECO-0142 JPR 7/13/16	JPR 12/18/06

SHEET 1 OF 2

FG-0001



SECTION VIEW

FloGard®
Catch Basin Insert Filter
Grated Inlet Style

Oldcastle® Stormwater Solutions
7921 Southpark Plaza, Suite 200 | Littleton, CO | 80120 | Ph: 800.579.8819 | oldcastlestormwater.com

DRAWING NO.	REV	ECO	DATE
FG-0001	E	ECO-0142 JPR 7/13/16	JPR 12/18/06

SHEET 2 OF 2

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W-2

SHEET 14 OF 14 SHT.