# PROJECT SUMMARY

**DIVISION OF THE STATE ARCHITECT (DSA)** 1515 CLAY STREET, SUITE 1201 OAKLAND, CA 94612

SAN RAFAEL FIRE DEPARTMENT SAN RAFAEL, CA 94903 P:415.485.3304

# **GOVERNING AGENCIES**

THIS PROJECT SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL CODES INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

P:510.622.3101

AMERICANS WITH DISABILITIES ACT (ADA)

ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)

STATE OF CALIFORNIA PARTIAL LIST OF APPLICABLE CODES AS OF JAN 1, 2020

2019 BUILDING STANDARDS ADMINISTRATIVE CODE CALIFORNIA CODE OF REGULATIONS (CCR) PART 1, TITLE 24 C.C.R.

2019 CALIFORNIA BUILDING CODE (CBC)

CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 2 (2018 INTERNATIONAL BUILDING CODE WITH THE INTERNATIONAL CODE COUNCIL WITH CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ELECTRICAL CODE (CEC)

CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 3 (2018 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA)

2019 CALIFORNIA MECHANICAL CODE

CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 4 (2018 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)

2019 CALIFORNIA PLUMBING CODE

CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 5 (2018 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF THE PLUMBING AND MECHANICAL OFFICIALS, IAPMO)

2019 CALIFORNIA ENERGY CODE

CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 6

2019 CALIFORNIA FIRE CODE

**CHAPTER 35** 

UL 521

CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 9 (2018 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL)

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CAL GREEN CODE) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 11

2019 CALIFORNIA REFERENCED STANDARDS CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 12

PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 19

SYSTEMS

PARTIAL LIST OF APPLICABLE STANDARDS: 2019 BUILDING CODE (FOR SFM) REFERENCED STANDARDS

AUTOMATIC SPRINKLER SYSTEM NFPA 13 2016 EDITION NFPA 17 DRY CHEMICAL EXTINGUISHING SYSTEMS 2016 EDITION NFPA 17A WET CHEMICAL SYSTEMS 2016 EDITION NFPA 72 2016 EDITION NATIONAL FIRE ALARM CODE NFPA 80 FIRE DOORS AND OTHER OPENING PROTECTIVES 2016 EDITION NFPA 2001 CLEAN AGENT FIRE EXTINGUISHING SYSTEMS 2018 EDITION 2016 EDITION AUDIBLE SIGNAL APPLIANCES UL 464

HEAT DETECTORS FOR FIRE PROTECTION SIGNAL

# **APPLICABLE CODES**

SVA ARCHITECTS IS THE DESIGNATED ARCHITECT OF RECORD AS REQUIRED BY THE STATE OF CALIFORNIA. THE ARCHITECT OF RECORD SHALL REVIEW SUBMITTALS AND COORDINATE SUBMITTALS AND DEFERRED SUBMITTALS THROUGH THE DIVISION OF THE STATE ARCHITECT. DEFERRED SUBMITTALS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE DIVISION OF THE STATE ARCHITECT.

DSA SHALL BE NOTIFIED IN WRITING BY THE OWNER IF THE ARCHITECT OF RECORD IS CHANGED OR IS UNABLE TO CONTINUE TO PERFORM THE DUTIES. THE OWNER SHALL DESIGNATE A SUBSTITUTE ARCHITECT OR ENGINEER OF RECORD WHO SHALL PERFORM ALL OF THE DUTIES REQUIRED OF THE ORIGINAL ARCHITECT OF RECORD.

REVIEW AND COMMENT ON SUBMITTALS AND DEFERRED SUBMITTALS SHALL NOT RELIEVE THE AUTHOR OF THE DOCUMENTS OR THE CONTRACTOR FROM COMPLIANCE WITH ALL APPLICABLE CODES AND THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THE REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATING HIS WORK WITH THAT OF OTHER TRADES, AND PERFORMING HIS WORK IN A SAFE AND SATISFACTORY MANNER.

# ARCHITECT OF RECORD

STATEMENT OF GENERAL CONFORMANCE FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS

**APPLICATION NUMBER: 01-119706** FILE NUMBER: 21-39 THE DRAWINGS OR SHEETS LISTED IN THE INDEX ON THIS SHEET HAVE

BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAD BEEN EXAMINED BY ME FOR:

- DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS
- COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THE PROJECT.

THIS STATEMENT OF GENERAL CONFORMANCE "SHALL" NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES AND RESPONSIBILITIES UNDER SECTION 17302 AND 81138 OF THE EDUCATION CODE AND SECTION 4-336, 4-341 AND 4-344 OF TITLE 24, PART 1 (TITLE 24, PART 1

SAN RAFAEL CITY SCHOOLS 320 NOVA ALBION WAY. SAN RAFAEL, CA 94903 CONTACT: DAN ZAICH P: (415) 492-3200

ARCHITECT SVA ARCHITECTS 203 FRANKLIN ST., SUITE 210 OAKLAND, CA 94612 **CONTACT: CHRIS BRADLEY** 

P: (510) 267-3180

P: (510) 906-2123

**CONSTRUCTION MANAGER** CUMMING GROUP 1111 BROADWAY, SUITE 300, OAKLAND, CA 94607

CONTACT: TERI MATHERS

HOHBACH-LEWIN, INC. 260 SHERIDAN AVE, SUITE 150 PALO ALTO, CA 94306

CONTACT: BILL HENN

Pacific Engineering Group

P: 650.617.5930

## PROJECT DIRECTORY

1. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS

(CCR). 2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CHANGE ORDER APPROVED BY THE DIVISION OF THE STATE ARCHITECT (DSA), AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR. 3. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR: CLASS 1. 4. CCD MUST BE SIGNED AS REQUIRED BY DSA IR A-6.

5. A COPY OF CCR TITLE 24, PARTS 1 THROUGH 5 MUST BE KEPT ON SITE DURING CONSTRUCTION. 6. THE SOILS REPORT TO BE UTILIZED FOR THIS PROJECT IS TO BE:

"GEOTECHNICAL INVESTIGATION VENETIA VALLEY K-8 SCHOOL SAN RAFAEL CITY SCHOOLS SAN RAFAEL, CALIFORNIA - Project 779.253" dated April 27, 2017 by Miller

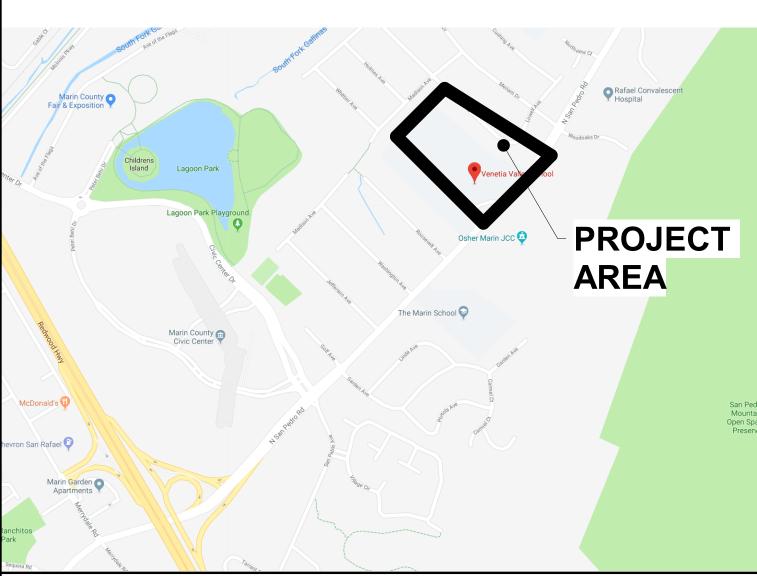
# **GENERAL NOTES**

THE FOLLOWING ITEMS ARE DESIGN-BUILD SYSTEMS AND WILL BE A DEFERRED SUBMITTAL BY THE CONTRACTOR AT A LATER DATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENGINEERING AND CALCULATIONS FOR APPLICABLE ITEMS. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A CIVIL OR STRUCTURAL ENGINEER WHO SHALL BE RESPONSIBLE FOR THE DESIGN. THE CONTRACTOR SHALL SUBMIT CALCULATIONS AND SHOP DRAWINGS TO THE ARCHITECT OF RECORD, WHO SHALL REVIEW THEM AND FORWARD THEM TO THE DIVISION OF THE STATE ARCHITECT WITH NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE DIVISION OF THE STATE ARCHITECT.

1. NONE

1999 EDITION

# **DEFERRED APPROVALS**



# **VICINITY MAP**

I FIND THAT ALL DRAWINGS OR SHEETS LISTED IN THE INDEX ON THIS SHEET (CIVIL, LANDSCAPE, AND IRRIGATION) ARE IN GENERAL CONFORMANCE AND HAVE BEEN COORDINATED.



# **GENERAL**

PROJECT INFORMATION & SHEET INDEX GENERAL NOTES

GEN-2 Grand total: 2

#### **ARCHITECTURAL**

SITE PLAN A1.0 **DETAILS** A1.1 Grand total: 2

CIVIL

**COVER SHEET** C1.1 NOTES

C2.0 DEMOLITION PLAN C3.0 GRADING AND DRAINAGE PLAN

C3.1 PAVEMENT PLAN C6.0 **DETAILS** 

Grand total: 6

#### LANDSCAPE

LANDSCAPE PLANTING PLAN Grand total: 1

# **IRRIGATION**

**SHEET INDEX** 

IRRIGATION LEGEND AND NOTES IRRIGATION PLAN IRRIGATION DETAILS IRRIGATION DETAILS IR3.00 IRRIGATION SPECIFICATIONS

**TOTAL SHEETS: 16** 

Grand total: 5

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 01-119706 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 DATE: 10/27/2021

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	DESCRIPTION	DATE
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PROJECT NO: **Project Number DATE ISSUED:** Issue Date

SCALE:

**PROJECT** 

GEN-1

**INFORMATION & SHEET INDEX** 



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> THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO SVA ARCHITECTS IC. AND IS FURNISHED IN CONFIDENCE FOR THE LIMITED PURPOSE OF EVALUATION BIDDING OR REVIEW THIS DOCUMENT OR ITS CONTENTS MAY NOT BE USED FOR ANY OTHER PURPOSE AND MAY NOT BE REPRODUCED OR DISCLOSED TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF SVA

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A. GRADE AND DEVELOP SITE SUCH THAT ALL PRIMARY BUILDING ENTRANCES ARE ACCESSIBLE TO THE PHYSICALLY DISABLED FROM THE PUBLIC WAY AND DISABLED PARKING

B. ONE ACCESSIBLE ROUTE SHALL CONNECT ACCESSIBLE BUILDINGS, FACILITIES AND SPACES ON THE SAME SITE. WHERE MORE THAN ONE ROUTE IS PROVIDED, ALL ROUTES SHALL BE

C. IF AN ACCESSIBLE ROUTE HAS A CHANGE IN LEVEL GREATER THAN 1/2", THEN A CURB RAMP, RAMP, ELEVATOR, OR PLATFORM LIFT SHALL BE PROVIDED.

D. ALL WALKS, HALLS, CORRIDORS, AISLES, AND OTHER SPACES THAT ARE PART OF AN ACCESSIBLE ROUTE SHALL PROVIDE A MINIMUM CLEAR WIDTH OF 48 INCHES AND A CLEAR HEIGHT OF 80 INCHES.

A. WALKS AND SIDEWALKS SUBJECT TO THESE REGULATIONS SHALL HAVE A CONTINUOUS COMMON SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2", AND SHALL BE A MINIMUM OF 48 INCHES IN WIDTH.

B. ALL SIDEWALKS SHALL BE STABLE, FIRM AND SLIP RESISTANT.

C. SURFACE CROSS SLOPES SHALL NOT EXCEED 1:48 (CBC 11B-403.3).

D. WALKS, SIDEWALKS AND PEDESTRIAN WAYS SHALL BE FREE OF GRATINGS WHENEVER POSSIBLE. GRATINGS LOCATED IN THE SURFACE OF ANY OF THESE AREAS, GRID OPENINGS IN THE GRATING SHALL BE LIMITED TO 1/2" IN THE DIRECTION OF TRAFFIC FLOW.

E. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2". WHEN CHANGES DO OCCUR, THEY SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2 EXCEPT THAT LEVELS NOT EXCEEDING 1/4" MAY BE VERTICAL.

F. WHEN CHANGES IN LEVELS GREATER THAN 1/2" ARE NECESSARY THEY SHALL COMPLY WITH THE REQUIREMENTS FOR CURB RAMPS OR RAMPS AS REQUIRED.

G. WALKS SHALL BE PROVIDED WITH A LEVEL AREA NOT LESS THAN 60" SQUARE AT A DOOR OR GATE THAT SWINGS TOWARD THE WALK, AND NOT LESS THAN 48" WIDE BY 44" DEEP AT A DOOR OR GATE THAT SWINGS AWAY FROM THE WALK. SUCH WALKS SHALL EXTEND 24" TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARD THE WALK.

H. WHEN THE SLOPE IN THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 5%, IT MUST COMPLY WITH THE PROVISIONS FOR PEDESTRIAN RAMPS (PER CBC 11B-405).

I. ALL WALKS WITH CONTINUOUS GRADIENTS SHALL HAVE LEVEL AREAS AT LEAST 5 FEET IN LENGTH AT INTERVALS NOT EXCEEDING 400 FEET.

#### 3. ENTRANCES AND DOORWAYS

A. PRIMARY ENTRANCES TO BUILDINGS AND FACILITIES SHALL BE MADE ACCESSIBLE TO THE

B. ACCESSIBLE ENTRANCES SHALL BE IDENTIFIED WITH AT LEAST ONE "ISA" SIGN AND WITH ADDITIONAL DIRECTIONAL SIGNS AS REQUIRED VISIBLE FROM APPROACHING PEDESTRIAN

C. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND ARE IN THE PATH OF TRAVEL, SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE.

D. HAND ACTIVATED DOOR HARDWARE SHALL BE CENTERED BETWEEN 34" AND 44" ABOVE THE FLOOR (CBC 11B-404.2.7).

E. THE FLOOR OR LANDING ON EACH SIDE OF AN ENTRANCE OR PASSAGE DOOR SHALL BE LEVEL AND CLEAR. THE LEVEL AND CLEAR AREA SHALL BE A MINIMUM 60" SQUARE IN THE DIRECTION OF THE DOOR SWING AND A MINIMUM 44" SQUARE OPPOSITE THE DIRECTION OF DOOR SWING (48" IF THE DOOR HAS BOTH LATCH AND CLOSER). THE SQUARES SHALL BE MEASURED AT RIGHT ANGLES TO THE PLANE OF THE DOOR IN ITS CLOSED POSITION. SEE NOTE I BELOW FOR STRIKE SIDE REQUIREMENTS.

F. THE WIDTH OF THE LEVEL AND CLEAR AREA ON THE SIDE TO WHICH THE DOOR SWINGS SHALL EXTEND 24" PAST THE STRIKE EDGE OF THE DOOR FOR EXTERIOR DOORS AND 18" PAS THE STRIKE EDGE FOR INTERIOR DOORS AND THE PRIMARY ENTRANCE TO THE DWELLING

G THE FLOOR OR LANDING SHALL BE NOT MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY. CHANGE IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED NO GREATER

H. THE BOTTOM 10 INCHES OF ALL DOORS EXCEPT SLIDING AND POCKET DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.

I. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS FOR EXTERIOR DOORS AND 5 LBS FOR INTERIOR DOORS, SUCH PULL OR PUSH EFFORT SHALL BE APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. THE AUTHORITY HAVING JURISDICTION MAY INCREASE THE MAXIMUM EFFORT TO OPERATE FIRE DOORS TO ACHIEVE POSITIVE LATCHING, BUT NOT TO EXCEED 15

J. EXIT DOORS MUST OPEN FROM THE INSIDE WITHOUT A KEY, OR ANY SPECIAL KNOWLEDGE OR EFFORT. EXIT DOORS FROM BUILDINGS OR ROOMS SERVING 10 OR FEWER OCCUPANTS MAY HAVE A NIGHT LATCH, DEADBOLT OR SECURITY CHAIN, AS LONG AS THE DOORS CAN STILL BE OPENED FROM THE INSIDE WITHOUT A KEY, SPECIAL KNOWLEDGE OR EFFORT. IN ADDITION, THESE DEVICES ARE NOT MOUNTED MORE THAN 48" ABOVE THE FLOOR. MANUALLY OPERATED EDGE BOLTS, SURFACE MOUNTED FLUSH BOLTS AND SURFACE BOLTS ARE PROHIBITED. WHEN EXIT DOORS ARE USED IN PAIRS AND AUTOMATIC FLUSH BOLTS ARE USED, THE DOOR LEAF WITH THE FLUSH BOLT MUST HAVE NO DOORKNOB OR SURFACE MOUNTED HARDWARE. THE UNLATCHING OF ANY LEAF MUST NOT REQUIRE MORE THAN ONE OPERATION.

K. EVERY REQUIRED EXIT MUST BE LARGE ENOUGH TO PERMIT A DOOR AT LEAST 3'-0" WIDE BY 6'-8" HIGH. EXIT DOORS SHALL OPEN AT LEAST 90 DEGREES AND PROVIDE A CLEAR WIDTH OF AT LEAST 32".

.. THRESHOLDS AT ALL EXTERIOR DOORS SHALL BE NO HIGHER THAN 1/2". SUCH THRESHOLDS SHALL BE BEVELED NO GREATER THAN 1:2.

M. THE FLOOR LANDING IMMEDIATELY OUTSIDE THE ENTRY MAY BE SLOPED UP TO 1/8" PER FOOT IN THE DIRECTION AWAY FROM THE PRIMARY ENTRANCE FOR DRAINAGE.

N. THE SPACE BETWEEN TWO CONSECUTIVE DOOR OPENINGS IN A VESTIBULE. SERVING OTHER THAN A REQUIRED EXIT STAIRWAY, MUST HAVE AT LEAST 48" OF CLEAR SPACE FROM ANY DOOR OPENING INTO THE VESTIBULE WHEN THE DOOR IS OPEN 90 DEGREES FROM ITS CLOSED POSITION. DOORS IN SERIES MUST SWING IN THE SAME DIRECTION OR AWAY FROM THE SPACE BETWEEN THE DOORS.

A. STAIRWAYS SHALL HAVE HANDRAILS ON EACH SIDE. STAIRWAYS SHALL HAVE INTERMEDIATE HANDRAILS WHERE REQUIRED SUCH THAT ALL PORTIONS OF THE STAIRWAY WIDTH REQUIRED FOR EGRESS CAPACITY ARE WITHIN 30 INCHES OF A HANDRAIL. INTERMEDIATE HANDRAILS SHALL BE SPACED AT EQUAL INTERVALS WITHIN THE WIDTH OF THE STAIRWAY AND BE CONTINUOUS FOR THE ENTIRE LENGTH.

B. HANDRAILS MUST BE 34 TO 38 INCHES ABOVE THE NOSING OF THE TREADS AND MUST EXTEND IN THE DIRECTION OF THE STAIR RUN FOR AT LEAST 12" BEYOND THE TOP NOSING

AND 12" PLUS THE TREAD WIDTH BEYOND THE BOTTOM NOSING. C. ENDS SHALL BE RETURNED OR SHALL TERMINATE IN A NEWEL POST OR SAFETY

D. HANDRAILS PROJECTING FROM A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1-1/2-INCH BETWEEN THE WALL AND THE HANDRAIL

E. THE HANDGRIP PORTION OF HANDRAILS SHALL BE NOT LESS THAN 1-1/4-INCHES NOR MORE THAN 1 1/2-INCHES IN CROSS-SECTIONAL DIMENSION OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE AND SHALL HAVE A SMOOTH SURFACE WITH NO SHARP OR ABRASIVE CORNERS AND ALL EDGES MUST HAVE A MINIMUM 1/8" RADIUS.

F. THE UPPER APPROACH AND THE LOWER TREAD OF EACH INTERIOR STAIR SHALL BE MARKED BY A STRIP OF CLEARLY CONTRASTING COLOR THE FULL WIDTH OF THE TREAD AT LEAST 2-INCHES WIDE PLACED PARALLEL TOAND NOT MORE THAN 1-INCH FROM THE NOSE OF THE STEP OR LANDING TO ALERT THE VISUALLY IMPAIRED. THE STRIP SHALL BE OF A MATERIAL THAT IS AT LEAST AS SLIP RESISTANT AS THE OTHER TREADS OF THE STAIR.

G. WHERE STAIRWAYS OCCUR OUTSIDE A BUILDING, THE UPPER APPROACH AND ALL TREADS SHALL BE MARKED BY A STRIP OF CLEARLY CONTRASTING COLOR AT LEAST 2-INCHES WIDE AND PLACED PARALLEL TO AND NOT MORE THAN 1-INCH FROM THE NOSE OF THE STEP OR LANDING TO ALERT THE VISUALLY IMPAIRED. THE STRIP SHALL BE OF A MATERIAL THAT IS AT LEAST AS SLIP RESISTANT AS THE OTHER TREADS OF THE STAIR. A

H. ALL TREAD SURFACES SHALL BE SLIP RESISTANT.

K. STAIR RISERS SHALL BE SOLID PER CBC 11B-504.

PAINTED STRIP SHALL BE ACCEPTABLE.

I. TREADS SHALL HAVE A SMOOTH, ROUNDED OR CHAMFERED EXPOSED EDGES, AND NO ABRUPT EDGES AT THE NOSING (LOWER FRONT EDGE).

J. NOSING SHALL NOT PROJECT MORE THAN 1-1/4 INCH PAST THE FACE OF THE RISER

# 5. SANITARY FACILITIES

A. WHEELCHAIR ACCESSIBLE WATER CLOSET COMPARTMENTS SHALL BE EQUIPPED WITH A DOOR THAT HAS AN AUTOMATIC CLOSING DEVICE, AND SHALL HAVE A CLEAR UNOBSTRUCTED OPENING WIDTH OF 32-INCHES WHEN LOCATED AT THE END AND 34-INCHES WHEN LOCATED AT THE SIDE WITH THE DOOR POSITION AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.

B. TOILET FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND, AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. CONTROLS FOR FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREAS, NO MORE THAN 44-INCHES ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS PER FOOT.

C. WHERE URINALS ARE PROVIDED AT LEAST ONE WITH A RIM PROJECTING A MINIMUM OF 14-INCHES FROM THE WALL AND AT A MAXIMUM OF 17-INCHES ABOVE THE FLOOR SHALL BE

D. URINAL FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND, AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST AND SHALL BE MOUNTED NO MORE THAN 44" ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS PER FOOT.

E. HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE

F. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FOOT. LEVER OPERATED, PUSH TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.

G. MIRRORS SHALL BE MOUNTED WITH THE BOTTOM GLASS EDGE NOT MORE THAN 40-INCHES ABOVE THE FLOOR.

H. LOCATE TOWEL, SANITARY NAPKIN, AND WASTE RECEPTACLES WITH ALL OPERABLE PARTS NOT MORE THAN 40-INCHES FROM THE FLOOR.

I. TOILET TISSUE DISPENSERS SHALL BE LOCATED ON THE WALL OR PARTITION WITHIN 7" TO 9" TO CENTERLINE FROM THE FRONT EDGE OF THE TOILET SEAT, MOUTED BELOW THE GRAB BAR, AT A MINIMUM HEIGHT OF 19 INCHES, AND 36 INCHES MAXIMUM TO THE FAR EDGE FROM THE REAR WALL. DISPENSERS SHALL PERMIT CONTINUOUS FLOW AND NOT CONTROL DELIVERY (CBC 11B-604.7).

J. GRAB BARS, TUB AND SHOWER SEATS, FASTENERS AND MOUNTING DEVICES SHALL BE DESIGNED FOR 250 LB. PER CBC 1607A.8.2.

1. THE DIAMETER OR WIDTH OF THE GRIPPING SURFACE OF A GRAB BAR SHALL BE 1-1/4" TO 1-1/2" OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. 2. IF THE GRAB BARS ARE MOUNTED ADJACENT TO A WALL, THE SPACE BETWEEN THE WALL AND THE GRAB BARS SHALL BE 1-1/2". 3. A GRAB BAR AND ANY WALL OR OTHER SURFACE ADJACENT SHALL BE FREE OF

4. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS. 5. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8".

ANY SHARP OR ABRASIVE ELEMENTS.

6. SWITCHES CONTROLS AND ELECTRICAL OUTLETS A. RECEPTACLE OUTLETS SHALL BE 15" MIN ABOVE THE FINISHED FLOOR TO THE BOTTOM OF THE BOX PER CBC 11B-308.1.1.

B. SWITCHES SHALL BE 48" MAX. ABOVE THE FINISHED FLOOR TO THE TOP OF THE BOX (11B-308.1.2).

C. IF REACH IS OVER AN OBSTRUCTION (FOR EXAMPLE, A BASE CABINET) BETWEEN 20" AND 25" IN DEPTH, THE MAXIMUM HEIGHT IS REDUCED TO 44" FOR FORWARD APPROACH, OR 46" FOR SIDE APPROACH PROVIDED THE OBSTRUCTION IS NO MORE THAN 24" IN DEPTH. THE OBSTRUCTION MAY NOT EXTEND MORE THAN 25" FROM THE WALL BENEATH THE CONTROL.

D. THE CENTER OF FIRE ALARM INITIATING DEVICES (BOXES) SHALL BE LOCATED 48" ABOVE THE LEVEL OF THE FLOOR, WORKING PLATFORM, GROUND SURFACE OR SIDEWALK.

E. IF EMERGENCY WARNING SYSTEMS ARE REQUIRED THEY SHALL ACTIVATE A MEANS OF WARNINGTHE HEARING IMPAIRED. FLASHING VISUAL WARNING SHALL HAVE A FREQUENCY OF NOT MORE THAN 60 FLASHES PER MINUTE.

 THESE DOCUMENTS AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF SVA ARCHITECTS. AND ARE NOT TO BE USED, IN WHOLE OR IN PART FOR ANOTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF SVA ARCHITECTS.

2. THE WORK SHOWN ON THESE DRAWINGS AS EXISTING CONDITIONS WAS PREPARED FROM INFORMATION FURNISHED BY THE OWNER. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, SVA ARCHITECTS INC. IS NOT RESPONSIBLE FOR THE ACCURACY OR ADEQUACY OF ANY WORK SHOWN AS EXISTING NOR IS SVA ARCHITECTS INC. RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT.

3. EACH BIDDER SHALL POSSESS AT THE TIME OF BID A CLASS B OR THE APPROPRIATE CLASS C CONTRACTOR'S LICENSE PURSUANT TO PUBLIC CONTRACT CODE SECTION 3300 AND BUSINESS AND PROFESSIONS CODE SECTION 7028.15. THE SUCCESSFUL BIDDER MUST MAINTAIN THE LICENSE THROUGHOUT THE DURATION OF

4. FIRE SAFETY DURING CONSTRUCTION AND THE DURATION OF THIS CONTRACT: A. GENERAL: FIRE SAFETY DURING CONSTRUCTION SHALL COMPLY WITH 2016 CALIFORNIA FIRE CODE TITLE 24, PART 9, CHAPTER 33.

B. ACCESS ROADS: FIRE DEPARTMENT ACCESS ROADS SHALL BE ESTABLISHED AND MAINTAINED IN ACCORDANCE WITH SECTION 1410. C. WATER SUPPLY: WATER MAINS AND HYDRANTS SHALL BE OPERATIONAL IN

ACCORDANCE WITH SECTION 1412. D. BUILDING ACCESS: ACCESS TO BUILDINGS FOR THE PURPOSE OF FIREFIGHTING SHALL BE PROVIDED, CONSTRUCTION MATERIAL SHALL NOT BLOCK ACCESS TO

BUILDINGS, HYDRANTS OR FIRE APPLIANCES. E. ALTERATIONS OF BUILDINGS: SHALL COMPLY WITH APPLICABLE PROVISIONS OF SECTIONS 1405, 1411, 1413, AND 1415.

G. FIRE WATCH: MAINTAIN FIRE WATCH WHEN REQUIRED BY THE BUILDING OFFICIAL

AND WHEN EXISTING FIRE PROTECTION SYSTEMS ARE SHUT DOWN FOR ALTERATIONS. FIRE WATCH SHALL REMAIN IN EFFECT UNTIL EXISTING FIRE PROTECTION SYSTEMS ARE RETURNED TO SERVICE OR AS ALLOWED BY THE BUILDING OFFICIAL.

5. PENETRATIONS TO FIRE RATED MATERIALS OR ASSEMBLIES SHALL BE RESTORED TO EQUAL RATING. FIRE STOP SYSTEMS AS LISTED BY UNDERWRITERS LABORATORIES SHALL BE INSTALLED PER FIRE RESISTANCE DIRECTORY. FIRE STOP SYSTEMS SHALL BE AS SPECIFIED.

6. STATEMENT (TITLE 24, PART 6): NONRESIDENTIAL ENERGY STANDARDS COMPLIANCE: THE DESIGN INDICATED HEREIN COMPLIES WITH THE REQUIREMENTS OF THE ENERGY CONSERVATION STANDARDS OF TITLE 24, PART 6, CALIFORNIA CODE OF REGULATIONS. THE PROPOSED BUILDING(S) WILL BE IN COMPLIANCE WITH THE ENERGY CONSERVATION STANDARDS PROVIDED IT (THEY) IS (ARE) BUILT ACCORDING TO THESE DRAWINGS AND SPECIFICATIONS AND PROVIDED ANY FUTURE IMPROVEMENTS ARE COMPLETED ACCORDING TO THE REQUIREMENTS OF TITLE 24, PART 6, CALIFORNIA CODE OF REGULATIONS. THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED TO INCLUDE ALL SIGNIFICANT ENERGY CONSERVATION FEATURES REQUIRED FOR COMPLIANCE WITH THE STANDARDS. BUILDING AREAS THAT ARE UNCONDITIONED AND/OR NOT SUBJECT TO THE STANDARDS ARE INDICATED ON THE

<u>ENVELOPE MANDATORY MEASURES:</u>

INTERIM U-VALUE RATING PROCEDURE.

ANY WORK FOR THIS PROJECT.

A. INSTALLED INSULATING MATERIALS SHALL HAVE BEEN CERTIFIED BY THE MANUFACTURER TO COMPLY WITH THE CALIFORNIA QUALITY STANDARDS FOR INSULATING MATERIAL.

B. ALL INSULATING MATERIALS SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF TITLE 24, PART 2, CALIFORNIA BUILDING CODE, SECTIONS 719 AND 2603.

C. ALL EXTERIOR JOINTS AND OPENINGS IN THE BUILDING ENVELOPE THAT ARE POTENTIAL AND OBSERVABLE SOURCES OF AIR LEAKAGE SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED OR OTHERWISE SEALED.

D. SITE CONSTRUCTED DOORS, AND WINDOWS SHALL BE CAULKED BETWEEN THE UNIT AND THE BUILDING, AND SHALL BE WEATHERSTRIPPED (EXCEPT FOR UNFRAMED GLASS DOORS AND FIRE DOORS).

E. MANUFACTURED DOORS AND WINDOWS INSTALLED SHALL HAVE AIR INFILTRATION

RATES CERTIFIED BY THE MANUFACTURER IN ACCORDANCE WITH TITLE 24, PART 6,

CALIFORNIA CODE OF REGULATIONS, SECTION 116(a)1. F. MANUFACTURED FENESTRATION PRODUCTS IN THE ENVELOPE OF THE BUILDING, INCLUDING, BUT NOT LIMITED TO, WINDOWS, SLIDING GLASS DOORS, FRENCH DOORS SKYLIGHTS, CURTAIN WALLS, AND GARDEN WINDOWS MUST BE LABELED FOR U-VALUE

G. DEMISING WALL INSULATION SHALL BE INSTALLED IN ALL OPAQUE PORTIONS OF FRAMED WALLS (EXCEPT DOORS).

IN ACCORDANCE WITH THE (NFRC) NATIONAL FENESTRATION RATING COUNCIL'S

. INSPECTOR OF RECORD REQUIREMENTS: A. ONE OR MORE INSPECTORS EMPLOYED BY THE OWNER IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS WILL BE ASSIGNED TO THE WORK. THE INSPECTORS DUTIES ARE SPECIFICALLY DEFINED IN SECTION 4-342 OF SAID TITLE 24, PART 1 AND IN ADDITION SHALL BE AS STIPULATED IN INTERPRETATION OF REGULATION DOCUMENT IR A-8. B. INSPECTOR SHALL BE CERTIFIED AS A CLASS 3 INSPECTOR THROUGH THE DIVISION OF THE STATE ARCHITECT INSPECTOR EXAMINATION PROGRAM. INSPECTOR SHALL ALSO BE SPECIFICALLY APPROVED BY THE DIVISION OF THE STATE ARCHITECT FOR THIS PROJECT AT LEAST 10 DAYS PRIOR TO THE START OF

8.  $\,$  ALL WORK SHOWN ON THESE DRAWINGS SHALL COMPLY WITH THE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).

9. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CCD APPROVED BY THE DIVISION OF THE STATE ARCHITECT.

10. GRADING PLANS, DRAINAGE IMPRPOVEMENTS, ROAD AND ACCESS REQUIREMENTS

AND ENVIROMENTAL HEALTH CONCIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES. 11. DRINKING WATER SHALL COMPLY WITH ALL LOCAL HEALTH DEPARTMENT

12. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE CODES. ALL ENGINEERING SHALL COMFORM WITH ALL APPLICABLE MUNICIPAL, STATE AND FEDERAL REGULATIONS HAVING JURISDICTION INCLUDING ACCESSIBILITY STANDARDS AND ADA REQUIREMENTS.

13. DO NOT SCALE THE DRAWINGS. THE DRAWINGS ARE NOT NECESSARILY TO SCALE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO BIDDING AND START OF CONSTRUCTION. IF DISCREPANCIES ARE FOUND, THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION BEFORE COMMENCING WORK.

14. ALL DIMENSIONS ARE TO FACE OF CONCRETE, FACE OF MASONRY UNITS, CENTERLINE OF COLUMNS AND BEAMS, OR FACE OF STUDS, UNLESS OTHERWIS NOTED. FINISH FLOOR ELEVATIONS ARE TO TOP OF CONCRETE SLAB OR TOP OF INTERIOR PAVING UNLESS NOTED OTHERWISE. CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES UNLESS NOTED OTHERWISE.

15. THE CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS ARE SUPPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK WITH THE ARCHITECTURAL DRAWINGS BEFORE PROCEEDING WITH INSTALLATION OF CIVIL, STRUCTURAL MECHANICAL, PLUMBING, AND ELECTRICAL WORK. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THE ARCHITECT'S AND THE CONSULTING ENGINEER'S DRAWINGS AND SPECIFICATIONS THAT WOULD CAUSE A CONFLICT, IT SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION FOR CLARIFICATION PRIOR TO INSTALLATION OF SAID WORK. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECTURAL DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE AND AT NO ADDITIONAL COST TO THE OWNER OR ARCHITECT.

16. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONS REGARDING ABBREVIATIONS OR THEIR EXACT MEANING, THE ARCHITECT SHALL BE NOTIFIED FOR

17. DETAILS MARKED "TYPICAL" SHALL APPLY IN ALL SIMILAR CASES UNLES SPECIFICALLY INDICATED OTHERWISE.

18. ALL RUBBISH AND DEBRIS RESULTING FROM DEMOLITION AND/OR NEW WORK SHALL BE DISPOSED OF OFF-SITE AND SHALL NOT BE ALLOWED TO ACCUMULATE.

19. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH SECTION 01 30 00 OF SPECIFICATIONS AND AS REQUIRED BY INDIVIDUAL SPECIFICATION SECTIONS.

20. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL. REQUEST FOR SUBSTITUTION SHALL BE IN ACCORDANCE WITH SECTION 01 60 00 OF SPECIFICATIONS. 21. ALL METAL FRAMING MEMBERS SHALL BE SO ARRANGED AND SPACED AS TO PERMIT INSTALLATION OF PIPE CONDUITS AND DUCT-WORK WITH A MINIMUM OF CUTTING. SHAFT WALLS SHALL BE PROVIDED WITH NECESSARY FRAMES, BRACING, AND SEALANT AROUND THE OPENING.

22. OFFSET STUDS WHERE REQUIRED SO THAT FINISH WALL SURFACE WILL BE FLUSH. 24. DOORS IN RATED WALLS SHALL CONSIST OF SELF-CLOSING, SELF-LATCHING ASSEMBLIES WITH SMOKE AND DRAFT SEALS AT HEAD AND JAMBS. DOOR ASSEMBLY RATINGS SHALL BE AS INDICATED ON DOOR AND ACTIVATED BY SMOKE DETECTORS.

26. GYPSUM BOARD SHALL EXTEND TO UNDERSIDE OF STRUCTURE ABOVE AT ALL COLUMNS AND EXTERIOR PERIMETER WALLS UNLESS OTHERWISE NOTED. WELD FURRING CHANNELS TO STEEL COLUMN PRIOR TO FIRE PROOFING WHEN REQUIRED.

WHEREVER GYPSUM BOARD, PLASTER, ETC. ABUTS DISSIMILAR FINISH MATERIAL AND PROVIDE

25. INSTALL METAL CORNER BEADS AT ALL EXPOSED GYPSUM BOARD EDGES INSTALL CASING BEADS

27. CONTRACTOR SHALL PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BACK-UP PLATES, AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK, STAIR RAILINGS, TOILET ROOM ACCESSORIES AND PARTITIONS, AND OF ALL WALL MOUNTED OR SUSPENDED

MECHANICAL, ELECTRICAL, OR MISCELLANEOUS EQUIPMENT. 28. ALL GLAZING SHALL COMPLY WITH THE CONSUMER PRODUCT SAFETY COMMISSION REQUIREMENTS (C.P.S.C.), CFC, AND CBC.

29. CONTACT BETWEEN DISSIMILAR METAL SHALL BE PROTECTED. 30. ALL DOOR SIZES SHOWN ON DOOR SCHEDULE ARE OPENING SIZES. ALLOWANCE FOR THRESHOLDS, ETC. SHALL BE TAKEN OFF DOOR. ALL DOORS AND FRAME SHALL BE REINFORCED WHERE REQUIRED FOR CLOSERS, STOPS, AND HARDWARE.

31. ROOFING SYSTEM SHALL BEAR U.L. LISTING AS A CLASS "A" SYSTEM. ALL MANUFACTURED MATERIALS USED SHALL BEAR THE APPROPRIATE U.L. LABEL.

32. ALL WOOD TRIM, SPACER, FILLER, ETC., THROUGHOUT JOB SHOULD BE FIRE TREATED. 33. INSPECTION AND TESTING LABORATORY MUST BE IN THE EMPLOY OF THE OWNER, NOT THE

34. MINIMUM HEADROOM CLEARANCE AT STAIRS SHALL BE 6'-8" MEASURED VERTICALLY FROM A PLANE PARALLEL AND TANGENT TO THE TREAD NOSING TO THE SOFFIT ABOVE AT ALL POINTS. 35. ALL EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEGE. LOCKING DEVICES SHALL BE OF AN APPROVED TYPE. 36. EXIT SIGNS SHALL HAVE 6" MINIMUM HEIGHT LETTERS AND SHALL CONFORM TO SECTION 1013 OF

THE CALIFORNIA BUILDING CODE.

37. FURNISH AND INSTALL ACCESS DOORS, FIRE DAMPERS, ETC. IN CEILING AND WALL CONSTRUCTION LOCATED AS REQUIRED BY INSTALLATION OF MECHANICAL PLUMBING, AND ELECTRICAL WORK AND AS APPROVED BY THE ARCHITECT. PROVIDE RATED ASSEMBLIES IN RATED WALLS AND CEILINGS AND SHALL BE APPROVED BY BUILDING INSPECTOR PRIOR TO INSTALLATION. 38. FURNISH AND INSTALL EMERGENCY LIGHTING AS SPECIFIED AND INDICATED BUT IN NO CASE

SHALL THE LIGHT VALUE BE LESS THAN ONE FOOT CANDLE AT FLOOR LEVEL IN ALL EXIT CORRIDORS AND STAIR SHAFTS (CBC SECTION 1008). 39. THERE SHALL BE NO TRENCHES OR EXCAVATIONS 5' OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DECEND UNLESS A PERMIT IS OBTAINED FROM THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO THE ISSUANCE OF A BUILDING OR GRADING PERMIT.

40. THE CONSTRUCTION OR DEMOLITION OF ANY BUILDING, STRUCTURE, SCAFFOLDING OR FALSEWORK MORE THAN 3 STORIES OR 36' IN HEIGHT REQUIRES A PERMIT FROM THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO THE ISSUANCE OF A BUILDING PERMIT 41. GLASS DOORS, ADJACENT PANELS AND ALL GLAZED OPENINGS WITHIN 18" OF THE ADJACENT FLOOR SHALL BE GLASS APPROVED FOR IMPACT HAZARD.

42. ALL LIGHT GAUGE METAL STUDS AND BRACING SHALL COMPLY WITH 2016 CALIFORNIA BUILDING 43. INSTALLATION OF SHORING, UNDERPINNING, AND/OR SLOT CUTTING EXCAVATIONS SHALL BE

PERFORMED UNDER THE CONTINUOUS INSPECTION AND APPROVAL OF THE GEOTECHNICAL

44. ALL CONSTRUCTION SHALL PERFORMED IN ACCORDANCE WITH THE STATE CONSTRUCTION SAFETY ORDERS ENFORCED BY THE STATE DIVISION OF INDUSTRIAL SAFETY. 45. DIMENSIONS AND CONDITIONS AT THE JOB SITE SHALL BE VERIFIED BY ALL CONTRACTORS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE EXISTING CONDITIONS PRIOR TO SUBMITTING BIDS TO THE OWNER SINCE PROPOSALS MUST TAKE INTO CONSIDERATION ALL SUCH CONDITIONS THAT MAY AFFECT THE WORK. DISCREPANCIES IN THE DRAWINGS OR BETWEEN THE

DRAWINGS OR INSTRUCTIONS SHALL BE ISSUED BY THE OWNER PRIOR TO THE INSTALLATION OF ANY

46. CONTRACTORS SHALL PROVIDE AND INSTALL ALL CONCRETE HOUSEKEEPING PADS FOR MECHANICAL AND ELECTRICAL EQUIPMENT, AS REQUIRED.

DRAWINGS AND ACTUAL FIELD CONDITION SHALL BE REPORTED TO THE ARCHITECT. REVISED

47. ALL GYPSUM WALL BOARD TO BE 5/8" THICK TYPE 'X' UNLESS OTHERWISE NOTED OR REQUIRED FOR SPECIFIC WALL CONSTRUCTION. 48. THERMAL INSULATION SHALL BE PROVIDED PER TYPICAL ASSEMBLIES NOTED ON DRAWINGS. REFER TO SPECS FOR PRODUCT INFORMATION.

APPLICABLE CODE. 50. ROOF DRAINS DISCHARGING WATER MUST BE CONDUCTED UNDER THE SIDEWALK 51. DOORS SHALL NOT PROJECT MORE THAN 7 INCHES INTO THE REQUIRED CORRIDOR WIDTH WHEN FULLY OPENED OR MORE THAN ONE HALF INTO THE REQUIRED WIDTH WHEN IN ANY POSITION. (CBC

49. PROVIDE TEMPERED GLASS AT LOCATIONS REQUIRED BY CBC SECTION 2406 AND BY OTHER

52. PUBLIC HALLWAYS AND EXIT COURT PASSAGEWAYS TO HAVE 7'-0" CLEAR HEIGHT TO LOWEST PROJECTION. (CBC SECTION 1005.3)

53. OCCUPANCY LOAD SIGNS SHALL BE POSTED IN EACH CLASSROOM, ASSEMBLY ROOM, OR SIMILAR PURPOSE ROOM, HAVING AN OCCUPANT LOAD OF 50 OR MORE. 54. DUCT PENETRATIONS THROUGH PROTECTIVE ELEMENTS OF FIRE RATED CORRIDOR WALLS SHALL

BE PROTECTED WITH A COMBINATON FIRE SMOKE DAMPERS PER CBC SECTION 714. 55. NO CHANGES ARE TO BE MADE ON THESE PLANS WITHOUT THE KNOWLEDGE OR CONSENT OF THE ARCHITECT/ENGINEER WHOSE SIGNATURE APPEARS HEREON.

56. THESE DRAWINGS DO NOT CONTAIN THE NECESSARY COMPONENTS FOR CONSTRUCTION

57. LOCATIONS OF ALL UTILITIES SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID INTERCEPTING EXISTING PIPING OR CONDUITS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. THE ARCHITECT IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETAILED AND INSTALLED BY ANY OTHER CONTRACT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT SHOULD ANY UNIDENTIFIED CONDITIONS BE DISCOVERED. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE

PROSECUTION OF THIS WORK. 58. THE PROJECT APPLICANT SHALL COMPLY WITH THE REQUIREMENTS OF THE ENGINEERING DIVISION FOR ALL PUBLIC IMPROVEMENTS.

APARTMENT ASPHALT AMERICAN SOCIETY OF NATURAL TESTING MATERIALS N.I.C. NOT IN CONTRACT NOT TO SCALE N.T.S. BOTTOM OF BEAM BLOCK ON CENTER BLOCKING **OVERFLOW DRAIN** BEAM OPP. OPPOSITE BOTTOM BEDROOM OVHD. OVERHEAD BROOM **PUSHBUTTON CABINET** PULL CHAIN CARPET PLATE PROPERTY LINE **CATCH BASIN** PLASTER CEMENT PLASTER PLATE GLASS PL. GLS CENTER LINE PLAST. **PLASTER** CERAMIC PLYWD. PLYWOOD CAST IRON CIRCULAR CEILING PRECAST PREFABRICATED PREFAB. CERAMIC MOSAIC TILE **IERCEMT** COMPOSITION CONCRETE CONTINUOUS QTY. QUANTITY COUNTERSUNK CUBIC FEET RADIUS CUBIC INCH CUBIC YARD RETURN AIR GRILLE ROOF DRAIN DOUGLAS FIR REDWOOD DRINKING FOUNTAIN RECP. RECEPTABLE DIAMETER REFERENCE DIMENSION REFRIGERATOR DOWN REGISTER REINFORCEMENT DOWN SPOUT REQ'D DRY STANDPIPE RES. FLR RESILIENT FLOORING DUPLICATE RETAINING DISHWASHER DRAWINGS ROOFING ROUGH **ROUGH OPENING EXPANSION JOINT** RUBBER R.B. ELEVATOR RUBBER (RESILIENT) BASE ELEVATION ENCLOSURE SOLID CORE **EQUIPMENT** STORM DRAIL ELECTRIC WELDED WIRE MESH SHT'G SHEATHING EXPANSION EXPOSED SIMILAR **EXTERIOR** SHELF AND POLE **EXTINGUISHER** SPECS. SPECIFICATIONS SPRINKLER FLAT HEAD SCREW SQUARE INCH FORCED AIR UNIT SQUARE FOOT FINISH FLOOR FIXED GLASS STORAGE FLAT HEAD WOOD SCREW STRUCT. STRUCTURAL SUSPENDED **FIXTURE** SIM. SIMILAR FLASHING SMOOTH FOUR SIDES S4S FLOOR **FLOORING FLUORESCENT** TOP AND BOTTOM T.B. **FACE OF CONCRETE** TOP OF BEAM **FACE OF MASONRY** TOP OF CURB TOP OF CONCRETE FACE OF STUD FACE OF WALL T.G. TOP OF GRATE FIRE PLACE TELEPHONE TEMP. **FINISH SURFACE TEMPERED FREQUENCY** T&G **TONGUE AND GROOVE** FEET. FOOT THK. THICK FOOTING THRESH THRESHOLD FIRE EXTINGUISHER & CABINET TOP OF PAVING TOP OF SHEATHING T.W. TOP OF WALL GALVANIZED TYP. TYPICAL GALVANIZED IRON (STEEL) UNDERWRITER'S LABEL **FUNITE** GYPSUM ULT. ULTIMATE GYPSUM BOARD UNFIN. UNFINISHED UNDER ROOF FRAMING U.R.F. HOSE BIBB **HOLLOW CORE** V.A.T. VINYL ASBESTOS TILE VFNT VENTILATOR VERT. **HOWLLOW METAL** VERTICAL **HORIZONTAL** VIT VITREOUS HOUR VOL. VOLUME VINYL TILE **INSIDE DIAMETER** WEST **INCORPORATED** WITH WATER CLOSET INSULATION INTERIOR WOOD WD. WIDE FLANGE (STEEL) WIRE GLASS JOIST W.H. WATER HEATER W.I. WROUGHT IRON KITCHEN WITH OUT WATERPROOFING LAMINATED WEATHERSTRIPPING LAMINATED PLASTIC W.S.P. WET STANDPIPE LAVATORY WEIGHT LOUVER YARD

ANCHOR BOLT (S)

ACOUSTICAL TILE

ACOUSTIC

AREA DRAIN

**ADJUSTABLE** 

**AGGREGATE** 

ALTERNATE

ALUMINUM

**APPROXIMATE** 

AC. T.

A.D.

APT.

B.B

BLK'G

BR.

CEM. PLAS

C.M.T.

CONT

CTSK.

CU. IN.

CU. YD.

E.W.W.M

EXPN.

EXP.

EXTR.

FIXT.

FLR

FLR'G

F.O.C.

F.O.M.

F.O.S.

F.O.W.

F.P.

F.S.

FTG.

FXC

GALV.

**GUN** 

H.B.

H.C.

H.M.

HR.

INSUL

LAM. PLAS.

LAV.

LVR.

INT

HORIZ.

HD

GYP. BD

DFAD

LIGHT

FREQ.

**FLUOR** 

FLASH.

ASPHALT CONCRETE PAVING

# **ABBREVIATIONS**

DETAIL REFERENCE DETAIL NUMBER — SHEET ON WHICH DETAIL IS SHOWN ---

**BUILDING SECTION REFERENCE** SECTION NUMBER — SHEET ON WHICH SECTION IS SHOWN --INTERIOR ELEVATION REFERENCE

FLEVATION NUMBER

SHEET ON WHICH ELEVATION IS SHOWN	-	A101
EXTERIOR ELEVATION REFERENCE SHEET ON WHICH ELEVATION IS SHOWN	_	A101
DOOR REFERENCE		101
WINDOW REFERENCE	_	1 SF1
STOREFRONT REFERENCE  REVISIONS	-	1/ A101
WALL TYPES —	_	<u>/1</u> <u>A1.6</u>
GRIDLINE REFERENCE  MATERIAL REFERENCE	-	1 101

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 01-119706 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹

MEDICINE CABINET

MECHANICAL

**MANUFACTURE** 

MEMBRANE

MAN HOLE

MINIMUM

MIRROR

METAL

MOUNTING

MECH

MFT

MFG.

MTG.

**REVISIONS: DESCRIPTION** DATE

GEN-2 **GENERAL NOTES** 

Project Number

Issue Date

1 1/2" = 1'-0"

PROJECT NO:

**DATE ISSUED:** 

SCALE:



**ACCESSIBILITY NOTES** 

**GENERAL NOTES** 

ARCHITECTURAL SYMBOLS LEGEND

TOILET ROOM ACCESSORY SYMBOL ---

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		EXISTING DSA APPLICATION HISTORY				
	FUNCTION		DSA App #	Date Certified		
BUILDING A	LIBRARY	BUILDING A	APPL # 105957	11/30/2016		
20.2207.			APPL # 26987	04/12/1967		
BUILDING B	GYM	BUILDING B	APPL # 18374	06/22/1960		
		20.2202	APPL # 26987	04/12/1967		
			APPL # 34077	04/02/1973		
			APPL # 34652	07/12/1973		
			APPL # 01-105957	11/30/2016		
			741 2 11 01 100001	11/00/2010		
BUILDING C	ADMIN	BUILDING C	APPL # 8426	03/17/1952		
			APPL # 34077	04/02/1973		
			APPL # 01-105957	11/30/2016		
			741121101100001	11/00/2010		
BUILDING D	MULTIPURPOSE	BUILDING D	APPL # 117438	07/20/21		
BUILDING E	CLASSROOMS		ADDI # 447400	07/00/04		
DOILDING L	02/100/100/IIIO	BUILDING E	APPL # 117438	07/20/21		
BUILDING G	CLASSROOMS	BUILDING G	APPL # 19093	06/28/1960		
DOILDING G	CLASSICOCIVIS	501251110	741121110000	00,20,1000		
BUILDING H	CLASSROOMS	BUILDING H	APPL # 19093	06/28/1960		
			APPL # 34077	04/02/1973		
BUILDING I	CLASSROOMS			0-1111100-		
BUILDING I		BUILDING I	APPL # 27434	05/11/1967		
BUILDING K	RESTROOM	BUILDING K	APPL # 01-104884	8/23/2006		
DOILDING IX	(PORTABLE)	BUILDING K	AFFL # U1-104004	0/23/2000		
BUILDING L1-3	CLASSROOMS	BLIII DING L12	APPL # 01-106302	12/20/2016		
DOILDING LI-3	(PORTABLE)	POILDING F1-3	AFFL#01-10030Z	12/20/2010		
DIIII DINIO DA A	CLASSROOMS	RI III DING P1-4	APPL # 01-111334	6/27/2011		
BUILDING P1-4	(PORTABLE)	DUILDING F 1-4	ΛΙΙ L # U I=111334	0/2//2011		
DI III DIVI	CLASSROOMS	BUILDING P5-6	APPL # 01-115903	2/7/2017		
BUILDING P5-6	(PORTABLE)	DOILDING 1 0-0	7.1.1.2.1.110000	211/2011		

## DSA APPLICATION SUMMARY

#### **PARKING LOT A**

USE: STAFF AND VISITOR PARKING

TOTAL NUMBER OF STALLS: 38

VAN ACCESSIBLE STALLS REQUIRED: 1

TOTAL ACCESSIBLE STALLS (VAN + STANDARD) REQUIRED: 2

TOTAL ACCESSIBLE STALLS (VAN + STANDARD) PROVIDED: 3

**PARKING LOT B** USE: STAFF AND VISITOR PARKING

TOTAL NUMBER OF STALLS: 35

VAN ACCESSIBLE STALLS REQUIRED: 1

VAN ACCESSIBLE STALLS PROVIDED: 1

TOTAL ACCESSIBLE STALLS (VAN + STANDARD)REQUIRED: 2

TOTAL ACCESSIBLE STALLS (VAN + STANDARD) PROVIDED: 2

# ACCESSIBLE PARKING CALCULATIONS

S01 EXISTING ACCESSIBLE PARKING PER 01-117438, REF. 2/A05.1 (CCD 80)

⟨S02⟩ EXISTING ACCESSIBLE STAFF RESTROOM PER 01-117438, REF. 1/A45.3

S03 EXISTING ACCESSIBLE STUDENT RESTROOM PER 01-117438, REF. 1/A45.4

⟨S05⟩ EXISTING ACCESSIBLE RAMP PER 01-117438, REF. 2/A05.1 (CCD 80)

⟨S06⟩ EXISTING ACCESSIBLE GATES PER 01-117438, REF. 9/A04.1 (INCREMENT 1)

(\$07) NEW TRACK AND ACCESSIBLE PATH, REF. CIVIL AND LANDSCAPE

(\$08) NEW ACCESSIBLE PARKING AND PATH OF TRAVEL, REF. CIVIL

⟨S09⟩ EXISTING BICYCLE LANE STRIPING

(\$10) EXISTING FACE OF CURB

S11 EXISTING ACCESSIBLE DROP OFF PER 01-117438 C3.0 (CCD B 79). SEE ALSO DET. 1 AND 2/A1.1.

⟨S12⟩ NEW TOW AWAY PARKING SIGN, REF. CIVIL

 $\langle S13 \rangle$  BLACKOUT EXISTING ACCESSIBLE PARKING STRIPING AND RESTRIPE AS STANDARD PARKING STALLS

⟨S14⟩ NEW ACCESSIBLE GATE AND FENCING, REF. DET. 4 AND 6/A1.1

NEW CHAINLINK FENCING. MATCH HEIGHT OF EXISTIGN FENCING. REF. DET. 7/A1.1

S16 EXISTING FENCE TO REMAIN. PROTECT IN PLACE.

 $\langle$  S17 $\rangle$  EXISTING VEHICULAR GATE TO REMAIN. PROTECT IN PLACE.

NOTE: PROJECT 01-117438 CERTIFIED 7-20-21

# **KEYNOTES - SITE PLAN**

PATH OF TRAVEL REQUIREMENTS FOR ALTERATION PROJECTS THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS

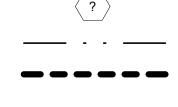
AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NONCOMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS.

ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRE SENTED AS CBC COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ABRUPT LEVEL CHANGES EXCEEDING ½" IF BEVELED AT 1:2 MAXIMUM SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAXIMUM AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP-RESISTANT. CROSS-SLOPE SHALL NOT BE STEEPER THAN 1:48 AND SLOPE IN THE DIRECTION OF TRAVEL SHALL NOT BE STEEPER THAN 1:20. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND FREE OF OBJECTS PROTRUDING MORE THAN 4" FROM THE WALL, ABOVE 27" AND LESS THAN 80" ABOVE THE FLOOR. ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

# **LEGEND - ACCESSIBLE POT NOTE**

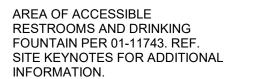


SITE PLAN - IMPROVEMENTS

1" = 40'-0"

SITE KEYNOTE PROPERTY LINE FIRE TRUCK LANE

EXISTING ACCESSIBLE PATH OF TRAVEL PER 01-117438



**LEGEND-SITE PLAN** 

IDENTIFICATION STAMP APP: 01-119706 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹

**REVISIONS:** 

SCALE:

ER

DESCRIPTION DATE

PROJECT NO: 2017 / 40104 **DATE ISSUED:** 12/18/2018

A1.0

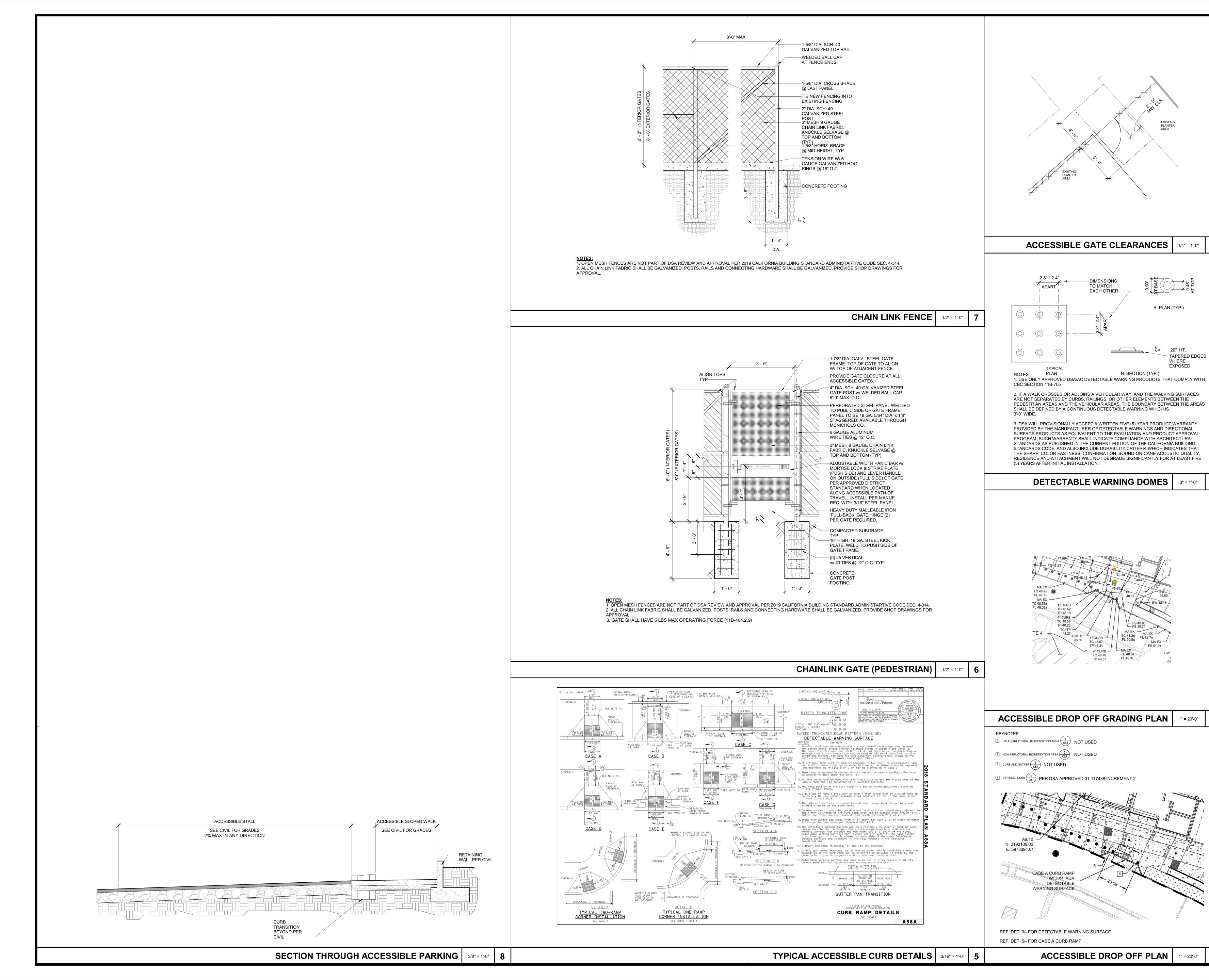
SITE PLAN

As indicated



2335 BROADWAY #301 WWW.SVA-ARCHITECTS.COM T 510.267.3180

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IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 01-119706 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 DATE: 10/27/2021

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OWN

**REVISIONS:** DESCRIPTION DATE

> 2017 / 40104 PROJECT NO: 12/18/2018 **DATE ISSUED:** SCALE: As indicated

> > **A1.1**

**DETAILS** 



## GENERAL CIVIL NOTES

#### GENERAL:

- I. ALL PERMITS WILL BE SECURED BY THE OWNER AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH THE CONDITIONS AND REQUIREMENTS OF THE PERMITS
- 2. THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE AND SHALL BE RESPONSIBLE FOR DAMAGE RESULTING FROM THEIR FAILURE TO DO SO.
- 3. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR
- 4. THE CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR THE POLICE, FIRE AMBULANCE, AND THOSE AGENCIES RESPONSIBLE FOR MAINTENANCE OF UTILITIES IN THE VICINITY OF THE JOB SITE.
- 5. LENGTHS OF SANITARY SEWERS AND STORM DRAINS SPECIFIED ARE HORIZONTAL DISTANCES AS MEASURED FROM CENTERS OF STRUCTURES ROUNDED TO THE NEAREST FOOT.
- 6. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL PERFORM AT THEIR EXPENSE A FIELD OBSERVATION LOCATING ALL EXISTING UTILITIES INCLUDING ELEVATIONS AND NOTIFY THE OWNER AND THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTING LOCATIONS OF UTILITIES SHOWN ON THESE PLANS. ANY ADDITIONAL COST INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF THE EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION SHALL BE BORNE BY
- 7. CONTRACTOR TO VERIFY ALL EXISTING INVERT ELEVATIONS FOR STORM DRAIN AND SANITARY SEWER CONSTRUCTION PRIOR TO ANY WORK. ALL WORK FOR STORM DRAIN AND SANITARY SEWER INSTALLATION SHALL BEGIN AT THE DOWNSTREAM CONNECTION POINT. THIS WILL ALLOW FOR ANY NECESSARY ADJUSTMENTS TO BE MADE PRIOR TO THE INSTALLATION OF THE ENTIRE LINE. IF THE CONTRACTOR FAILS TO BEGIN AT THE DOWNSTREAM CONNECTION POINT AND WORKS UPSTREAM, HE SHALL PROCEED AT HIS OWN RISK AND BE RESPONSIBLE FOR ANY ADJUSTMENTS NECESSARY.
- 8. CONTRACTOR SHALL UNCOVER AND EXPOSE ALL EXISTING UTILITY AND SEWER LINES WHERE THEY ARE CROSSED ABOVE OR BELOW BY THE NEW FACILITY BEING CONSTRUCTED IN ORDER TO VERIFY THE GRADE AND TO ASSURE THAT THERE IS SUFFICIENT CLEARANCE. PIPES SHALL NOT BE STRUNG NOR TRENCHING COMMENCED UNTIL ALL CROSSINGS HAVE BEEN VERIFIED FOR CLEARANCE. IF THE CONTRACTOR FAILS TO FOLLOW THIS PROCEDURE HE WILL BE SOLELY RESPONSIBLE FOR ANY EXTRA WORK OR MATERIAL REQUIRED IF MODIFICATIONS TO THE DESIGN ARE NECESSARY.
- 9. ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S SOLE EXPENSE.
- 10. CONTRACTOR TO TAKE NECESSARY PRECAUTIONARY MEASURES TO PREVENT SOIL EROSION AND SEDIMENTATION. EXISTING AND PROPOSED DRAINAGE STRUCTURES TO BE TEMPORARILY COVERED WITH FILTER FABRIC OR EQUAL UNTIL SURROUNDING PAVEMENT IS INSTALLED.
- 11. ANY RELOCATION OF UTILITIES SHALL BE COORDINATED WITH THE OWNER AND CONDUCTED IN ACCORDANCE WITH ANY AND ALL REQUIREMENTS OF THE OWNER, INCLUDING FEES, BONDS. PERMITS AND WORKING CONDITIONS, ETC. THE OWNER SHALL PAY THE FEES, BONDS, AND FILE THE APPROPRIATE PERMITS FOR ALL SUCH RELOCATION WORK. ALL ON- SITE UTILITY WORK IS THE RESPONSIBILITY OF THE CONTRACTOR (MATERIALS AND INSTALLATION).
- 12. IF ARCHAEOLOGICAL MATERIALS ARE UNCOVERED DURING GRADING. TRENCHING OR OTHER EXCAVATION, EARTHWORK WITHIN 100 FEET OF THESE MATERIALS SHALL BE STOPPED UNTIL A PROFESSIONAL ARCHAEOLOGIST WHO IS CERTIFIED BY THE SOCIETY OF CALIFORNIA ARCHAEOLOGY (SCA) AND/OR THE SOCIETY OF PROFESSIONAL ARCHAEOLOGY (SOPA) HAS HAD AN OPPORTUNITY TO EVALUATE THE SIGNIFICANCE OF THE FIND AND SUGGEST APPROPRIATE MITIGATION MEASURES. IF THEY ARE DEEMED NECESSARY.
- 13. THESE PLANS DO NOT SPECIFY NOR RECOMMEND THE USE OR INSTALLATION OF ANY MATERIAL OR EQUIPMENT WHICH IS MADE FROM, OR WHICH CONTAINS ASBESTOS FOR USE IN THE CONSTRUCTION OF THESE IMPROVEMENTS. ANY PARTY INSTALLING OR USING SUCH MATERIALS OR EQUIPMENT SHALL BE SOLELY RESPONSIBLE FOR ALL INJURES. DAMAGES, OR LIABILITIES, OF ANY KIND, CAUSED BY THE USE OF SUCH MATERIALS, OR EQUIPMENT. NOTIFY OWNER WHEN DISCOVERING ASBESTOS MATERIALS. REFER TO SPECIFICATION 'HAZARDOUS MATERIALS PROCEDURES AND CONTROL' AND 'HAZARDOUS MATERIALS ABATEMENT AND CONTROL.'
- 14. THE CONTRACTOR SHALL MEET AND FOLLOW ALL (NPDES) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM REQUIREMENTS IN EFFECT AT THE TIME OF CONSTRUCTION.
- 15. SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- 16. CONTRACTOR SHALL ARRANGE, INSTALL, AND PAY FOR ANY TEMPORARY UTILITIES, INCLUDING BUT NOT LIMITED TO TELEPHONE, ELECTRIC, SEWER, WATER, ETC.. THE CONTRACTOR IS TO COORDINATE ANY SUCH UTILITY NEEDS WITH THE OWNER.
- 17. ALL SITE AREAS SHALL BE GRADED AT 1% MINIMUM FOR DRAINAGE UNLESS OTHERWISE NOTED OR ALONG FLOWLINES OF CONCRETE LINED GUTTERS AND VALLEY GUTTERS.
- 18. ESTIMATED EARTHWORK QUANTITIES SHOWN ARE APPROXIMATE ONLY AND SHOWN FOR THE PURPOSES OF ESTIMATING GRADING
- 19. WHERE EXISTING STRUCTURES ARE TO REMAIN IN CONSTRUCTION ZONE AREA, CONTRACTOR SHALL ADJUST RIMS OF THESE

PERMIT FEES, HOHBACH-LEWIN ASSUMES NO LIABILITY FOR THE ACCURACY OF THESE QUANTITIES.

STRUCTURES, I.E. CATCH BASINS, VALVE BOXES, CLEAN OUTS, UTILITY BOXES, ETC. TO NEW FINISH GRADE.

- 20. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT FOR NORTHERN CALIFORNIA AT LEAST 48 HOURS (2 WORKING DAY)
- 21. THE ORGANIC MATERIAL COVERING THE SITE SHALL BE STRIPPED AND STOCKPILED. THE STRIPPINGS SHALL BE USED TO BACKFILL ALL LANDSCAPE PLANTERS AND ROUGH GRADE MOUND AREAS, AS SHOWN ON LANDSCAPE DRAWINGS, TO WITHIN 1" OF GRADES SHOWN. EXCESS STRIPPINGS AND EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
- 22. ADJUSTMENTS TO PAD ELEVATIONS OR PARKING LOT GRADES TO ACHIEVE EARTHWORK BALANCE SHALL BE MADE ONLY WITH APPROVAL OF THE ENGINEER.
- 23. COMPACTION TO BE DETERMINED USING ASTM D1557-LATEST EDITION.

PRIOR TO COMMENCEMENT OF CONSTRUCTION. (800) 227-2600.

- 24. STORM DRAIN PIPES DESIGNATED AS SD FROM 4" TO 24" IN DIAMETER SHALL BE SDR-35 PVC. (GREEN-TITE PIPE BY MANVILLE OR APPROVED EQUAL), CLASS HDPE SMOOTH INTERIOR PIPE PER ASTM D3212 HANCOR SURE-LOK WT PIPE OR APPROVED EQUAL WITH CLASS 1 BACKFILL OR DUCTILE IRON PIPE DIP, IF SPECIFIED ON PLANS. NO MATERIAL SUBSTITUTE SHALL BE ALLOWED FOR DUCTILE IRON PIPE. ANY PIPES LARGER THAN 24" IN DIAMETER SHALL BE CLASS III REINFORCED CONCRETE PIPE RCP. PVC PIPE EXCEEDING 24" DIAMETER SHALL ONLY BE USED WHEN APPROVED BY MANUFACTURER IN THIS JURISDICTION.
- 25. PROPOSED SPOT GRADES (ELEVATIONS) SHOWN HEREON ARE FINISHED PAVEMENT GRADES, NOT TOP OF CURB GRADES, UNLESS NOTED OTHERWISE.
- 26. THE CONTRACTOR SHALL VERIFY THE CONTENTS AND THICKNESS OF THE BUILDING SLAB SECTION (IE: CONCRETE, SAND, ROCK) WITH THE STRUCTURAL PLANS AND THE ELEVATIONS SHOWN HEREON PRIOR TO COMMENCEMENT OF GRADING.
- 27. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE O.S.H.A. REGULATIONS.
- 28. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.
- 29. WHERE OFF-SITE DRIVEWAY APPROACHES ARE TO BE CONSTRUCTED THE ON-SITE DRIVEWAY SHALL NOT BE CONSTRUCTED UNTIL THE OFF-SITE IMPROVEMENTS ARE INSTALLED. THE ON-SITE DRIVEWAY SHALL CONFORM TO THE COMPLETED OFF-SITE DRIVEWAY.

# GRADING NOTES:

UNDERGROUND UTILITY LOCATIONS SHOWN HEREON WERE TAKEN FROM RECORD DATA. NO GUARANTEE IS MADE OR IMPLIED AS TO THE ACCURACY OF SUCH RECORD DATA. NO EXCAVATIONS WERE MADE TO CONFIRM LOCATIONS. CONTRACTORS ARE CAUTIONED TO CONTACT U.S.A. UNDERGROUND AND TO EXERCISE EXTREME CARE IN VERIFYING ALL LOCATIONS PRIOR TO COMMENCING EXCAVATIONS OR OTHER WORK WHICH MAY AFFECT THESE UTILITIES.

ADA COMPLIANCE:

GEOTECHNICAL CRITERIA:

PROJECT GEOTECHNICAL REPORT.

1. ALL NEW WORK SHALL CONFORM TO TITLE 24 OF THE CALIFORNIA ADMINISTRATIVE CODE AND THE AMERICANS WITH DISABILITIES

3. ALL NEW ENTRANCE WALKS TO THE BUILDINGS SHALL NOT EXCEED A SLOPE OF 1:20 (5%) LONGITUDINALLY UNLESS RAILINGS ARE PROVIDED IN WHICH CASE THE SLOPE SHALL NOT EXCEED 1:12 (8.33%). SEE ARCHITECTURAL PLANS FOR RAILING REQUIREMENTS.

4. LANDINGS SHALL BE PROVIDED AT PRIMARY ENTRANCES TO BUILDINGS WITH A 2% MAXIMUM SLOPE THE LANDINGS SHALL HAVE A

5. RAMPS ARE DEFINED AS ANY WALKWAY BETWEEN SLOPES OF 1:20 (5%) AND 1:12 (8.33%), AND SHALL HAVE A MINIMUM WIDTH OF 48"

6. MAXIMUM CROSS-SLOPE ON ANY SIDEWALK OR RAMP SHALL BE 2%. MAXIMUM SLOPE IN ANY DIRECTION WITHIN PARKING STALLS

1. ALL WORK INCLUDING GRADING, TRENCHING, COMPACTION, AND SUBBASES SHALL FOLLOW THE RECOMMENDATIONS OF THE

2. ALL ENGINEERED FILL SHALL HAVE A MINIMUM RELATIVE COMPACTION PER PROJECT GEOTECHNICAL REPORT.

AND A MAXIMUM CROSS-SLOPE OF 2%. RAMPS EXCEEDING 30" VERTICAL DROP SHALL HAVE INTERMEDIATE (2% MAXIMUM SLOPE)

LANDINGS HAVING A MINIMUM LENGTH IN THE DIRECTION OF TRAVEL OF 60". BOTTOM LANDINGS AND LANDINGS AT CHANGES IN RAMP

MINIMUM WIDTH OF 60" AND A MINIMUM DEPTH OF 60" WHEN THE DOOR OPENS INTO THE BUILDING, AND 42" PLUS THE WIDTH OF THE

ACT 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, AND ANY LOCAL OR STATE AMENDMENTS THEREOF.

2. ALL NEW CURB RAMPS SHALL NOT EXCEED A SLOPE OF 1:12 (8.33%).

DOOR WHEN THE DOOR OPENS ONTO THE LANDING.

DIRECTION SHALL HAVE A MINIMUM LENGTH OF 72".

DESIGNATED AS ACCESSIBLE PARKING STALL SHALL BE 2%.

- 2. IRRIGATION LATERALS, PARKING LOT LIGHTING WIRING AND SIGNAL WIRING NOT SHOWN. VERIFY LOCATION BEFORE COMMENCING TRENCHING. REPLACE OR REPAIR IMMEDIATELY WHERE BROKEN TO PROVIDE UNINTERRUPTED SERVICE.
- ALL FINISH GRADES SHOWN ARE FINISH GRADE ELEVATIONS UNLESS NOTED OTHERWISE.

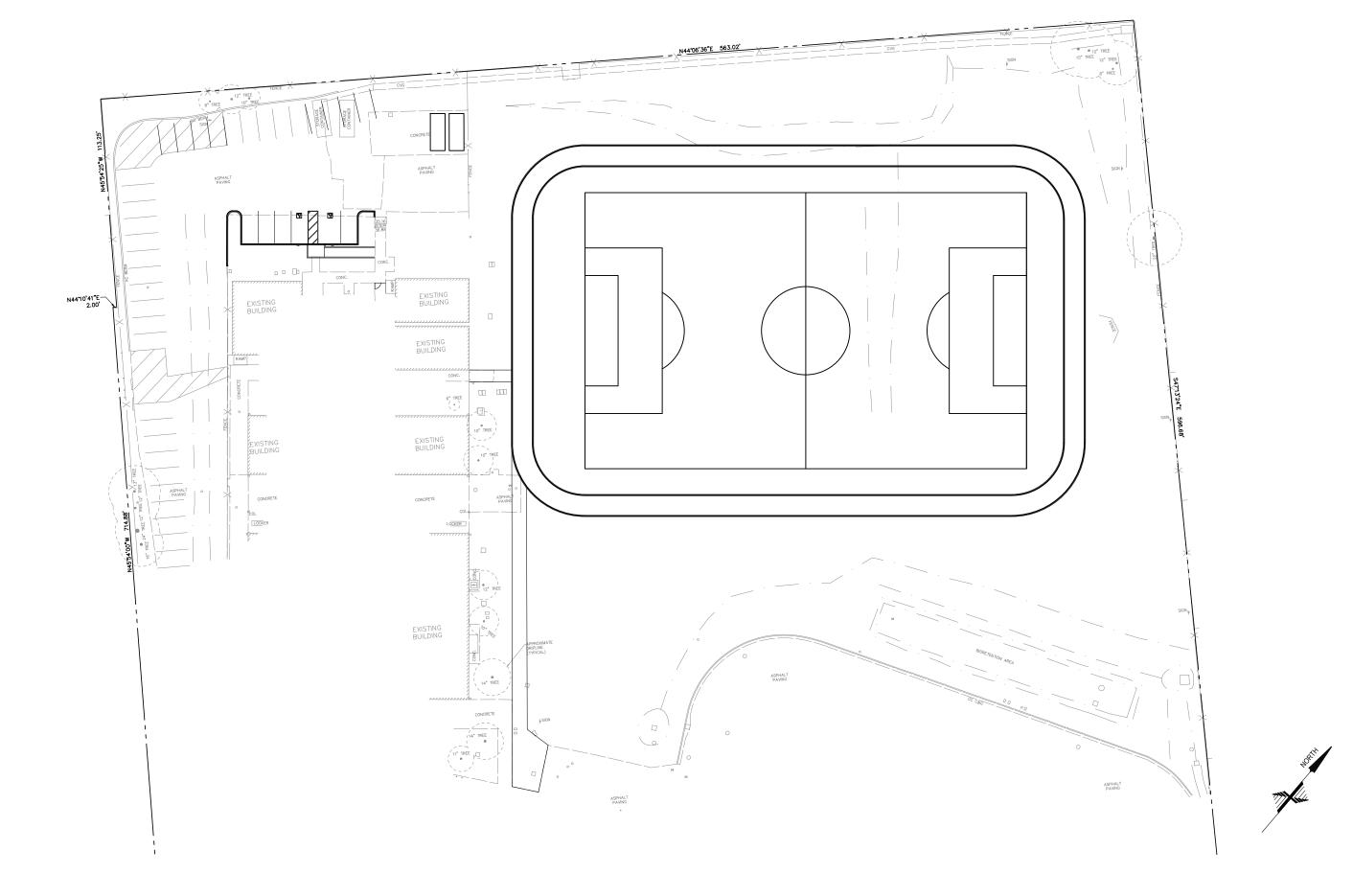
# UTILITY NOTES:

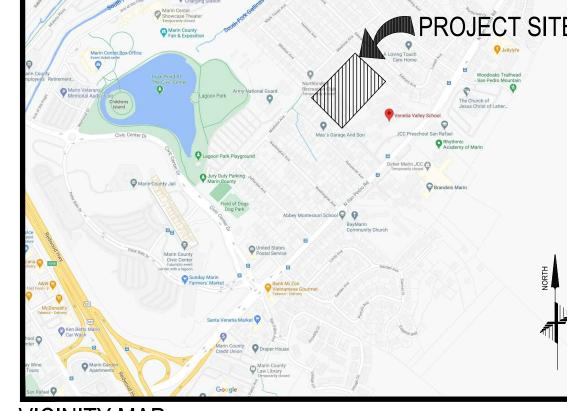
- 1. THIS SURVEY IS NOT INTENDED TO REPRESENT THE EXACT LOCATIONS, SIZES OR EXTENT OF THE UTILITIES WITHIN THE AREA ENCOMPASSED BY THIS SURVEY. THEREFORE, IT IS THE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR TO VERIFY THE LOCATION, SIZE AND EXTENT OF ANY EXISTING UTILITIES PRIOR TO DESIGN OR CONSTRUCTION. CONTRACTORS ARE CAUTIONED TO CONTACT U.S.A. UNDERGROUND AND TO EXERCISE EXTREME CARE IN VERIFYING ALL LOCATIONS PRIOR TO COMMENCING EXCAVATIONS OR OTHER WORK WHICH MAY AFFECT THESE UTILITIES.
- 2. IRRIGATION LATERALS, PARKING LOT LIGHTING WIRING AND SIGNAL WIRING NOT SHOWN. VERIFY LOCATION BEFORE COMMENCING TRENCHING. REPLACE OR REPAIR IMMEDIATELY WHERE BROKEN TO PROVIDE UNINTERRUPTED SERVICE.
- 3. UTILITY ABANDONMENT/REMOVAL: DISCONNECT AND CAP PIPES AND SERVICES TO REMAIN. REMOVE ALL PORTIONS OF ALL UTILITIES WITHIN NEW BUILDING FOOTPRINT AND DISPOSE OF OFF-SITE. OTHERWISE ABANDON IN PLACE UNLESS NOTED OTHERWISE.
- 4. NOTIFY THE ENGINEER IMMEDIATELY OF ANY UTILITIES ENCOUNTERED THAT ARE NOT SHOWN ON THE DRAWINGS. PRESERVE AND REPAIR ANY UTILITIES THAT ARE DAMAGED AND THAT ARE TO REMAIN.
- 5. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CROSSINGS OF NEW UTILITIES WITH EACH OTHER, AND WITH EXISTING UTILITIES. VERIFY EXISTING PIPE LOCATION AND INVERT PRIOR TO INSTALLING NEW UTILITIES. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR DEVIATIONS.
- 6. PRIOR TO CONNECTING TO EXISTING UTILITIES FIELD VERIFY LOCATION 6. & INVERT OR DEPTH PRIOR TO INSTALLING NEW PIPE OR FOLIPMENT
- 7. EACH BUILDING WATER SERVICE CONNECTION SHALL BE WITH VALVE AND VALVE BOX SET AT GRADE.
- 8. ALL BUILDING SEWER LATERALS SHALL BE WITH CLEANOUT TO GRADE.
- 9. ALL CATCH BASINS WITHIN VEHICULAR AREAS SHALL BE TRAFFIC RATED FOR H20 VEHICULAR LOADS. FOR CATCH BASINS IN WALKWAY AREAS, INCLUDING EXISTING CATCH BASINS, USE HEEL PROOF AND ADA GRATE.

# IMPROVEMENT PLANS

FOR

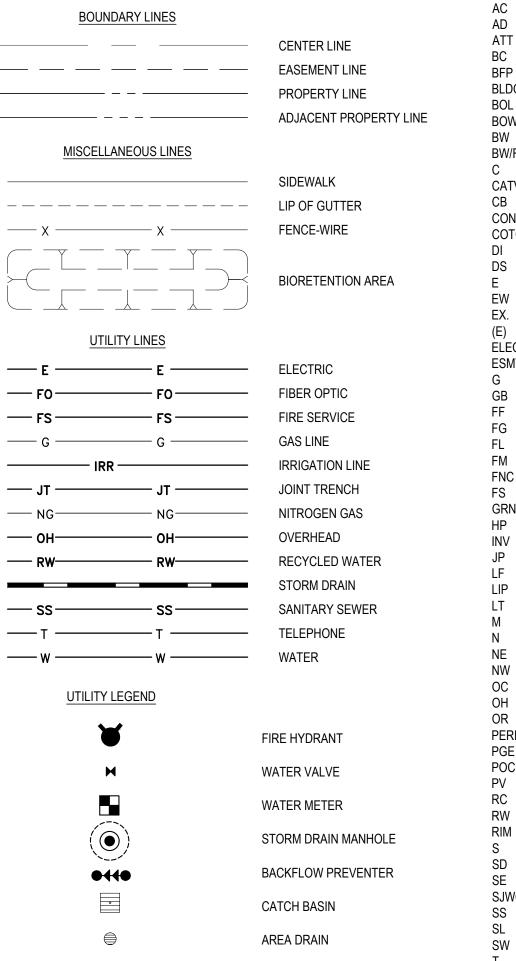
VENETIA VALLEY SCHOOL FIELD 177 N SAN PEDRO ROAD SAN RAFAEL, CA 94903





VICINITY MAP

# LEGEND



# ABBREVIATIONS AB AGGREGATE BASE AC ASPHALTIC CONCRETE AD AREA DRAIN ATT AT&T BC BACK OF CURB

BACKFLOW PREVENTER BLDG BUILDING BOLLARD BACK OF WALK **BOTTOM OF WALL** BOTTOM OF WALL/FINISHED SURFACE CONCRETE CABLE TV CATCH BASIN CONC CONCRETE **CLEANOUT TO GRADE** DRAIN INLET **DOWN SPOUT** ELECTRIC OR EAST

EACH WAY

**EXISTING** 

**EXISTING** 

**ELECTRIC** 

**EASEMENT** 

FLOWLINE

**FENCE** 

GROUND HIGH POINT

INVERT

LIGHT

NORTH

NORTHEAST NORTHWEST

ON CENTER

JOINT POLE LINEAR FEET

LIP OF GUTTER

FORCE MAIN

**GRADE BREAK** 

FINISHED FLOOR FINISHED GRADE

FINISHED SURFACE

BACKFLOW PREVENTER

SD STOR
SE SOUT
SJWC SAN J
SS SANIT
AREA DRAIN

AREA DRAIN

CLEANOUT TO GRADE

FIRE DEPARTMENT CONNECTION

TW/FS TOP C
TYP TYPIC

#### OVERHEAD OF RECORD PERFORATED PIPE PACIFIC GAS & ELECTRIC POINT OF CONNECTION PAVEMENT RELATIVE COMPACTION RECYCLED WATER RIM OF UTILITY OBJECT SOUTH STORMDRAIN SOUTHEAST SAN JOSE WATER COMPANY SANITARY SEWER STREET LIGHT SOUTHWEST TOP OF CURB TOP OF WALL TOP OF WALL/FINISHED SURFACE UNLESS OTHERWISE NOTED UNDERGROUND SERVICE ALERT VALLEY GUTTER WATER/WEST/WITH WATER METER WATER WATER VALVE

# SHEET INDE

C1.0 COVER SHEET
C1.1 NOTES
C2.0 DEMOLITION PLAN
C3.0 GRADING AND DRAINAGE PLAN
C3.1 PAVEMENT PLAN

DETAILS

SA SO0-227-260

DISCLAIMER: TOPOGRAPHIC INFORMATION, INCLUDING PROPERTY LINES, EASEMENTS, EXISTING GRADES, EXISTING UTILITIES LOCATIONS, ETC., SHOWN ARE FOR GENERAL REFERENCE ONLY AND HAVE BEEN PROVIDED BY OTHERS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY HOHBACH-LEWIN, INC.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APP: 01-119706 INC:

REVIEWED FOR

SS FLS ACS 
DATE: 10/27/2021

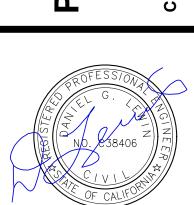
10/27/2021

OL FIELD

IIA VALLEY SCHOOL FII

T NAME: VENETIA VA

LIENT ADDRESS:



DATE ISSUED:
PROJECT NO: 2017-1018

SCALE: AS SHOWN
SHEET NUMBER:

SHEET TITLE:

COVER SHEE



#### CAUTION:

- I. THE LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. (A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES). CONTRACTOR SHALL VERIFY LOCATION AND DEPTH PRIOR TO ANY EXCAVATION OR IMPROVEMENT.
- 2. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION-PHONE (800) 642-2444. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES PRIOR TO BEGINNING ANY WORK ON THIS SITE.
- 3. THESE DRAWINGS DO NOT ADDRESS CONTRACTOR MEANS, METHODS OR PROCESSES THAT MAY BE ASSOCIATED WITH ANY TOXIC SOILS IF FOUND ON SITE. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL CITY AND COUNTY STANDARDS AND APPROPRIATE REGULATIONS IF TOXIC SOILS ARE ENCOUNTERED. CONTRACTOR MUST NOTIFY THE OWNER'S PROJECT MANAGER IMMEDIATELY IF ANY SOILS ARE EVEN SUSPECTED OF BEING CONTAMINATED.

## GENERAL SITE NOTES:

- I. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING ON THIS WORK AND CONSIDER THE EXISTING CONDITIONS AND SITE CONSTRAINTS IN THE BID. CONTRACTOR SHALL BE IN THE POSSESSION OF AND FAMILIAR WITH ALL APPLICABLE GOVERNING AGENCIES STANDARD DETAILS AND SPECIFICATIONS PRIOR TO SUBMITTING OF A BID.
- 2. ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO ALL APPLICABLE GOVERNING AGENCIES STANDARD DETAILS & SPECIFICATIONS.
- PRIOR TO BEGINNING WORK, AND AFTER INITIAL HORIZONTAL CONTROL STAKING, CONTRACTOR SHALL FIELD CHECK ALL ELEVATIONS MARKED WITH (E) AND REPORT ANY DISCREPANCIES GREATER THAN 0.05' TO OWNER'S PROJECT MANAGER.
- 4. DAMAGE TO ANY EXISTING SITE IMPROVEMENTS, UTILITIES AND/OR SERVICES TO REMAIN SHALL BE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL REPAIR AND/OR REPLACE IN KIND.
- 5. CONTRACTOR SHALL REPLACE ALL STRUCTURES AND GRATE LIDS FOR VAULTS, CATCH BASINS, ETC.., WITH VEHICULAR-RATED STRUCTURES IN ALL TRAFFIC ACCESSIBLE AREAS.
- 6. CONTRACTOR SHALL MAINTAIN THE EXISTING SITE IN A SAFE AND USABLE MANNER SUCH THAT EMERGENCY VEHICLE ACCESS IS AVAILABLE AT ALL TIMES, CONTRACTOR TO SUPPLY, INSTALL AND MAINTAIN ALL NECESSARY FENCING, GATES, SIGNAGE, TEMPORARY WALKWAYS, AND PROVISIONS FOR ENSURING THE PROJECT'S SECURITY AND SAFE PASSAGEWAY AROUND IT BY CAMPUS STAFF, STUDENTS AND VISITORS AT ALL TIMES.
- 7. CONTRACTOR TO BE RESPONSIBLE FOR OBTAINING ALL NECESSARY & REQUIRED PERMITS FOR THIS
- 8. NOTIFICATION PRIOR TO THE START OF THE WORK MUST BE GIVEN TO THE UNDERGROUND SERVICE
- CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING APPROVAL FROM DISTRICT PERSONNEL AND PROJECT ARCHITECT FOR THE LOCATION OF ALL STAGING, STORAGE, CONSTRUCTION OFFICE AND LAY
- 10. CONSTRUCTION HOURS TO BE VERIFIED AND APPROVED BY DISTRICT AND LOCAL AGENCIES.
- 11. CONTRACTOR MUST HAVE OWNER'S REPRESENTATIVE OR ENGINEER/ARCHITECT FIELD REVIEW AND APPROVE FORMWORK PRIOR TO PLACING SITE CONCRETE FOR CURBS, RAMPS, STAIRS, WALKS, DRIVEWAYS AND RELATED FLATWORK.
- 12. IF ARCHEOLOGICAL MATERIALS ARE UNCOVERED DURING GRADING, TRENCHING OR OTHER ON-SITE EXCAVATION, ALL WORK ON THE SITE SHALL BE STOPPED AND THE CITY IMMEDIATELY NOTIFIED. THE COUNTY CORONER & THE NATIVE AMERICAN HERITAGE COMMISSION SHALL ALSO BE NOTIFIED AND PROCEDURES FOLLOWED AS REQUIRED IN APPENDIX "K" OF THE CALIFORNIA ENVIRONMENTAL ACT
- : CONTRACTOR TO COORDINATE WITH SCHOOL PERSONNEL AND ENSURE HIS/HER WORK DOES NOT IMPACT SCHOOL OPERATION AND TRAFFIC CIRCULATION OF BUSSES, EMERGENCY VEHICLES, STAFF AND STUDENT VEHICLES.

## SITE MAINTENANCE:

- 1. CONTRACTOR SHALL: GATHER ALL CONSTRUCTION DEBRIS ON A REGULAR BASIS AND PLACE IT IN A DUMPSTER OR OTHER CONTAINER WHICH IS EMPTIED OR REMOVED ON A REGULAR BASIS. WHEN APPROPRIATE, USE TARPS ON THE GROUND TO COLLECT FALLEN DEBRIS OR SPLATTERS THAT COULD CONTRIBUTE TO STORM WATER RUNOFF POLLUTION.
- REMOVE ALL DIRT, GRAVEL, RUBBISH, REFUSE, AND GREEN WASTE FROM STREET PAVEMENT AND STORM DRAINS ADJOINING THE SITE. LIMIT CONSTRUCTION ACCESS ROUTES ONTO THE SITE AND PLACE GRAVEL PADS AT THESE LOCATIONS. DO NOT DRIVE VEHICLES AND EQUIPMENT OFF THE PAVED OR GRAVELED AREAS DURING WET WEATHER.
- SWEEP OR VACUUM THE STREET PAVEMENT AND SIDEWALKS ADJOINING THE PROJECT SITE AND THE ON-SITE PAVED AREAS ON A DAILY BASIS. SCRAPE CAKED-ON MUD AND DIRT FROM THESE AREAS BEFORE SWEEPING. CORNERS AND HARD TO REACH AREAS SHALL BE SWEPT MANUALLY.
- 4. IF THE STREETS, SIDEWALKS AND/OR PARKING LOT ARE PRESSURE WASHED, DEBRIS MUST BE TRAPPED AND COLLECTED TO PREVENT ENTRY INTO THE STORM DRAIN SYSTEM. NO CLEANING AGENT MAY BE DISCHARGED INTO THE STORM DRAIN. IF ANY CLEANING AGENT OR DEGREASER IS USED, WASH WATER MUST BE COLLECTED AND DISCHARGED TO THE SANITARY SEWER, SUBJECT TO THE APPROVAL OF THE OWNER'S PROJECT MANAGER, OR OTHERWISE DISPOSED OF THROUGH APPROVED DISPOSAL
- 5. CREATE A CONTAINED AND COVERED AREA ON THE SITE FOR THE STORAGE OF BAGS, CEMENT, PAINTS, OILS, FERTILIZERS, PESTICIDES, OR OTHER MATERIALS USED ON THE SITE THAT HAVE THE POTENTIAL OF BEING DISCHARGED INTO THE STORM DRAIN SYSTEM THROUGH EITHER BEING WIND-BLOWN OR IN THE EVENT OF A MATERIAL SPILL.
- 6. NEVER CLEAN MACHINERY, EQUIPMENT OR TOOLS INTO A STREET, GUTTER OR STORM DRAIN.
- ENSURE THAT CEMENT TRUCKS, PAINTERS, OR STUCCO/PLASTER FINISHING CONTRACTORS DO NOT DISCHARGE WASH WATER FROM EQUIPMENT, TOOLS OR RINSE CONTAINERS INTO GUTTERS OR
- 8. PREVENT DUST FROM LEAVING THE SITE AND ACCUMULATING ON ADJACENT AREAS AS REQUIRED IN THE DUST CONTROL NOTES ON THIS SHEET.
- 9. PREVENT SEDIMENT LADEN STORM RUN-OFF FROM LEAVING THE SITE OR ENTERING STORM DRAIN OR SANITARY SEWER SYSTEMS AS REQUIRED IN THE EROSION AND SEDIMENTATION CONTROL NOTES ON
- 10. MAINTAIN EXISTING TREES AND PLANTS THAT ARE TO REMAIN AS REQUIRED BY THE TREE AND PLANT PROTECTION NOTES ON THIS SHEET.

# **DUST CONTROL**

- WATER TRUCKS SHALL BE PRESENT AND IN USE AT THE CONSTRUCTION SITE. ALL PORTIONS OF THE SITE SUBJECT TO BLOWING DUST SHALL BE WATERED AS OFTEN AS DEEMED NECESSARY BY THE APPROPRIATE GOVERNMENTAL AGENCY IN ORDER TO ENSURE PROPER CONTROL OF BLOWING DUST FOR THE DURATION OF THE PROJECT.
- WATERING ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITY SHALL TAKE PLACE BETWEEN THE ESTABLISHED CONSTRUCTION HOURS AND SHALL INCLUDE AT LEAST ONE LATE-AFTERNOON WATERING TO MINIMIZE THE EFFECTS OF BLOWING DUST.
- 3. ALL PUBLIC STREETS AND MEDIANS SOILED OR LITTERED DUE TO THIS CONSTRUCTION ACTIVITY SHALL BE CLEANED AND SWEPT ON A DAILY BASIS DURING THE WORK WEEK, OR AS OFTEN AS DEEMED NECESSARY BY THE OWNER'S ENGINEER/INSPECTOR, TO THE SATISFACTION OF THE CITY'S DEPARTMENT OF PUBLIC WORKS.
- WATERING ON PUBLIC STREETS OR POWER WASHING SEDIMENTATION ON STREETS SHALL NOT OCCUR. UNLESS CONTRACTOR COLLECTS AND FILTERS THE WASH WATER PRIOR TO ITS ENTERING THE CITY'S STORM DRAIN SYSTEM.
- ON-SITE PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS SHALL BE SWEPT DAILY WITH A WATER SWEEPER.
- 6. ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS SHALL BE COVERED WITH ARPAULINS OR OTHER EFFECTIVE COVERS.
- 7. THE SPEED OF ALL VEHICLES DRIVING ON UNPAVED ROADS OR PORTIONS OF THE SITE SHALL BE LIMITED TO 10 MPH.

# **EROSION AND SEDIMENTATION**

- 1. EROSION CONTROL MEASURES ARE INTENDED TO PREVENT SEDIMENT AND DEBRIS FROM ENTERING THE CITY, COUNTY STORM DRAIN SYSTEM, SANITARY SEWER SYSTEM OR FROM LEAVING THE SITE. THE CONTRACTOR SHALL MAKE ADJUSTMENTS IN THE FIELD TO MAKE SURE THAT THIS CONCEPT IS
- 2. EROSION CONTROL FACILITIES AND MEASURES ARE TO BE INSTALLED AND OPERABLE BY OCTOBER 1st AND SHALL CONTINUE IN EFFECT UNTIL DISTURBED AREAS ARE STABILIZED OR UNTIL INSTALLATION OF THE PERMANENT SITE IMPROVEMENTS.
- 3. CONTRACTOR SHALL ASSUME THE CONCEPTS ON THE EROSION CONTROL PLAN, C5.1, ARE SCHEMATIC MINIMUM REQUIREMENTS, THE FULL EXTENT OF WHICH ARE TO BE DETERMINED BY THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR THE EXACT DESIGN AND EXTENT OF THE EROSION CONTROL SYSTEM SO THAT IT WORKS WITH THE CONTRACTOR'S INTENDED USE AND MANAGEMENT OF THE CONSTRUCTION SITE, AND IS APPROVAL BY THE APPROPRIATE GOVERNMENTAL AGENCIES.
- 4. ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED BY THE CONTRACTOR AND REPAIRED, AS REQUIRED, AT THE CONCLUSION OF EACH WORKING DAY DURING THE RAINY SEASON. THE CONTRACTOR SHALL INSPECT THE EROSION CONTROL FACILITIES AND MAKE NECESSARY REPAIRS PRIOR TO ANTICIPATED STORMS AND AT REASONABLE INTERVALS DURING STORMS OF EXTENDED DURATION. REPAIRS TO DAMAGED FACILITIES SHALL BE MADE IMMEDIATELY UPON DISCOVERY.
- 5. AS SOON AS PRACTICAL FOLLOWING EACH STORM, THE CONTRACTOR SHALL REMOVE ANY ACCUMULATION OF SILT OR DEBRIS FROM THE EROSION CONTROL SEDIMENT BASINS AND SHALL CLEAR THE OUTLET PIPES OF ANY BLOCKAGE.
- 6. PROVISION SHALL BE MADE TO ASSURE THAT BORROW AREAS AND STOCK PILED SOILS ARE PROTECTED FROM EROSION WITH EROSION CONTROL MEASURES SATISFACTORY TO THE APPROPRIATE GOVERNMENTAL AGENCIES.
- 7. ALL STOCKPILE MATERIALS SHALL BE COVERED AND PROTECTED FROM THE ELEMENTS WITH A NON-PERMEABLE PLASTIC MEMBRANE SO AS TO PREVENT SOIL EROSION FROM OCCURRING. THIS COVER SHALL BE SECURED WITH ANCHORS OR WEIGHTS OF SUFFICIENT SIZE AND FREQUENCY TO PREVENT DISRUPTION OR REMOVAL BY WIND OR RAIN. ANCHORAGE AT THE BASE OF THE SLOPE SHALL BE AS INDICATED BY DETAIL ON THIS SHEET. ALL MEMBRANE AND COVERINGS SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR OR HIS REPRESENTATIVE ON A FREQUENT AND REGULAR BASIS. SPECIFICALLY BEFORE AND AFTER ANY INCLEMENT WEATHER. WITH ANY NECESSARY REPAIRS BEING IMMEDIATELY PERFORMED. COVERINGS SHALL REMAIN IN PLACE UNTIL THE STOCKPILE(S) IS READY TO BE REMOVED FROM THE SITE, AT WHICH TIME THEY MAY BE REMOVED AND DISPOSED OF BY
- 8. EARTHEN BERMS, STRAW-FIBER FILLED TUBES AND/OR GEOTEXTILE FABRIC BARRIER (SILT FENCING) SHALL BE CONSTRUCTED AS SHOWN TO PREVENT OFF-FLOW OF SEDIMENT-LADEN RUNOFF, OR THE EROSION OF BANKS OR ROADWAYS. ALL SUCH TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED BY THE CONTRACTOR AS SOON AS CONSTRUCTION IS COMPLETED AND VEGETATION IS ESTABLISHED. HAY BALES SHALL NOT BE USED.
- 9. ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS, SWEPT ON A REGULAR BASIS, TO THE SATISFACTION OF THE ON-SITE INSPECTORS.
- 10. SWEEP OR VACUUM THE STREET PAVEMENT AND SIDEWALKS ADJOINING THE PROJECT SITE AND THE ON-SITE PAVED AREAS ON A DAILY BASIS OR AS REQUIRED BY THE CITY. SCRAPE CAKED-ON MUD AND DIRT FROM THESE AREAS BEFORE SWEEPING. CORNERS AND HARD TO REACH AREAS SHALL BE SWEPT
- 11. PERSON RESPONSIBLE FOR EROSION CONTROL IMPLEMENTATION, TO BE DETERMINED. WHEEL WASHERS SHALL BE INSTALLED AND USED TO CLEAN ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE. IF WHEEL WASHERS CANNOT BE INSTALLED, TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT SHALL BE WASHED OFF BEFORE LEAVING THE CONSTRUCTION SITE.

#### TREE/PLANT PROTECTION NOTES:

- 1. PRIOR TO BEGINNING CONSTRUCTION ON SITE, CONTRACTOR SHALL IDENTIFY, CONFIRM WITH OWNER AND PROTECT EXISTING TREES AND PLANTS DESIGNATED AS TO REMAIN.
- 2. PROVIDE 6 FOOT TALL TREE PROTECTION FENCE WITH DISTINCTIVE MARKING VISIBLE TO CONSTRUCION EQUIPMENT, ENCLOSING DRIP LINES OF TREES DESIGNATED TO REMAIN.
- WORK REQUIRED WITHIN FENCE LINE SHALL BE HELD TO A MINIMUM, AVOID UNNECESSARY MOVEMEN OF HEAVY EQUIPMENT WITHIN FENCED AREA AND DO NOT PARK ANY VEHICLES UNDER DRIP LINE OF TREES. DO NOT STORE EQUIPMENT OR MATERIALS WITHIN FENCE LINE.
- 4. PRIOR TO REMOVING ROOTS AND BRANCHES LARGER THAN 2" IN DIAMETER OF TREES OR PLANTS THAT ARE TO REMAIN. CONSULT WITH THE OWNER'S PROJECT MANAGER.
- 5. ANY GRADE CHANGES GREATER THAN 6" WITHIN THE DRIPLINE OF EXISTING TREES SHALL NOT BE MADE WITHOUT FIRST CONSULTING THE LANDSCAPE ARCHITECT / CIVIL ENGINEER.
- PROTECT EXISTING TREES TO REMAIN FROM SPILLED CHEMICALS, FUEL OIL, MOTOR OIL, GASOLINE AND ALL OTHER CHEMICALLY INJURIOUS MATERIAL; AS WELL AS FROM PUDDLING OR CONTINUOUSLY RUNNING WATER. SHOULD A SPILL OCCUR. STOP WORK IN THAT AREA AND CONTACT THE CITY'S ENGINEER / INSPECTOR IMMEDIATELY. CONTRACTOR SHALL BE RESPONSIBLE TO MITIGATE DAMAGE
- 7. PROVIDE TEMPORARY IRRIGATION TO ALL TREES AND PLANTS THAT ARE IN OR ADJACENT TO CONSTRUCTION AREAS WHERE EXISTING IRRIGATION SYSTEMS MAY BE AFFECTED BY THE CONSTRUCTION. ALSO PROVIDE TEMPORARY IRRIGATION TO RELOCATED TREES.

FROM SPILLED MATERIAL AS WELL AS MATERIAL CLEAN UP.

- 8. CONTRACTOR SHALL BE RESPONSIBLE FOR ONGOING MAINTENANCE OF ALL TREES DESIGNATED TO REMAIN AND FOR MAINTENANCE OF RELOCATED TREES STOCKPILED DURING CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REPLACE TREES THAT DIE DUE TO LACK OF MAINTENANCE.
- 9. CONSULT WITH LANDSCAPE ARCHITECT SHOULD SPECIAL CIRCUMSTANCES ARISE OR QUESTIONS ARISE REGARDING THESE PROCEDURES.

- 1. DEMOLITION AND CONSTRUCTION WORK MAY BE PERFORMED OVER THE TOP OF AND AROUND TELEPHONE AND POWER SERVICES. CONTRACTOR SHALL WORK BY HAND IN ALL AREAS WHERE THESE SERVICES MIGHT BE HARMED BY LARGER LESS PRECISE EQUIPMENT.
- THE CONTRACTOR SHALL LOCATE AND CLEARLY MARK (AND THEN PRESERVE THESE MARKERS) FOR THE DURATION OF CONSTRUCTION OF ALL TELEPHONE, DATA, STREET LIGHT, SIGNAL LIGHT AND POWER FACILITIES THAT ARE IN OR NEAR THE AREA OF CONSTRUCTION.
- 3. CONTRACTOR'S BID IS TO INCLUDE ALL VISIBLE SURFACE AND ALL SUBSURFACE FEATURES IDENTIFIED TO BE REMOVED OR ABANDONED IN THESE DOCUMENTS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SITE INSPECTION TO FULLY ACKNOWLEDGE THE EXTENT OF THE DEMOLITION WORK. 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS NECESSARY FOR ENCROACHMENT, GRADING, DEMOLITION, AND DISPOSAL OF SAID MATERIALS AS REQUIRED BY

PRIVATE, LOCAL AND STATE JURISDICTIONS. THE CONTRACTOR SHALL PAY ALL FEES ASSOCIATED

6. CONTRACTOR SHALL PAY DISPOSAL FEES.

WITH THE DEMOLITION WORK.

- 7. BACKFILL ALL DEPRESSIONS AND TRENCHES FROM DEMOLITION OF FOUNDATIONS & UTILITIES TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
- 8. WITHIN LIMITS OF WORK, REMOVE CURBS, GUTTERS, LANDSCAPING, SIGNAGE, TREES, SHRUBS, ASPHALT, UNDERGROUND PIPES, ETC. AS INDICATED ON THE DRAWINGS.
- 9. REMOVAL OF LANDSCAPING SHALL INCLUDE ROOTS AND ORGANIC MATERIALS TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
- 10. PRIOR TO BEGINNING DEMOLITION WORK ACTIVITIES, CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES OUTLINED IN THE EROSION CONTROL PLAN & DETAILS.
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING ALL DEMOLITION MATERIALS, OR STORING SELECTED ITEMS BY OWNER'S REPRESENTATIVE AT DESIGNATED LOCATIONS.
- ABANDONED UTILITIES WITHIN 6 FEET OF THE PROPOSED BUILDING FOOTPRINT SHOULD BE REMOVED IN THEIR ENTIRETY. UTILITIES OUTSIDE THE BUILDING AREA SHOULD BE REMOVED OR ABANDONED IN-PLACE BY LOCATING AND PLUGGING ALL LATERALS AND ENDS OF PIPES WITH CONCRETE. AND THEN FILLING THE ENTIRE PIPE WITH GROUT. REMOVAL OF ANY UTILITIES WILL REQUIRE THAT ALL TRENCHES BE BACKFILLED PER THE SPECIFICATIONS WITH APPROPRIATE TESTS BY THE GEOTECHNICAL ENGINEER TO VERIFY COMPACTION VALUES.

# SITE FENCING NOTES:

- 1. CONTRACTOR SHALL PROVIDE A CONSTRUCTION FENCE AROUND THE ENTIRE AREA OF DEMOLITION AND CONSTRUCTION, INCLUDING ALL STAGING, STORAGE, CONSTRUCTION OFFICE AND LAYDOWN
- 2. FENCE LOCATION MAY BE ADJUSTED FROM TIME TO TIME AS CONSTRUCTION PROCEEDS TO EXCLUDE SOME AREAS WHERE CONSTRUCTION WORK IS NOT BEING DONE AND THE AREA IS NOT OBJECTIONABLE IN VISUAL APPEARANCE, AT THE DISCRETION AND APPROVAL OF THE DISTRICT STAFF. CONSTRUCTION FENCE SHALL BE A MINIMUM OF A 6' HIGH GALVANIZED CHAIN LINK.
- 3. CONSTRUCTION FENCE ADDRESSED IN THESE NOTES IS TO MEET MINIMUM SEPARATION REQUIREMENTS FROM CONSTRUCTION SITE AND THE CAMPUS. CONTRACTOR IS REQUIRED TO INSTALL ANY ADDITIONAL FENCING. BARRICADES OR OTHER SAFETY DEVICES NEEDED TO KEEP THE SITE SECURE & SAFE AT ALL TIMES.
- 4. ALL FENCING SHALL BE INSTALLED AT ONLY LOCATIONS DESIGNATED AND APPROVED BY DISTRICT PERSONNEL, WITH PARTICULAR CARE GIVEN SUCH THAT THE FENCING DOES NOT CREATE A TRAFFIC HAZARD OR NUISANCE, OR RESTRICT CAMPUS CIRCULATION & FIRE EXITING.

## **GRADING & EARTHWORK NOTES:**

- 1. ALL PAVED AREAS ARE TO SLOPE A MINIMUM OF 1%. ACCESSIBLE STALLS AND LOADING ZONES ARE TO SLOPE AT A MAXIMUM OF 2% IN ANY DIRECTION AND ACCESSIBLE PATHWAYS ARE TO SLOPE AT A MAXIMUM OF 8.33%, WITH A MAXIMUM CROSS-SLOPE OF 2%. ANY AREAS ON THE SITE NOT CONFORMING TO THESE BASIC RULES DUE TO EXISTING CONDITIONS OR DISCREPANCIES IN THE DOCUMENTS ARE TO BE REPORTED TO THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH FORMWORK FOR CURBS AND/OR FLATWORK.
- 2. CONTRACTOR SHALL DETERMINE EARTHWORK QUANTITIES BASED ON THE TOPOGRAPHIC SURVEY. THE SOILS INVESTIGATION AND THE PROPOSED SURFACE GRADES AND BASE THE BID ACCORDINGLY. ANY DIFFERENCES BETWEEN THE STATE IN WHICH THE PROJECT SITE IS DELIVERED TO THE CONTRACTOR AND THESE DOCUMENTS SHOULD BE NOTED TO THE CIVIL ENGINEER.
- 3. ALL FILL SHALL BE COMPACTED PER THE CONSTRUCTION SPECIFICATIONS AND THE CONTRACTOR SHALL COORDINATE AND COMPLY WITH THE OWNER'S TESTING AGENCY TO TAKE THE APPROPRIATE TESTS TO VERIFY COMPACTION VALUES.
- 4. IMPORT SOILS MUST MEET THE REQUIREMENTS OF THE CONSTRUCTION SPECIFICATIONS.
- 5. COORDINATE THE PLACEMENT OF ALL SLEEVES FOR LANDSCAPE IRRIGATION (WATER AND CONTROL WIRING) AND STREET LIGHTING PRIOR TO THE PLACEMENT OF ANY ASPHALT, BASEROCK OR CONCRETE SURFACING. SEE LANDSCAPE AND SITE ELECTRICAL DRAWINGS.
- 6. DO NOT ADJUST GRADES ON THIS PLAN WITHOUT PRIOR WRITTEN APPROVAL OF ARCHITECT & ENGINEER.
- 7. SPOT ELEVATIONS ARE TO FINISHED SURFACE.
- 8. TOP OF CONCRETE CURBS ARE 0.50' ABOVE TOP OF PAVING ELEVATIONS, U.N.O.
- 9. ROUGH GRADING TO BE WITHIN 0.1' AND FINISH GRADES ARE TO BE WITHIN 0.05'. 10. SUBGRADES SHALL BE PROOF ROLLED, OR AS INSTRUCTED PER THE CONSTRUCTION SPECIFICATIONS.
- 11. CONTRACTOR TO GRADE LANDSCAPED (NON PAVED) AREAS TO A FINISH GRADE OF 8" BELOW PROPOSED FINISH GRADE SHOWN ON THE GRADING PLANS. DISTRICT WILL INSTALL TOP 8 INCHES OF TOPSOIL AND PERFORM FINISH GRADING. CONTRACTOR TO GRADE PLANTER & LANDSCAPED AREAS (NON-PAVED AREAS ADJACENT TO BUILDINGS) TO FINISH GRADE 24" BELOW FINISH FLOOR OF BUILDING.
- 12. AFTER STAKING FOR HORIZONTAL CONTROL CONTRACTOR SHALL FIELD CHECK ALL ELEVATIONS MARKED WITH (E) AND REPORT ANY DISCREPANCIES GREATER THAN 0.05' TO ARCH/ENGR.

DISTRICT TO INSTALL FINAL FILL MATERIAL, AND INSTALL IRRIGATION SYSTEMS.

- 13. ALL EXISTING UTILITY STRUCTURES WITHIN THE AREA OF WORK SHALL HAVE THE LIDS. GRATES. COVERS, ETC. ADJUSTED TO BE FLUSH WITH FINISHED GRADES. CONTRACTOR SHALL IDENTIFY ALL SUCH ITEMS BY USE OF THESE PLANS AND THOROUGH FIELD INVESTIGATION.
- 14. GEOTECHNICAL CONSULTANT TO BE NOTIFIED OF DELIVERY OF ALL IMPORTED SOILS TO SITE FOR HIS/HER INSPECTION AND APPROVAL PRIOR TO PLACING BY CONTRACTOR.

## EARTHWORK QUANTITY NOTES:

- 1. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE QUANTITIES OF ALL FORMS OF EARTHWORK ON THIS PROJECT AND BASING THE BID ON THOSE QUANTITIES WITH FULL KNOWLEDGE THAT ADDITIONAL PROCESSES - INCLUDING ENGINEERING - AND QUANTITIES ARE ALSO TO BE INCLUDED IN THE BID PER THE FOLLOWING NOTES.
- THE CONTRACTOR SHALL MAKE AN INITIAL DETERMINATION OF THE QUANTITIES, BASED ON A DETAILED SITE VISIT, THE TOPOGRAPHIC SURVEY, THE GEOTECHNICAL REPORT, THE FINISH GRADES SHOWN ON THESE DRAWINGS, THE SIZE AND EXTENT OF FOOTINGS, THE PREPARATION AND MATERIALS USED FOR BUILDING SLABS, PAVEMENT SECTIONS, AND THE SIZE AND DEPTH OF UTILITY TRENCHES, INCLUDING THE UTILITY CONTRACTORS ANTICIPATED RE-USE OF EXISTING MATERIAL FOR
- 3. THE CONTRACTOR SHALL MEET THE GRADES SHOWN ON THE DRAWINGS, ADJUSTING THE AMOUNT OF IMPORT OR EXPORT AS REQUIRED TO DO SO. NO ASSUMPTIONS SHOULD BE MADE ABOUT THE SITE BALANCING. NO ADJUSTMENTS TO THE GRADES SHALL BE PERMITTED UNLESS SPECIFICALLY APPROVED BY THE ARCH/ENGR IN WRITING AFTER THE IMPACT OF ANY GRADE CHANGES (IMPACT TO RAMPS, STAIRS, WORK BY OTHERS, ETC.) HAS BEEN THOROUGHLY REVIEWED BY THE ARCH/ENGR. WHEN PREPARING THE EARTHWORK BIDS, DO NOT ASSUME ANY CHANGES TO THE FINISHED GRADES SHOWN ON THESE DRAWINGS WILL BE PERMITTED.
- 4. THE EARTHWORK SPECIFICATIONS AND GEOTECHNICAL REPORT HAVE SPECIFIC REQUIREMENTS FOR BRINGING FILL MATERIAL ONTO THE SITE (IMPORT) SINCE THE EXISTING SOILS ARE NOT SUITABLE FOR FILL MATERIAL IN CERTAIN AREAS. THE EARTHWORK SPECIFICATIONS AND GEOTECHNICAL REPORT MAY IDENTIFY ALTERNATIVES THAT ALLOW TREATMENT OF EXISTING SOILS TO MINIMIZE IMPORT. HOWEVER MEETING THE GRADES SHOWN ON THESE DRAWINGS MUST ALSO BE CONSIDERED WHEN DETERMINING THE METHOD.
- 5. AFTER THE BID IS AWARDED THE CONTRACTOR SHALL SUBMIT A DETAILED EARTHWORK HANDLING PLAN THAT SHOWS THE INTENT AND LOCATIONS OF EARTH MOVEMENT AND QUANTITIES OF CUT. FILL IMPORT AND EXPORT AS THE PROJECT WAS BID. PROPOSING ALTERNATIVE PLANS THAT MAY IDENTIFY GRADE ADJUSTMENTS TO MINIMIZE THE DISTANCE SOIL IS MOVED OR TO MINIMIZE IMPORT OR EXPORT WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF PREPARING AN EARTHWORK PLAN

# GENERAL UTILITY SYSTEM NOTES

- 1. ALL TRENCHES SHALL BE BACKFILLED PER THE SPECIFICATIONS WITH APPROPRIATE TESTS TO VERIFY COMPACTION VALUES.
- 2. CONTRACTOR SHALL STAKE LOCATION OF ABOVE GROUND UTILITY EQUIPMENT (HYDRANTS, TRANSFORMERS, ETC.) AND MEET WITH THE APPROPRIATE GOVERNMENTAL AUTHORITY AND PROPER UTILITY AUTHORITY TO REVIEW LOCATION PRIOR TO INSTALLATION. THE APPROPRIATE GOVERNMENTAL AUTHORITY AND PROPER UTILITY AUTHORITY MUST SPECIFICALLY AGREE WITH LOCATION PRIOR TO PROCEEDING WITH THE INSTALLATION.
- CONTRACTOR SHALL VERIFY (POTHOLE IF NECESSARY) SIZE, MATERIAL, LOCATION AND DEPTH OF ALL SYSTEMS THAT ARE TO BE CONNECTED TO OR CROSSED PRIOR TO THE TRENCHING OR INSTALLATION OF PROPOSED UTILITIES, AND INFORM ENGINEER OF ANY CONFLICTS BEFORE PROCEEDING WITH
- 4. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS AND ASSEMBLIES THAT ARE IN CONTACT WITH THE SOIL. CONTRACTOR IS RESPONSIBLE FOR FULLY ENGINEERING AND INSTALLING THIS SYSTEM AND COORDINATE ANODE AND TEST STATION LOCATIONS WITH OWNER'S ENGINEER. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL CORROSION PROTECTION REQUIREMENTS.
- 5. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INVERTS AND LOCATIONS PRIOR TO BEGINNING ANY WORK ON THIS SITE.
- 6. ALL DRAINAGE STRUCTURES LOCATED IN VEHICULAR TRAFFIC AREAS SHALL HAVE TRAFFIC RATED COVERS AND BOLT-DOWN GRATES. ALL DRAINAGE STRUCTURES IN PEDESTRIAN ACCESSIBLE AREAS SHALL HAVE ADA APPROVED BOLT-DOWN GRATES. 7. ALL UTILITY STRUCTURES WITHIN THE AREA OF WORK SHALL HAVE THE LIDS, GRATES, COVERS, ETC.
- USE OF THESE PLANS AND FIELD INVESTIGATION. 8. SEE LANDSCAPE LAYOUT PLANS FOR IRRIGATION SLEEVE LOCATIONS.

ADJUSTED TO BE FLUSH WITH FINISHED GRADES. CONTRACTOR SHALL IDENTIFY ALL SUCH ITEMS BY

9. ALL EXISTING UTILITY STRUCTURES (CLEANOUTS VALVES BOXES MANHOLES CB'S ETC.) SHALL BE

THEIR RELATIONSHIP TO THE BUILDING, FLATWORK, BUILDING UTILITIES, AND/OR CURB LAYOUT. NOT BY

RAISED TO FINAL FINISH GRADE AND COMPLETED WITH THE NECESSARY LABOR AND MATERIALS TO BE IN ACCORDANCE WITH DETAILS SHOWN ON THESE PLANS. 10. CLEANOUTS, CATCH BASINS, MANHOLES AND AREA DRAINS ARE TO BE ACCURATELY LOCATED BY

THE LENGTH OF PIPE SPECIFIED ON THE DRAWINGS. (WHICH IS APPROXIMATE)

# GENERAL UTILITY SYSTEM NOTES (Cont.):

- 11. SEE ELECTRICAL PLANS FOR SITE ELECTRICAL WORK. ADVISE ENGINEER OF ANY CONFLICTS WITH OTHER UTILITIES PRIOR TO BEGINNING WORK.
- 12. COMPLETE SYSTEMS: ALL UTILITY SYSTEMS ARE DELINEATED IN A SCHEMATIC MANNER ON THESE PLANS. CONTRACTOR IS TO PROVIDE ALL FITTINGS, ACCESSORIES & WORK NECESSARY TO COMPLETE
- 13. SEE SPECIFICATION SECTION 01300 FOR SUBMITTAL REQUIREMENTS OF UTILITY COMPONENTS.

THE UTILITY SYSTEM SO THAT IT IS FULLY FUNCTIONING FOR THE PURPOSE INTENDED.

# STORM DRAIN NOTES:

- 1. INSTALL DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 18" BELOW THE SURFACE IN NON-PAVED AREAS, AND AT BOTTOM OF BASEROCK FOR PAVED AREAS. GREEN, IMPRINTED WITH "CAUTION-STORM DRAIN LINE BELOW", CALPICO TYPE 2 OR EQUAL.
- 2. PAINT THE TOP OF THE CURBS ADJACENT TO EACH CATCH BASIN INSTALLED UNDER THIS WORK OR ADJACENT TO THIS SITE WITH THE WORDS "NO DUMPING - DRAINS TO BAY". WORDING TO BE BLUE 4" HIGH LETTERS ON A PAINTED WHITE BACKGROUND.
- 3. INSTALL ADA APPROVED GRATES ON ALL DRAINAGE STRUCTURES WITHIN PEDESTRIAN ACCESSIBLE PAVED AREAS. INSTALL BOLT-DOWN GRATES ON ALL DRAINAGE STRUCTURES. 4. WHERE CONNECTION IS TO BE MADE TO AN EXISTING SEWER OR STRUCTURE, SAID EXISTING SEWER

OR STRUCTURE SHALL BE UNCOVERED AND CHECKED FOR LOCATION AND ELEVATION PRIOR TO

STAKING NEW SEWER DEPTH AND LOCATION. ANY DISCREPANCY BETWEEN THE PLANS AND FIELD

5. REFER TO STORM SEWER SPECIFICATIONS FOR LABOR AND MATERIAL, TESTING AND QUALITY CONTROL REQUIREMENTS.

INFORMATION SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER

- 6. MINIMUM SLOPE FOR SITE STORM DRAIN PIPES SHALL BE:
- 8" & LARGER @ 0.5%
- UNLESS INDICATED OTHERWISE
- 7. PRIVATE STORM DRAIN LINE 4-INCH THROUGH 12-INCH WITH A MINIMUM OF TWO (2) FEET OF COVER IN NON-TRAFFIC AREAS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35.
- PRIVATE STORM DRAIN LINE 6-INCH THROUGH 12-INCH WITH LESS THAN THREE (3) FEET OF COVER IN VEHICULAR TRAFFIC AREAS SHALL BE POLYVINYL CHLORIDE (PVC) C900, RATED 150 PSI CLASS PIPE.

#### **WATER SYSTEM NOTES:**

- . INSTALL DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 18" BELOW THE SURFACE IN NON-PAVED AREAS, AND AT BOTTOM OF BASEROCK FOR PAVED AREAS. BLUE, IMPRINTED WITH "CAUTION-WATER-LINE BELOW", CALPICO TYPE 2 OR EQUAL.
- PROVIDE THRUST BLOCKS OR COMPARABLE RESTRAINTS PER THE LOCAL WATER AGENCY, AT BENDS OF 22 1/2 DEGREES OR GREATER (HORIZONTAL AND VERTICAL), AT SIZE CHANGES AND AT FIRE HYDRANTS PER CITY STANDARD. AWWA C600, SECTION 3.8 UNLESSS NOTED OTHERWISE.
- 3. PROVIDE MINIMUM OF 3 FEET OF COVER OVER WATER LINES, UNLESS NOTED OTHERWISE.
- 4. MAINTAIN PUBLIC WATER LINES 10' AWAY FROM PUBLIC SANITARY SEWER LINES.
- 5. WHERE WATER LINES HAVE TO CROSS SANITARY SEWER LINES, DO SO AT A 90 DEGREE ANGLE AND WATER LINES SHALL BE MINIMUM OF 12" ABOVE TOP OF SANITARY SEWER LINES AND WATERLINE JOINTS SHALL BE A MINIMUM OF 10 FEET FROM SANITARY SEWERS.
- 6. WATER LINES ARE SHOWN SCHEMATICALLY. CONTRACTOR SHALL IDENTIFY EACH ANGLE AND/OR BEND WITH APPROPRIATE FITTINGS THAT MAY BE REQUIRED TO ACCOMPLISH THE INTENDED DESIGN.
- 7. BOTTOM OF BACKFLOW PREVENTOR ASSEMBLY TO BE INSTALLED NO GREATER OR LESS THAN 12" FROM FINISH GRADE.
- 8. THE UNDERGROUND DOMESTIC WATER SYSTEM INSTALLER SHALL OBTAIN ALL APPROVALS AND PERMITS PRIOR TO ORDERING MATERIALS, FABRICATING SYSTEMS OR ANY INSTALLATION. 9. CONTRACTOR TO POTHOLE AND VERIFY LOCATION, DEPTH & SIZE OF P.O.C. TO EXISTING WATERMAIN
- PRIOR TO INSTALLING ANY NEW WATERMAIN AND ADVISE THE OWNER ENGINEER OF ANY FIELD DISCREPANCIES THAT WILL IMPACT THE DESIGN.

10. REFER TO DOMESTIC WATER SPECIFICATIONS FOR LABOR AND MATERIAL, TESTING AND QUALITY

- 11. PUBLIC AND PRIVATE WATER MAIN AND WATER SERVICE LINE 4-INCH THROUGH 12-INCH SHALL BE POLYVINYL CHLORIDE (PVC) AND SHALL MEET AWWA C900, RATED FOR 200 PSI CLASS PIPE WITH EPOXY COATED DUCTILE IRON FITTINGS AND FUSION EPOXY COATED GATE VALVES.
- 12. ALL WATER LINES 3" OR SMALLER SHALL BE TYPE K COPPER WITH SILVER BRAZED JOINTS. CONTRACTOR TO VERIFY PRESSURES FROM EXISTING LINES ARE ADEQUATE TO SERVICE BUILDINGS AS SPECIFIED BY THE PLUMBING PLANS.

# CONDUITS

- 1. CONDUITS FOR POWER, SITE LIGHTING, LOW VOLTAGE SYSTEMS, TELEPHONE, SECURITY, DATA, CABLE TV, CLOSED CIRCUIT TV, FIRE ALARM SYSTEMS, ETC SHALL BE INSTALLED PER THE ELECTRICAL SITE
- 2. ALL CONDUITS SHALL INCLUDE PULL STRINGS.

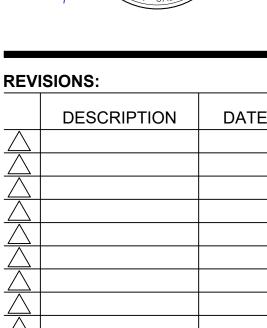
CONTROL REQUIREMENTS.

3. ALL CONDUITS STUBBED TO A SPECIFIC LOCATION FOR FUTURE USE OR USE BY A SEPARATE CONTRACTOR SHALL BE CLEARLY MARKED IN THE FIELD AND DOCUMENTED IN THE CONTRACTOR'S RECORD DOCUMENTS AS TO BOTH DEPTH AND LOCATION.

IDENTIFICATION STAMP APP: 01-119706 INC: REVIEWED FOR

DIV. OF THE STATE ARCHITEC SS 🗹 FLS 🗹 ACS 🗹

SEAL:



**DATE ISSUED: PROJECT NO:** 2017-1018

AS SHOWN

**SHEET TITLE:** 

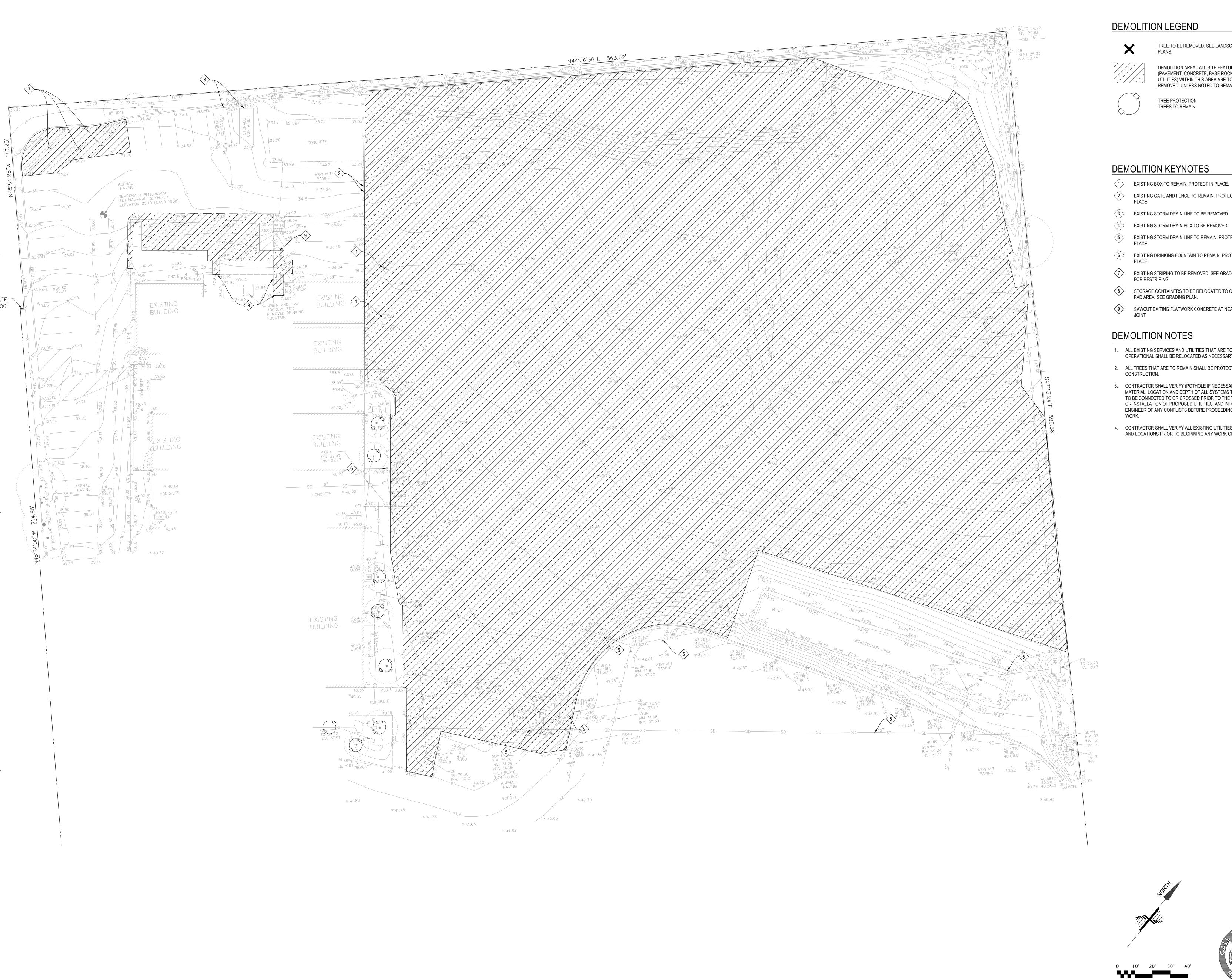
**SHEET NUMBER:** 

SCALE:



HOHBACH-LEWIN, INC. STRUCTURAL & CIVIL ENGINEERS 260 Sheridan Avenue,

Palo Alto, CA 94306 (650) 617-5930,



# **DEMOLITION LEGEND**

TREE TO BE REMOVED. SEE LANDSCAPE

DEMOLITION AREA - ALL SITE FEATURES (PAVEMENT, CONCRETE, BASE ROCK AND UTILITIES) WITHIN THIS AREA ARE TO BE REMOVED, UNLESS NOTED TO REMAIN.

# DEMOLITION KEYNOTES

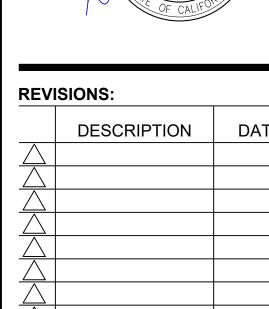
- EXISTING BOX TO REMAIN. PROTECT IN PLACE. EXISTING GATE AND FENCE TO REMAIN. PROTECT IN
- EXISTING STORM DRAIN BOX TO BE REMOVED.
- EXISTING STORM DRAIN LINE TO REMAIN. PROTECT IN
- 6 EXISTING DRINKING FOUNTAIN TO REMAIN. PROTECT IN
- EXISTING STRIPING TO BE REMOVED, SEE GRADING PLAN
- STORAGE CONTAINERS TO BE RELOCATED TO CONCRETE PAD AREA. SEE GRADING PLAN.
- 9 SAWCUT EXITING FLATWORK CONCRETE AT NEAREST JOINT

ALL EXISTING SERVICES AND UTILITIES THAT ARE TO REMAIN OPERATIONAL SHALL BE RELOCATED AS NECESSARY.

- 2. ALL TREES THAT ARE TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION.
- 3. CONTRACTOR SHALL VERIFY (POTHOLE IF NECESSARY) SIZE, MATERIAL, LOCATION AND DEPTH OF ALL SYSTEMS THAT ARE TO BE CONNECTED TO OR CROSSED PRIOR TO THE TRENCHING OR INSTALLATION OF PROPOSED UTILITIES, AND INFORM ENGINEER OF ANY CONFLICTS BEFORE PROCEEDING WITH
- AND LOCATIONS PRIOR TO BEGINNING ANY WORK ON THIS SITE.

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DATE ISSUED: PROJECT NO: 2017-1018

AS SHOWN

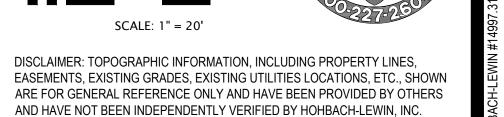
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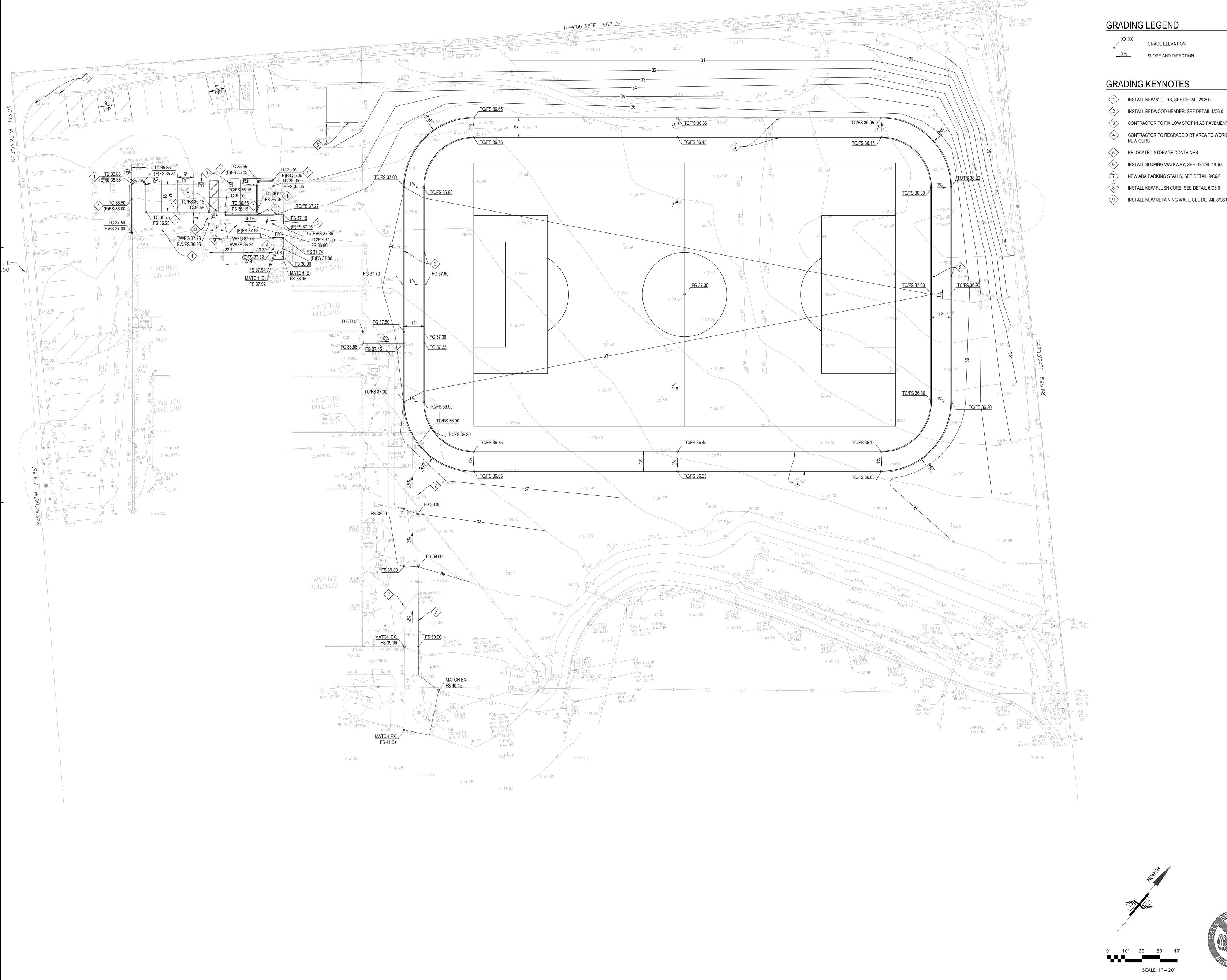
**DEMOLITION PLAN** 







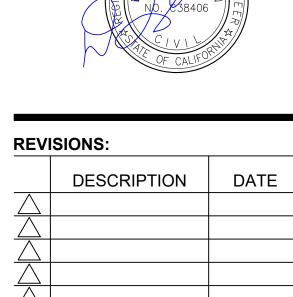
HOHBACH-LEWIN, INC. STRUCTURAL & CIVIL ENGINEERS 260 Sheridan Avenue, Palo Alto, CA 94306 (650) 617-5930, Fax (650) 617-5932



- INSTALL REDWOOD HEADER, SEE DETAIL 1/C6.0
- CONTRACTOR TO FIX LOW SPOT IN AC PAVEMENT AREA
- CONTRACTOR TO REGRADE DIRT AREA TO WORK WITH NEW CURB
- RELOCATED STORAGE CONTAINER
- NEW ADA PARKING STALLS, SEE DETAIL 9/C6.0
- INSTALL NEW FLUSH CURB, SEE DETAIL 6/C6.0
- INSTALL NEW RETAINING WALL, SEE DETAIL 8/C6.0

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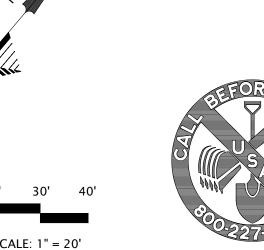
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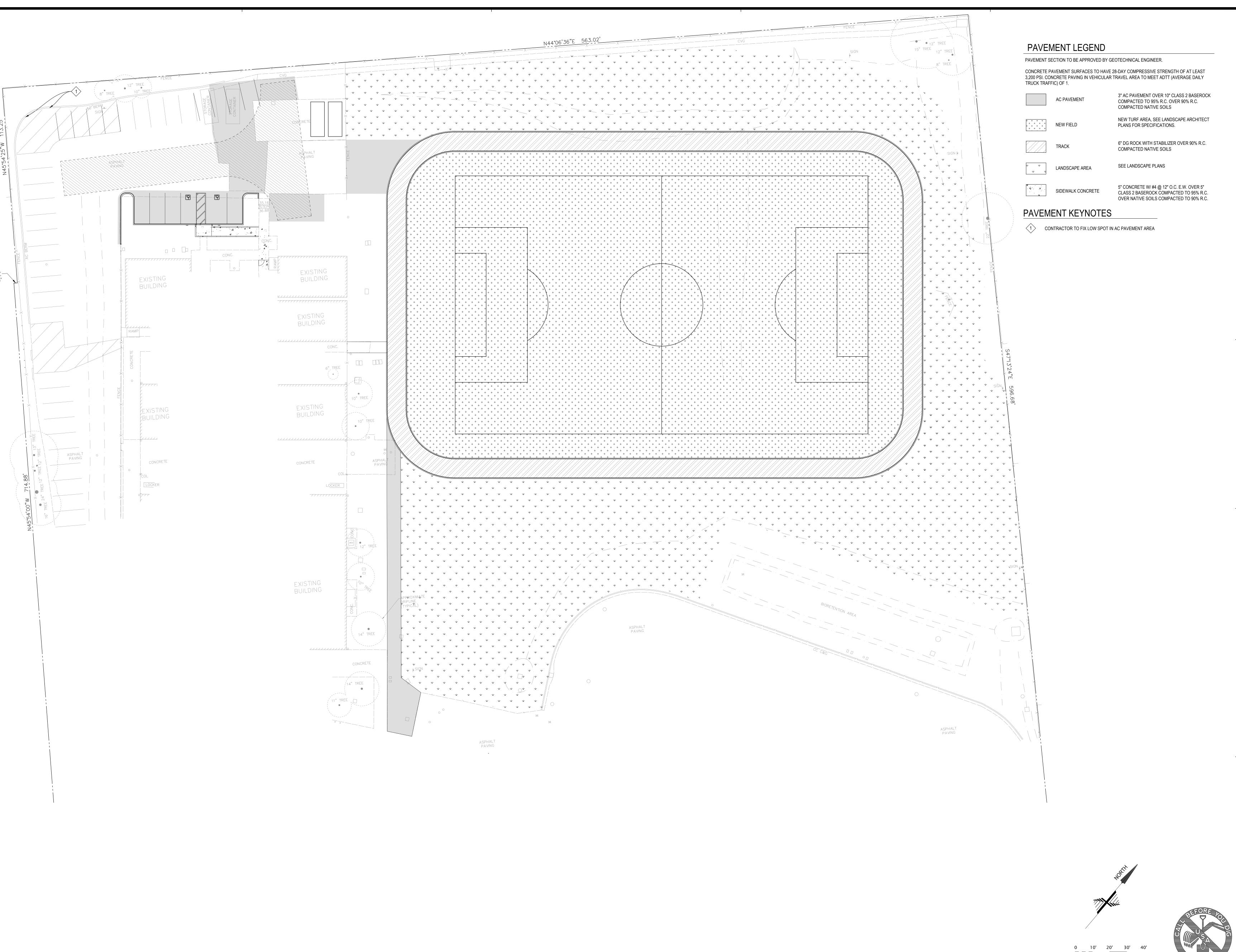
**GRADING AND** DRAINAGE PLAN





DISCLAIMER: TOPOGRAPHIC INFORMATION, INCLUDING PROPERTY LINES, EASEMENTS, EXISTING GRADES, EXISTING UTILITIES LOCATIONS, ETC., SHOWN ARE FOR GENERAL REFERENCE ONLY AND HAVE BEEN PROVIDED BY OTHERS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY HOHBACH-LEWIN, INC.

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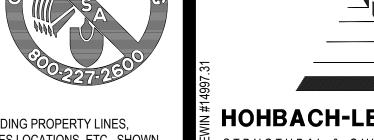
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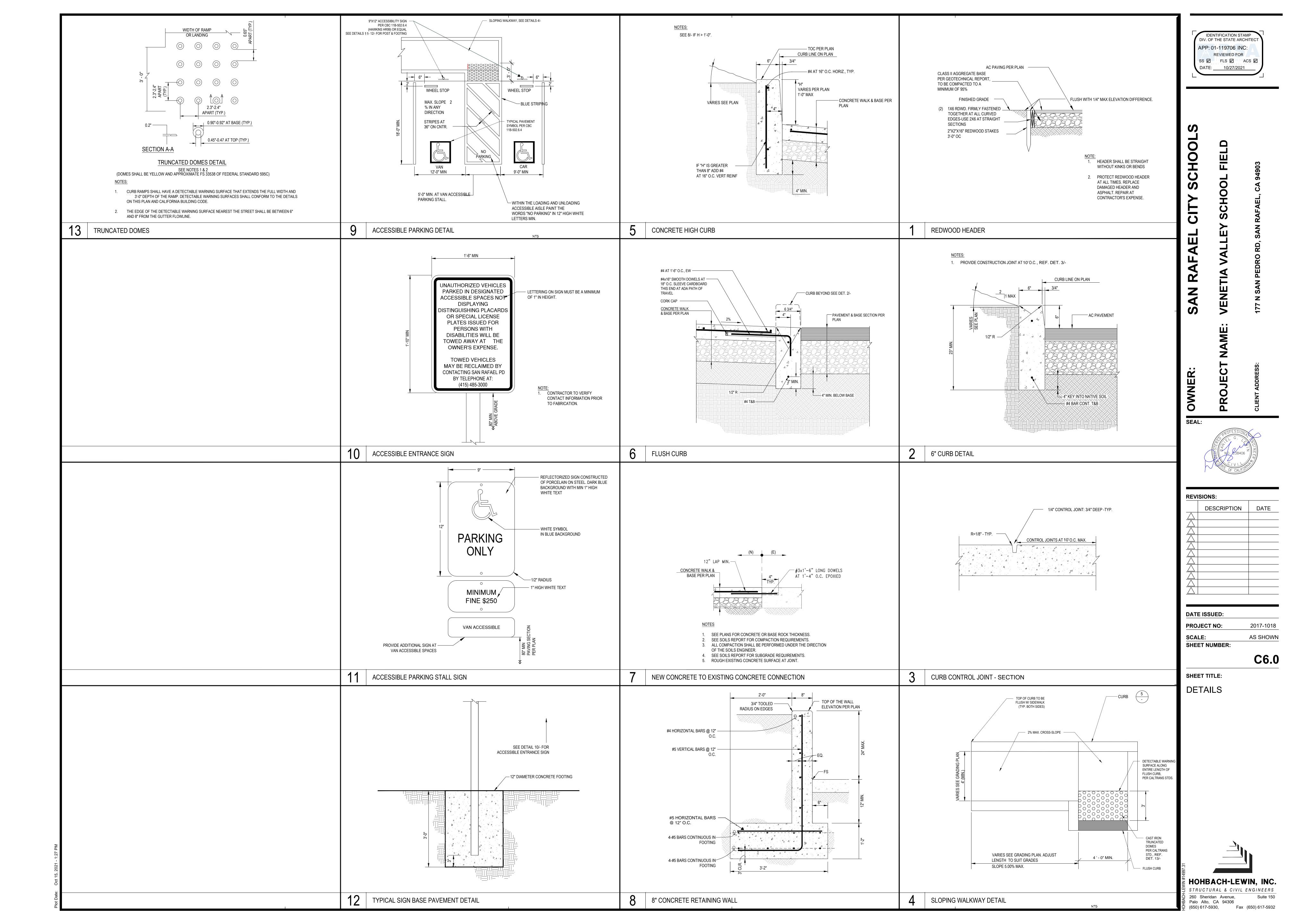
PAVEMENT PLAN

(650) 617-5930, Fax (650) 617-5932





SCALE: 1" = 20' HOHBACH-LEWIN, INC. DISCLAIMER: TOPOGRAPHIC INFORMATION, INCLUDING PROPERTY LINES, EASEMENTS, EXISTING GRADES, EXISTING UTILITIES LOCATIONS, ETC., SHOWN STRUCTURAL & CIVIL ENGINEERS ARE FOR GENERAL REFERENCE ONLY AND HAVE BEEN PROVIDED BY OTHERS 260 Sheridan Avenue, AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY HOHBACH-LEWIN, INC. Palo Alto, CA 94306



SHRUB AND GROUNDCOVER LEGEND (USDA ZONE 10a) **BOTANICAL NAME** SIZE QUANTITY WUCOLS (157 FESTUCA ARUNDINACAE TALL FESCUE 69,603 SQ. FT. UNKNOWN UNDERSTORY HYDROSEED OR WILDFLOWER MIX UNKNOWN 34,203 SQ. FT. HYROSEED

# TREE LEGEND

TREE TO BE PROTECTED-IN-PLACE

# MATERIALS LEGEND

	ALO LLOLIND			
SYM.	DESCRIPTION	COLOR	FINISH	TOTAL
	ASPHALT PAVING (REFER TO CIVIL FOR DETAIL AND SECTION) (REFER TO CIVIL PLANS FOR GRADING)	STANDARD WITH WOOD HEADER		1,805 SQ. FT.
	DECOMPOSED GRANITE (REFER TO CIVIL FOR DETAIL AND SECTION) (REFER TO CIVIL PLANS FOR GRADING)	STANDARD WIT	ΓΗ WOOD HEADER	10,137 SQ. FT.

#### COASTAL GRASSLAND & WILDFLOWER MIX

SPECIES	COMMON NAME	BULK #'s/ACRE	MIN % PLS*
Bromus carinatus	California brome	8.00	86
Eschscholzia californica	California poppy	2.00	83
Amsinckia intermedia	Fiddleneck	1.00	30
Festuca microstachys	Small fescue	6.00	90
Festuca rubra Molate	Molate Red Fescue	2.00	72
Lupinus microcarpus densiflorus	Chick lupine	4.00	83
Mimulus aurantiacus aurantiacus	Monkey flower	2.00	5
Phacelia cicutaria	Catepillar phacelia	1.00	80
Melica imperfecta	Coast Melic	2.00	60
Stipa pulchra	Purple needle grass	6.00	73
to and the transfer of the second street is	a constitution and the same and	34.00	

\* MIN % PLS (Pure Live Seed) = Seed Purity x Germination Rate

For additional plant characteristics visit the plant database portion of our website at <a href="www.ssseeds.com">www.ssseeds.com</a>.

# SEED ESTABLISHMENT AND CULTURE

TIMING: AN IDEAL TIME TO SOW THIS MIX WOULD BE UPON THE INITIATION OF THE COOLER FALL SEASON IN ORDER TO TAKE ADVANTAGE OF WINTER RAINFALL. IN MANY CASES, ANNUAL WINTER WEED GROWTH PRESENTS THE GREATEST COMPETITION TO THE ESTABLISHMENT OF AN EFFECTIVE ORNAMENTAL GRASS COVER OR

WITH LONGER ATTENTION PAID TO THE CONTROL OF INVASIVE WEEDS. IN ANY EVENT, THERE ARE SIGNIFICANT

IN NON-IRRIGATED PROJECTS, THE PLANTS WILL OF COURSE BE DEPENDENT ON NATURAL RAINFALL TO ESTABLISH AND GROW OVER THE FIRST AND SUBSEQUENT WINTERS. PLANT DEVELOPMENT WILL BE SLOWER AND MORE DEPENDENT ON WEATHER CONDITIONS AFTER PLANTING AND THROUGH THE FIRST SPRING.

# GENERAL PLANTING NOTES

- REFER TO THE WRITTEN SPECIFICATION.
- ALL BOXED TREES WILL BE SELECTED AND TAGGED BY THE LANDSCAPE DESIGNER AND OWNER REPRESENTATIVE ANY TREE INDICATED ON A PLAN SHOULD BE CONSIDERED DIAGRAMMATIC. ALL LOCAL JURISDICTION STANDARDS AND SPECIFICATIONS SHOULD BE REVIEWED PRIOR TO PLANTING.
- THE CONTRACTOR SHALL VERIFY ALL PLANT MATERIAL QUALITY AND QUANTITIES PRIOR TO INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUOUS PROTECTION OF ALL PLANT MATERIALS UPON ARRIVAL TO THE SITE. ALL TREES, SHRUBS, VINES AND GROUNDCOVERS SHALL BE SPOTTED UNDER THE
- DIRECTION OF THE LANDSCAPE DESIGNER AND OWNER REPRESENTATIVE. CONTRACTOR IS TO SPOT ALL PLANT MATERIAL AND HAVE THE LANDSCAPE DESIGNER APPROVE LOCATION PRIOR TO EXCAVATION OF ANY PLANT PIT. ALLOW 48 HOURS LEAD TIME. ANY TREE, SHRUB OR VINE THAT IS PLANTED
- WITHOUT APPROVAL OF THE LANDSCAPE DESIGNER MAY BE MOVED AT THE CONTRACTOR'S EXPENSE.. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE CORRECT HEIGHT OF ROOT BALL ABOVE GRADE.
- ADJUST TREE LOCATIONS IF THERE IS A CONFLICT WITH SUBSURFACE DRAIN LINES OR STORM DRAINS. ALL SPECIMEN TREES ARE TO BE FINE PRUNED AFTER PLANTING.
- THIRTY (30) DAYS AFTER INSTALLATION, ALL LANDSCAPE AREAS SHALL BE FERTILIZED WITH A COMMERCIAL GRADE FERTILIZER OF 16-6-8 OR APPROVED EQUAL, APPLIED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. FERTILIZER APPLICATION SHALL BE CONTINUOUS THEREAFTER AT MONTHLY INTERVALS.
- . DURING THE LAST 30 DAYS OF MAINTENANCE, THE BUILDER IS RESPONSIBLE FOR OBTAINING AS-BUILTS, CONTROLLER CHARTS AND WATER SCHEDULES FROM THE LANDSCAPE CONTRACTOR. THREE (3) COPIES ARE TO
- BE SUBMITTED TO THE MASTER OR SUB ASSOCIATION AND MAINTENANCE CONTRACTOR.
- INSTALL 12" DIAMETER MINIMUM MULCH RING AROUND THE BASE OF TREES PLANTED WITHIN TURF AREAS. 2. CONTRACTOR SHALL COVER ALL PLANTING AREAS WITH A 3" LAYER OF SHREDDED BARK MULCH.
- ENGINEERING PLANS.

B. ALL LANDSCAPE AREAS SHALL SHEET FLOW @ 2% MINIMUM OR DRAIN TO AREA. DRAINS @ 1% MINIMUM PER CIVIL

- 14. ALL TREES THAT ARE CLOSER THAN FIVE FEET (5') TO HARDSCAPE ELEMENTS SHALL BE PLANTED WITH AN OWNER
- AND AGENCY APPROVED LINEAR ROOT BARRIER. 15. SUBMIT MULCH SAMPLE WITH HORTICULTURAL SOILS REPORT PRIOR TO DELIVERY.
- 16. FLOWLINE/DIRECTION OF DRAINAGE @ 1% MIN. SEE CIVIL ENG. PLANS.



UNDERGROUND SEVICE ALERT OF SOUTHERN CALIFORNIA

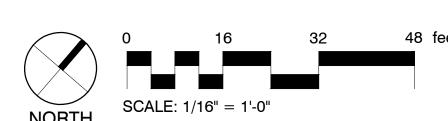
4 PARTS BY VOLUME STABILIZED NITROGEN ORGANIC AMENDMENT

THE ABOVE MATERIALS SHOULD BE THOROUGHLY BLENDED PRIOR TO USE FOR BACKFILL PURPOSES. THE IRON

SULFATE SHOULD NOT BE IN CONTACT WITH CEMENT SURFACES AT ANY TIME, OR SEVERE STAINING WILL OCCUR.

1 POUND 12-12-12 PER CUBIC YARD OF MIX

2 POUNDS IRON SULFATE PER CUBIC YARD OF MIX



APP: 01-119706 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹

**REVISIONS:** DESCRIPTION DATE

**PROJECT NO:** 2017 / 40104 **DATE ISSUED:** 12/18/2018

As indicated

LA1.00

SCALE:

LANDSCAPE PLANTING PLAN



T 510.267.3180 WWW.SVA-ARCHITECTS.COM

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#### **IRRIGATION GENERAL NOTES:**

REPRESENTATIVE IMMEDIATELY.

- 1. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO INSTALL THE IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, LICENSES, TEXTS, AND/OR APPROVALS, PAYING ANY FEES AND INSTALLING OR ARRANGING FOR ALL WATER METERS AND TAPS FOR INSTALLATION AND OPERATION AS APPLICABLE. WATER METERS SHALL BE PLACED IN NAME OF THE CONTRACTOR, AND WILL PAY FOR MONTHLY WATER CHARGES UNTIL PROJECT TURNOVER TO CLIENT. WATER METERS SHALL REMAIN OPERATIONAL AND TURNED ON THROUGH ALL PHASES OF THE CONTRACT TO ENSURE PLANTS RECEIVE REQUIRED
- 2. THE IRRIGATION CONTRACTOR IS REQUIRED BY LAW TO NOTIFY 811 DIG ALERT 72 HOURS PRIOR TO ANY EXCAVATION. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THEMSELVES FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. IRRIGATION CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF SAID UTILITIES WHETHER OR NOT 811 IS NOTIFIED.
- 3. THE CONTRACTOR SHALL COORDINATE AS NECESSARY WITH THE GENERAL CONTRACTOR AND OWNER'S REPRESENTATIVE FOR SUCCESSFUL COMPLETION OF THIS WORK.
- 4. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WITHOUT VERIFYING ACTUAL ON-SITE WATER PRESSURE FROM THE SOURCE. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- 5. THE CONTRACTOR ASSUMES ALL LIABILITY ASSOCIATED WITH THE MODIFICATION OF THE IRRIGATION SYSTEM DESIGN WITHOUT NOTIFYING THE OWNER'S REPRESENTATIVE
- 6. ALL IRRIGATION EQUIPMENT IS TO BE AS SPECIFIED OR APPROVED EQUAL PER THE DISCRETION OF THE OWNER'S REPRESENTATIVE.
- 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT A THOROUGH SITE INSPECTION AND REVIEW OF THE PROJECT CONSTRUCTION DOCUMENTS INCLUDING BUT NOT LIMITED TO THE FOLLOWING: ARCHITECTURE PLAN, LANDSCAPE PLAN, UTILITY PLAN, CIVIL PLAN, GRADING AND DRAINAGE PLAN AND ALL OTHER ASSOCIATED PLANS THAT AFFECT THIS WORK PRIOR TO BEGINNING CONSTRUCTION. IF THE CONTRACTOR OBSERVES ANY DISCREPANCIES AMONG THE CONSTRUCTION DOCUMENTS AND THE EXISTING CONDITIONS ON SITE, IT IS THEIR RESPONSIBILITY TO CONTACT THE OWNER'S
- 8. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL AND STATE REGULATIONS AND INSTALL THE IRRIGATION SYSTEM AND ITS COMPONENTS PER THE MANUFACTURER'S SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN AND PROVIDE PAYMENT FOR ALL PERMITS REQUIRED BY ANY LOCAL AND STATE AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION OVER THIS SITE
- 9. THE CONTRACTOR MUST VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. IF THE CONTRACTOR FAILS TO DO SO AND DAMAGES ANY UNDERGROUND UTILITIES THROUGH THE COURSE OF HIS WORK THE IRRIGATION CONTRACTOR SHALL PAY FOR ANY REPAIR WORK ASSOCIATED WITH SAID DAMAGES.
- 10. IT IS THE INTENT OF THIS DESIGN THAT ALL IRRIGATION EQUIPMENT BE INSTALLED WITHIN LANDSCAPE AREAS AND WITHIN THE PROJECT LIMITS. EQUIPMENT SHOWN OUTSIDE OF THESE LIMITS IS SHOWN FOR GRAPHIC CLARITY ONLY. IF THERE IS A QUESTION REGARDING THE LOCATION OF ANY COMPONENT OF THE IRRIGATION SYSTEM, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNER'S REPRESENTATIVE. IF THE CONTRACTOR NEGLECTS TO NOTIFY THE NECESSARY PARTIES, THE CONTRACTOR SHALL PAY FOR ANY REPLACEMENT OR MODIFICATION TO ENSURE PROPER LOCATION AND OPERATION OF THE IRRIGATION SYSTEM AND ITS COMPONENTS.
- 11. CONFIRM STATIC WATER PRESSURE AT LEAST 7 DAYS BEFORE BEGINNING WORK. IF STATIC WATER PRESSURE IS LESS THAN STATED IN PRESSURE CALCULATIONS DO NOT PROCEED UNTIL DIRECTED SO BY THE LANDSCAPE ARCHITECT. IF ACTUAL SITE STATIC PRESSURE EXCEEDS DESIGN PRESSURE BY 15 P.S.I. IN ANY ZONE, A PRESSURE REDUCING VALVE SHALL BE INSTALLED.
- 12. 120 VAC ELECTRICAL POWER SOURCE AT CONTROLLER LOCATION SHALL BE PROVIDED BY OTHERS. THE IRRIGATION CONTRACTOR SHALL MAKE THE FINAL CONNECTION FROM THE ELECTRICAL SOURCE TO THE CONTROLLER WITH A HARDWIRE CONNECTION APPROVED AND INSTALLED BY A LICENSED ELECTRICIAN.
- 13. ALL VALVE BOXES AND LIDS SHALL BE PLASTIC WITH PURPLE LOCKING COVERS. LID COLOR TO BE PURPLE. INSTALL PER THE CONSTRUCTION DETAILS. DO NOT INSTALL IN PAVED AREAS.
- 14. ALL VALVE BOXES SHALL BE INSTALLED A MINIMUM OF 1'-0" FROM THE EDGE OF PAVED SURFACES AND 3'-0" FROM THE CENTERLINE OF DRAINAGE SWALES OR RETENTION BASINS. THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES TO BE FLUSH FINISH GRADE. CONTRACTOR TO BRAND VALVE ID NUMBER AND TYPE ON ALL LIDS. HEAT BRAND LIDS WITH 2" HIGH LETTERS.
- 15. GROUNDING FOR THE IRRIGATION CONTROLLER IS TO BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS AND PER THE AMERICAN SOCIETY OF IRRIGATION CONSULTANTS GUIDELINE 100-2002 FOR EARTH GROUNDING ELECTRONIC EQUIPMENT IN IRRIGATION SYSTEMS FOUND AT www.asic.org/Design\_Guides.aspx. FOR TECHNICAL SUPPORT REGARDING THE IRRIGATION CONTROLLER OR GROUNDING PLEASE CONTACT MANUFACTURER'S TECHNICAL SERVICES.
- 16. CONTROLLER WIRE SHALL BE 12GA MIN. UL APPROVED WIRE, COLOR PER SPECIFICATIONS, TAPED AND BUNDLED EVERY 10'. CONTRACTOR SHALL USE UL APPROVED WIRE STRIPPER AND WATERPROOF CONNECTIONS AT ALL SPLICES AND CONNECTIONS POINTS.
- 17. CONTRACTOR SHALL INSTALL TRACER WIRE IN ALL PRESSURE MAINLINE TRENCHES. SEE IRRIGATION DETAILS FOR MORE INFORMATION.
- 18. ALL PIPE CONNECTIONS SHALL BE PRIMED WITH AN APPROVED COLOR PRIMER BEFORE BEING CHEMICAL WELDED.
- 19. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ADEQUATE VERTICAL SEPARATION BETWEEN ALL IRRIGATION DISTRIBUTION LINES AND ALL UTILITIES (EXISTING OR PROPOSED), CONDUIT, STORM WATER COMPONENTS, DRAINS, ETC.
- 20. PLANT MATERIAL LOCATIONS TAKE PRECEDENCE OVER IRRIGATION LINES. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL INCLUDING PERENNIAL BEDS.
- 21. THE CONTRACTOR SHALL STAKE THE LOCATION OF THE MAINLINE, TURF LATER LINES, DRIP IRRIGATION LINES, CONTROL VALVES, GATE VALVES, ETC. AND SCHEDULE A REVIEW WITH THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- 22. CONTRACTOR SHALL FINE TUNE AND ADJUST NOZZLE DIRECTION AND RADIUS TO REDUCE OVERSPRAY ONTO IMPERVIOUS SURFACES. HEAD SPACING SHALL NOT EXCEED 50% OF SPRAY DIAMETER BASED ON MANUFACTURERS OPERATING SPECIFICATIONS.SPRINKLER HEAD SPACING SHALL BE DESIGNED FOR HEAD-TO-HEAD COVERAGE OR HEADS SHALL BE SPACED AS PER MANUFACTURER'S RECOMMENDATIONS AND ADJUSTED FOR PREVAILING WINDS. THE SYSTEM SHALL BE INSTALLED FOR MINIMUM RUN-0FF AND MINIMUM OVER SPRAY ONTO NON-IRRIGATED AREAS, (I.E. PAVING, ROADS AND STRUCTURES)
- 23. CONTRACTOR SHALL INSTALL A QUICK COUPLER IN 10" PURPLE VALVE BOX AT THE END OF ALL BRANCHES OF THE MAINLINE. OR AS SHOWN ON PLANS.
- 24. AFTER AWARD OF CONTRACT AND BEFORE ANY IRRIGATION SYSTEM MATERIALS ARE ORDERED FROM SUPPLIERS OR DELIVERED TO THE JOB SITE, SUBMIT TO THE OWNER A COMPLETE LIST OF ALL IRRIGATION SYSTEM MATERIALS, OR PROCESSES PROPOSED TO BE FURNISHED AND INSTALLED AS PART OF THIS CONTRACT. THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE WILL ALLOW NO SUBSTITUTIONS WITHOUT PRIOR WRITTEN ACCEPTANCE. MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF THEIR LIABILITY UNDER THE GUARANTEE. SUCH WARRANTIES SHALL ONLY SUPPLEMENT THE GUARANTEE.
- 25. IRRIGATION CLOSEOUT DOCUMENTS SHALL INCLUDE A LAMINATED COPY OF THE WATER BUDGET AND BE PERMANENTLY INSTALLED INSIDE THE IRRIGATION CONTROLLER DOOR.
  - CHART CONTAINING ZONE NUMBER, PRECIPITATION RATE AND GPM.
  - LOCATION OF EMERGENCY IRRIGATION SYSTEM SHUT-OFF VALVE.

# IRRIGATION GENERAL NOTES CONTINUED:

- 26. THE CONTRACTOR SHALL PROVIDE A SEASONAL MAINTENANCE SCHEDULE TO ENSURE THE EFFICIENCY AND LONGEVITY OF THE IRRIGATION SYSTEM. THE MAINTENANCE SCHEDULE SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING LIST OF BEST MANAGEMENT PRACTICES:
  - CHECK HEADS FOR COVERAGE AND LEAKAGE.
  - CHECK CONTROLLER PROGRAMMING AND ADJUST FOR SEASONAL CHANGES AS NECESSARY.
  - VERIFY THAT THE WATER SUPPLY AND PRESSURE ARE AS STATED IN THE DESIGN.
  - CERTIFY THE BACKFLOW PREVENTION DEVICE AND SUBMIT TEST RESULTS TO THE PROPERTY MANAGER.
  - PERIODICALLY VERIFY THE THE SENSORS IN THE IRRIGATION SYSTEM ARE OPERATING CORRECTLY.

## PROJECT SPECIFIC IRRIGATION NOTES:

#### 1. SYSTEM PARAMETERS :

- a. WATER WINDOW: 9:00 PM 6:00 AM
- b. MAXIMUM GALLONS PER MINUTE 60 GPM
- c. STATIC PRESSURE AT POC: 125.00 PSI2. POINT OF CONNECTION:
- a. PROPOSED PLAYFIELD 2-1/2" MAINLINE STUB-OUT POINT OF CONNECTION LOCATED BY BIORETENTION
- b. EXISTING 2" RECYCLED WATER METER #70045091 LOCATED ON THE SOUTH DRIVEWAY ON SAN PEDRO ROAD
- c. EXISTING BACKFLOW
- 3. <u>CONTROLLER:</u> CONTRACTOR TO COORDINATE WITH OWNER'S REPRESENTATIVE FOR ELECTRICAL POWER SERVICE. ALL ELECTRICAL EQUIPMENT AND POWER CONNECTION INSTALLATION SHALL CONFORM TO ALL LOCAL CODES. INSTALL A LINE VOLTAGE SURGE DEVICE (INTERMATIC AG2401C3/ OR SQUARE D SDSA1175) FOR 120V IN A JUNCTION BOX PRIOR TO CONTROLLER.
- RAIN SENSORS: MOUNT THE RAIN SENSOR ON BUILDING EAVE ADJACENT TO THE CONTROLLER. THE SENSOR SHALL BE MOUNTED IN A LOCATION IN FULL SUN AND OPEN TO RAINFALL. SENSOR SHALL BE NO MORE THAN 200' FROM WIRELESS RECEIVER. MOUNT WIRELESS RECEIVER ON OR ADJACENT TO THE IRRIGATION CONTROLLER.
- 5. FINAL IRRIGATION CONTROLLER, SENSOR LOCATION AND SENSOR MOUNTING SYSTEM TO BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

#### 6. SYSTEM PRESSURE:

#### a. REQUIRED MINIMUM STATIC PRESSURE OF 80 PSI AND MAXIMUM SAFE FLOW OF 5 FPS FROM POINT OF CONNECTION.

- b. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESSURE IN THE FIELD AT THE POINT OF CONNECTION BEFORE CONSTRUCTION BEGINS AND FOR NOTIFYING THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCY BETWEEN THE DESIGN PRESSURE OF THE SYSTEM AND THE MEASURED PRESSURE IN THE FIELD. IF THE CONTRACTOR FAILS TO NOTIFY OWNER'S REPRESENTATIVE OF SUCH DISCREPANCIES, THEN THE CONTRACTOR ASSUMES ALL LIABILITY AND COSTS ASSOCIATED WITH SYSTEM MODIFICATIONS TO ACCOMMODATE THE ACTUAL PRESSURE.
- c. CONTRACTOR SHALL INSTALL A WILKINS 500XLYSBR PRESSURE REGULATING VALVE AT PLAYFIELD POINT OF CONNECTION AND SET AT 80 PSI IF PRESSURE EXCEEDS 90 PSI. IF PRESSURE IS LESS THAN 75 PSI, PLEASE CONTACT OWNER'S REPRESENTATIVE FOR COORDINATION.

## SLEEVING COORDINATION NOTES

- 1. INSTALLATION OF IRRIGATION SLEEVING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- 2. SLEEVES SHALL BE INSTALLED PRIOR TO THE START OF PAVING OPERATIONS. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR FOR LOCATION AND SIZING OF SLEEVES PRIOR TO THE START OF CONSTRUCTION.

  3. THE CONTRACTOR SHALL SLEEVE ALL IRRIGATION DISTRIBUTION LINES, VALVE CONTROL WIDES, AND COMMUNICATION WIDES.
- 3. THE CONTRACTOR SHALL SLEEVE ALL IRRIGATION DISTRIBUTION LINES, VALVE CONTROL WIRES AND COMMUNICATION WIRES UNDER ALL PAVED SURFACES, WALL FOOTERS, DRAINAGE CHANNELS, INLETS, CATCH BASINS, ETC.
- 4. ALL SLEEVES SHALL EXTEND A MINIMUM OF 1 FOOT BEYOND EDGE OF ALL OBSTRUCTIONS. NO TEES, ELLS OR OTHER TURNS IN PIPING SHALL BE LOCATED UNDER ANY OBSTRUCTIONS. MARK CURB OR PAVING WITH 2" 'X' AT SLEEVE LOCATIONS.
- 5. SLEEVING SHALL BE INSTALLED PER THE PLANS BASED ON THE CHART BELOW. ALL MAINLINE, VALVE CONTROL AND COMMUNICATION WIRES, AND LATERALS UNDER PAVED SURFACES ARE TO BE INSTALLED IN SEPARATE SLEEVING.

SLEEVED PIPE SIZE/WIRE QTY

MAINLINE PIPING

LATERAL PIPING

REQUIRED SLEEVE SIZE AND QTY

6" PVC (1)

2X DIAMETER OF PIPE

CONTROL WIRES

# **EXISTING TREE NOTES**

- ALL TRENCHING OR OTHER WORK UNDER LIMB SPREAD OF ANY AND ALL PLANT MATERIAL SHALL BE DONE BY HAND OR BY OTHER METHODS SO AS TO PREVENT DAMAGE TO LIMBS OR BRANCHES.

  WHERE IT IS NECESSABLY TO EXCAVATE AD INCENT TO EXCENT AD EXCENT.
- 2. WHERE IT IS NECESSARY TO EXCAVATE ADJACENT TO EXISTING TREES USE ALL POSSIBLE CARE TO AVOID INJURY TO TREES AND TREE ROOTS.

4" PVC (1)

- 3. EXCAVATION, IN AREAS WHERE 2 INCH AND LARGER ROOTS OCCUR, SHALL BE DONE BY HAND. ROOTS 2 INCHES OR LARGER IN DIAMETER, EXCEPT DIRECTLY IN THE PATH OF PIPE OF CONDUIT, SHALL BE TUNNELED UNDER AND SHALL BE HEAVILY WRAPPED WITH BURLAP TO PREVENT SCARRING OR EXCESSIVE DRYING.
- 4. WHERE A TRENCHING MACHINE IS OPERATED CLOSE TO TREES HAVING ROOTS SMALLER THAN 2 INCHES IN DIAMETER, WALL OF TRENCH ADJACENT TO TREE SHALL BE CLOSED WITHIN 24 HOURS, AND WHEN THIS IS NOT POSSIBLE, SIDE OF TRENCH.
- 5. TRENCHES ADJACENT TO TREES SHALL BE CLOSED WITHIN 24 HOURS, AND WHEN THIS IS NOT POSSIBLE, SIDE OF TRENCH ADJACENT TO TREE SHALL BE KEPT SHADED WITH MOISTENED BURLAP OR CANVAS.

# **EXISTING IRRIGATION NOTES:**

- 1. BEFORE STARTING WORK, CONTRACTOR TO PERFORM SYSTEM WALK THRU TO VERIFY FUNCTION OF ENTIRE SYSTEM.
- 2. CONTRACTOR TO CONFIRM FUNCTION OF ALL AFFECTED VALVES PRIOR TO CONSTRUCTION AND AGAIN POST CONSTRUCTION.
- 3. CONTRACTOR TO REPAIR/ REPLACE ANY DAMAGE CAUSED BY CONSTRUCTION BEYOND SCOPE OF WORK.
- 4. WIRES, COMPONENTS THAT OPERATE AREAS OUTSIDE OF LOC TO REMAIN AND ARE TO BE UNDISTURBED, IF POSSIBLE.
- 5. REUSE EXISTING VALVE WIRES TO BE ABANDONED. ALL NEW VALVES TO BE CONNECTED TO EXISTING CONTROLLERS IF CAPABLE.
- 6. EXISTING IRRIGATION WITHIN EXCAVATION AREA TO BE REMOVED OR ABANDONED TO LIMITS OF WORK BOUNDARY.

COORDINATE WITH CLIENT REPRESENTATIVE BEFORE ANY WORK TO BE DONE.

- 7. CONTRACTOR TO VERIFY EXISTING SYSTEM FUNCTIONS FOLLOWING DEMO AND RETROFIT PER IRRIGATION PLANS. CONTRACTOR TO CAP ALL LATERAL LINES THAT FEED INTO LOC OR RETROFIT INTO NEW DESIGN AS NOTED ON DESIGN PLANS.
- 8. CONTRACTOR TO MINIMIZE DOWN TIME OF EXISTING SYSTEM. CONTRACTOR TO BE CONSCIENCE OF PLANT MATERIAL BEING IRRIGATED BY EXISTING IRRIGATION SYSTEM. CONTRACTOR IS RESPONSIBLE FOR REPLACING ALL PLANT MATERIAL LOST DUE TO NON OPERATION OF EXISTING SYSTEM.
- 9. CONTRACTOR TO RECONNECT EXISTING MASTER VALVE, FLOW SENSOR, AND VALVE STATIONS #1-16 TO NEW CONTROLLER.

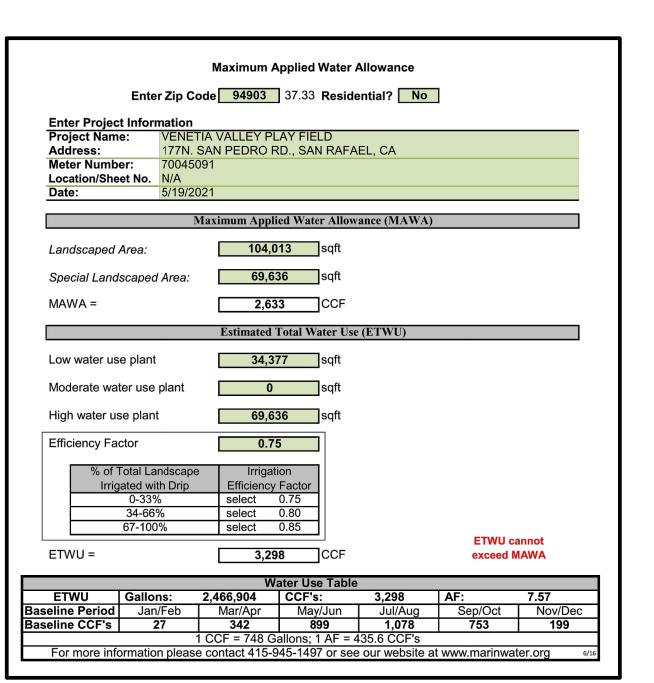
  10. CONTRACTOR TO VERIFY OPERABLE CONDITIONS OF POC EQUIPMENT AND REPAIR AND OR REPLACE IF NECESSARY.

## GUARANTEED AND ACCEPTANCE:

- 1. MAINTENANCE PERIOD. DURING THE INSTALLATION, ESTABLISHMENT, AND MAINTENANCE, CONTRACTOR SHALL PERFORM THE FOLLOWING ACTIVITIES AS A MINIMUM AND TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT:
- a. INSTALL AND MAINTAIN THE CONTROLLER PROGRAM TO INSURE THE PROPER DISTRIBUTION OF WATER (INCLUDES REPLACEMENT OF ANY BATTERIES).
- b. INSPECT, REPAIR, AND/OR REPLACE ANY EQUIPMENT THAT IS FOUND DEFECTIVE OR MAY BE DAMAGED BY OTHER
- c. MAKE ANY ADJUSTMENTS THAT MAY BECOME NECESSARY TO ENSURE THE PROPER DELIVERY OF WATER TO THE PLANT MATERIAL.
- 2. AS-BUILT DRAWINGS. UPON COMPLETION OF THE REQUIRE MAINTENANCE PERIOD, THE LANDSCAPE ARCHITECT WILL MAKE AN INSPECTION OF THE PROJECT. THE CONTRACTOR SHALL FURNISH THE LANDSCAPE ARCHITECT A SET OF AS-BUILT DRAWINGS ON REPRODUCIBLE FILM BASE SHEETS. THE LANDSCAPE ARCHITECT WILL CHECK BASE SHEETS TO BE SURE THEY ARE A TRUE RECORD OF THE PROJECT CONDITIONS AND WILL DIRECT THE CONTRACTOR TO CORRECT ANY ERRORS THAT ARE FOUND. THE DRAWINGS SHALL SHOW ALL VALVE LOCATIONS BY TRIANGULATION FROM A FIXED OBJECT AND ANY CHANGE TO SPRINKLER HEAD LOCATION AND REROUTING OF MAIN AND LATERAL LINES (CHANGE OF THIS NATURE SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION).
- 3. CONTRACTOR IS RESPONSIBLE TO PROVIDE AS-BUILT DRAWINGS THAT INCLUDE, BUT NOT LIMITED TO THE FOLLOWING ITEMS:
- a. CONTROLLER LOCATION
- b. BACKFLOW, MASTER VALVE, AND FLOW SENSOR
- c. MAINLINE RUN
- d. MAINLINE, LATERAL, AND WIRE SLEEVES
- e. CONTROL VALVES AND DRIP CONTROL ZONE KITSf. PULL BOXES, SPLICE BOXES
- 4. OPERATING AND MAINTENANCE DATA. THE CONTRACTOR SHALL PROVIDE INSTRUCTIONS COVERING FULL OPERATION, CARE AND MAINTENANCE OF THE EQUIPMENT, INCLUDING A SCHEDULE SHOWING LENGTH OF TIME EACH VALVE IS TO BE OPEN TO PROVIDE DETERMINED AMOUNT OF WATER, AND INSTRUCT THE STATE'S DESIGNATED PERSONNEL IN PROPER OPERATION OF
- 5. THE CONTRACTOR SHALL ALSO TEST AND ASSURE THE PROPER ELECTRICAL WORKING ORDER OF THE SYSTEM TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT.

# TEMPORARY IRRIGATION NOTES:

- 1. CONTRACTOR TO INSTALL PROPER IRRIGATION METHODOLOGY TO ESTABLISH HYDROSEED ON ALL PLANTING AREAS LOCATED PER PLANTING PLAN.
- 2. CONTRACTOR TO FOLLOW PROPER PROCEDURES OF TEMPORARY IRRIGATION PER JURISDICTION.
- 3. CONTRACTOR SHALL BE ABLE TO USE PROPOSED IRRIGATION MAINLINE AND CONTROLLER TO ESTABLISH HYDROSEED, IF ALLOWED PER JURISDICTION. ONCE SEED HAS BEEN ESTABLISHED, CONTRACTOR SHALL REMOVE IRRIGATION EQUIPMENT AND RETURN TO CLIENT REPRESENTATIVE.
- 4. CONTRACTOR TO REVIEW PROPOSED IRRIGATION PARAMETERS IN ORDER PRIOR TO INSTALLATION OF TEMPORARY IRRIGATION.



STATION #	HYDROZONE	IRRIGATION METHOD	GPM	AREA (SF)	% OF LANDSCAPE AREA
17	LOW	ROTARIES	24.64	3948	3.80%
18	HIGH	ROTORS	52.57	6225	5.98%
19	LOW	DRIPLINE	2.42	275 0.26%	
20	HIGH	ROTORS	47.98	6331	6.09%
21	HIGH	ROTORS	49.80	6379	6.13%
22	LOW	SPRAY	31.48	1408	1.35%
23	LOW	ROTORS	46.68	6342	6.10%
24	LOW	ROTORS	23.04	2901	2.79%
25	HIGH	ROTORS	33.20	4320	4.15%
26	HIGH	ROTORS	33.20	3566	3.43%
27	HIGH	ROTORS	49.80	6111	5.88%
28	LOW	ROTORS	57.47	6416	6.17%
29	LOW	ROTORS	57.34	6755	6.49%
30	LOW	ROTORS	49.76	6332	6.09%
31	HIGH	ROTORS	49.80	6480	6.23%
32	HIGH	ROTORS	49.80	6500	6.25%
33	HIGH	ROTORS	49.80	6226	5.99%
34	HIGH	ROTORS	49.80	6820	6.56%
35	HIGH	ROTORS	33.20	4208	4.05%
36	HIGH	ROTORS	48.00	6470	6.22%
			TOTAL	104013	100.00%

	HYDROZONE TABLE SUMMARY					
HYDROZONE	AREA (SF)	% OF LANDSCAPE AREA				
LOW	34377	33.05%				
MODERATE	0	0				
HIGH	69636	66.95%				
TOTAL	104013	100.00%				

CRITICAL ANALYSIS

PRESSURE AVAILABLE	
Static Pressure at POC:	125.00 ps
Pressure Available:	125.00 ps
DESIGN ANALYSIS	
Maximum Multi-valve Flow:	60.00 gpm
Critical Station:	30
Design Pressure:	70.00 psi
Friction Loss:	2.50 psi
Fittings Loss:	0.25 psi
Elevation Loss:	0.00 psi
Loss through Valve:	1.48 psi
Pressure Req. at Critical Station:	74.23 psi
Loss for Fittings:	0.15 psi
Loss for Main Line:	1.54 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi
Critical Station Pressure at POC:	75.92 psi
Pressure Available:	125.00 psi
Pressure Regulator:	80.00 psi
Residual Pressure Available:	4.08 ps

# Marin Water Landscape Plan Review Packet

# Recycled Water Irrigation Notes

Regulations – Prior to start of work contractors shall familiarize themselves with all State and local laws, codes, regulations, and ordinances pertaining to the installation, use, and operation of recycled water. In addition, seven days before any work is started, the installing contractor shall contact the Reclamation and Backflow Group and schedule an on-site meeting to discuss the project and the inspection process (415-945-1558).

Approved Plans – Contractor shall conduct all work from plans approved and stamped by MMWD.

**Temporary Connection\*** – A temporary point-of-connection (POC) from the potable water system may be necessary to supply the irrigation system until final approval has been granted. When required, the temporary POC shall be removed and inspected by MMWD prior to activation of the recycled water supply. **Controller** – Irrigation system(s) shall be equipped with a high-efficiency,

weather based, or other sensor-based self-adjusting irrigation controller. Recycled water controllers shall be designated for recycled water use only and shall not control any potable water irrigation system. Each recycled water controller shall have a sign (supplied by MMWD) noting recycled water operating parameters.

Location of this sign shall be at the direction of MMWD.

Irrigation Schedule\* – The contractor shall provide MMWD a detailed irrigation schedule for each recycled water controller. Irrigation schedules shall include a color coded map depicting areas served by each control valve. Scheduling of all overhead spray irrigation systems shall be restricted to the hours of 9:00 p.m. – 6:00 a.m.
 Backflow Protection\* – Backflow protection is not required on recycled water services unless provisions for chemical injection i.e., in-line chemigation or other conditions exist which make backflow protection necessary as determined by MMWD. Backflow protection, when required, shall be of a type specified by MMWD and shall be

installed in accordance with MMWD standards installation instructions.
 Pressure Regulation – A pressure reducing valve (PRV) shall be installed between the recycled water meter and the first control valve. The PRV shall be set so that all components of the irrigation system operate at the manufacturer's recommended optimal pressure. Additional pressure compensating devices may be necessary to meet equipment manufacturer's specifications.
 Quick Couplers – Quick couplers (QC) shall have locking, purple color thermoplastic covers marked with "Do Not

Drink" in English and Spanish and shall include the international symbol for "do not drink". QC's shall be installed in

planter areas, in round irrigation valve boxes.
 Irrigation Control Valves – Use of special irrigation control valves (dirty water valves) shall not be required.
 Irrigation Valve Boxes – Valve boxes shall be purple in color, shall be installed in planters, and shall be grouped whenever possible. This requirement shall not apply to subterranean emitter boxes.

Piping – All new buried irrigation pipe (PVC) shall be purple PVC with "CAUTION RECYCLED WATER DO NOT DRINK" clearly imprinted on the pipe. All copper pipe and/or irrigation pipe installed inside a structure shall comply with the provisions of the California Plumbing Code for marking recycled water piping systems.
 Water Waste – Irrigation system components shall be installed and adjusted to prevent recycled water from leaving

the landscape area via overspray, mist, or runoff. Check valves shall be installed at each sprinkler head where low

head drainage may occur. Slopes greater than 15% shall not be irrigated by any form of spray irrigation.
 13. Appurtenance Identification\* – All appurtenances within the irrigation system, i.e., control valves, shut-off valves, quick couplers, etc. shall have attached, by nylon wire tie an identification tag as manufactured by T. Christy Enterprises. Tags shall read "WARNING RECYCLED WATER DO NOT DRINK", in English and Spanish.
 14. Signage – Notification signs as supplied by MMWD shall be installed in locations designated by MMWD. Signs shall at

all times be visible to users of the site. Additional signs may be required where recycled water is supplied to water features.
 15. Inspections – All irrigation pipe and components installed in a recycled water irrigation system shall be inspected by the MMWD prior to burial. Contractor shall contact the MMWD Recycled Water Section at least three (3) working

the MMWD prior to burial. Contractor shall contact the MMWD Recycled Water Section at least three (3) working days prior to start of work.
 Separation Test – Contractor shall perform a recycled water system separation test in the presence of an MMWD Recycled Water representative following installation of the irrigation system and prior to activation of the recycled

water service.
 Coverage Test – Contractor shall perform an irrigation system coverage test in the presence of an MMWD Recycled Water representative following the installation of the irrigation system prior to final approval.
 Final Approval – Final project approval shall be granted following installation of all system components, a separation

test and coverage test has been conducted and all codes, regulations, and ordinances have been satisfied.

Requirement does not apply to irrigation projects where recycled water is not readily available.



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APP: 01-119706 INC:

REVIEWED FOR

SS FLS ACS D

DATE: 10/27/2021

CHOOL FIELD

ECT NAME: VENETIA VALLEY SCH

No. C-18301
Jan 31, 2023

 PROJECT NO:
 2017 / 40104

 DATE ISSUED:
 12/18/2018

 SCALE:
 As indicated

IRRIGATION LEGEND AND NOTES



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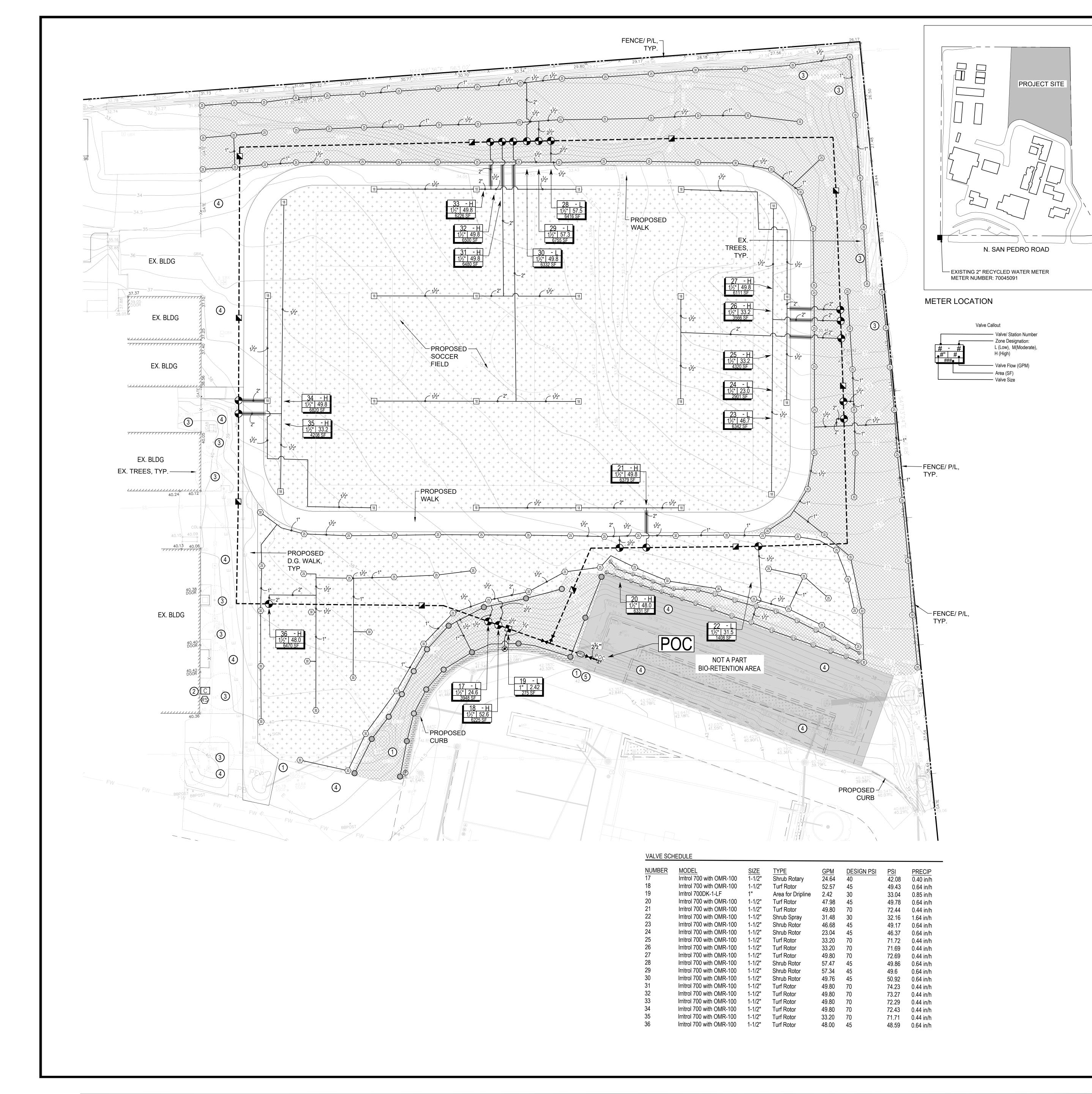
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CVMDOL	DECODIDATION	GP	M			
SYMBOL	DESCRIPTION	Q	H	F	PSI	RADIUS
(5) (5) (3) Q H F	POP-UP SPRAY Hunter PROS-12-PRS30-CV-R	.12	.23	.47	30	5'
® ® ® Q H F	POP-UP SPRAY Hunter PROS-12-PRS30-CV-R	.24	.47	.97	30	8'
(1) (1) (1) Q H F	POP-UP SPRAY Hunter PROS-12-PRS30-CV-R	.42	.88	1.59	30	10'
(12) (12) (2) Q H F	POP-UP SPRAY Hunter PROS-12-PRS30-CV-R	.67	1.30	2.70	30	12'
(5) (15) (5) Q H F	POP-UP SPRAY Hunter PROS-12-PRS30-CV-R	.97	1.86	3.75	30	15'
2000	POP-UP ROTARY Hunter MP2000 PROS-12-PRS40-CV-R	.43	.77	1.48	40	20'
3000	POP-UP ROTARY Hunter MP3000 PROS-12-PRS40-CV-R	.86	1.82	3.64	40	30'
<u>(25)</u>	POP-UP ROTOR Hunter I-20-06-PRB-R-MPR	1.00	1.98	3.82	45	25'
30>	POP-UP ROTOR Hunter I-20-06-PRB-R-MPR	1.40	2.96	5.78	45	30'
35	POP-UP ROTOR Hunter I-20-06-PRB-R-MPR	1.92	3.81	7.58	45	35'
25)	POP-UP ROTOR Hunter I-20-12-PRB-MPR-R	1.00	1.98	3.82	45	25'
30)	POP-UP ROTOR Hunter I-20-12-PRB-MPR-R	1.40	2.96	5.78	45	30'
35)	POP-UP ROTOR Hunter I-20-12-PRB-MPR-R	1.92	3.81	7.58	45	35'
18	POP-UP ROTOR Hunter I-50-SS-06-ON-TURFCUP		16.6		70	60'

# IRRIGATION LEGEND

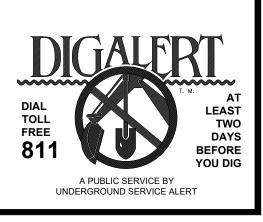
SYMBOL	DESCRIPTION	COMMENTS
POC <b>H</b>	POINT OF CONNECTION	
দ	Connection to existing 2-1/2" mainline	
	RECYCLED WATER SIGN	Refer to City of Marin
	Locations and quantity of signs to be coordinated	Recycled Water Notes
	with owner's representative and city representative	,
	WATER METER	Located on south drivewa
	Existing 2" Recycled Water Meter #70045091	on San Pedro Road
	CONTROLLER	Rain Master Eagle Plus
С	Rain Master EGP-48i-S w/ RM-ISVC-2Y	Controller in a stainless
	48 station controller w/ additional 2 years of	steel wall mount enclosure
	permium (freedom) wireless data service and zipet	includes I-Card and 2 year
	for Rain Master iCentral Control System	Rain Master I-Central
	•	Service
	RAIN SENSOR	Wireless
RS	Irritrol RS-500 wireless rain sensor	
	ICOLATION CHUT OFF MALVE	1: 0:
	ISOLATION SHUT-OFF VALVE	Line Size
×	Nibco Stainless Steel Ball Valve (T-580)	
	Carson Round Purple Valve Box (910)	
_	QUICK COUPLER	Provide:
	Rain Bird 3/4" Quick Coupler (33-DNP)	Swivel (SH-0)
	Carson Round Purple Valve Box (910)	Key (33DK)
	REMOTE CONTROL VALVE	Install a ball valve at each
	Irritrol (700-1/OMR-100) - Size per plan	valve manifold
	Carson Jumbo Purple Valve Box (1220)	
	DRIP CONTROL ZONE VALVE	Install a ball valve at each
	Irritrol 1" Drip Valve (700DK-1-LF)	valve manifold
	Carson Jumbo Purple Valve Box (1220)	
	PRESSURE REDUCING VALVE	Set pressure to 80 psi,
PRV	1-1/2" Wilkins PRV (500XLYSBR)	Ref. system pressure note
	Carson Jumbo Purle Valve Box (1220)	, ,
<b>@</b>	DRIPLINE TRANSITION POINT	
Ø	Pipe transition point from PVC lateral to dripline	
	header	
	DRIPLINE	
	Toro Dripline w/ rootguard (RGP-212-NP)	
	0.53 GPH @ 12" Row and Emitter Spacing	
	FLUSH VALVE	Install at lowest elevation in
Ē	Toro Automatic flush valve (T-FCH-H-FIPT)	dripline area.
	Carson Round Purple Valve Box (809)	
	SLEEVING	Sleeving pipe shall be 2X
	Sch. 40 PVC Purple Pipe	diameter of pipe.
	MAINLINE	Unless otherwise noted on
	2-1/2" Sch. 40 Purple PVC Pipe	the plan
	LATERAL	Unless otherwise noted on

# IRRIGATION KEY NOTES

NOTE: ITEMS LISTED BELOW REFERENCE CONTRACTOR COORDINATION REQUIREMENTS
ITEMS ARE INCLUDED FOR CONTRACTOR CONVENIENCE AND CONTRACTOR SHALL VERIF
ASSOCIATED COORDINATION AND WORK TO BE DONE.

IRRIGATION EQUIPMENT IS SHOWN FOR GRAPHIC CLARITY. ALL MAINLINES, LATERALS, VALVES ETC SHALL BE LOCATED WITHIN PLANTING/ TURF AREAS. REPRESENTATIVE OF CONFLICTS UNABLE TO BE AVOIDED AND PROVIDE ADJUSTED LOCATIONS OF ANY AND ALL EQUIPMENT ON AS-BUILT DRAWINGS. CONTRACTOR TO COORDINATE EXISTING CONTROLLER REPLACEMENT WITH NEW CONTROLLER. RECONNECT EXISTING WIRES FROM MASTER VALVE, FLOW

- SENSOR, AND VALVE STATIONS #1-16 CONTRACTOR SHALL AVOID INSTALLING IRRIGATION MAINLINE, LATERALS, AND ALL EQUIPMENT WITHIN THE EXISTING TREE CRITICAL ZONE AREA. REFER TO EXISTING TREE NOTES.
- EXISTING PLANTING AND IRRIGATION TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE EXISTING IRRIGATION SYSTEM IN PROPER LANDSCAPE AREAS. CONTRACTOR TO COORDINATE WITH OWNER REPRESENTATIVE IF MODIFICATIONS, REPAIRS, OR SHUT-OFF OF EXISTING IRRIGATION SYSTEM ARE REQUIRED.
- CONTRACTOR SHALL INSTALL A WILKINS 500XLYSBR PRESSURE REGULATING VALVE AT PLAYFIELD POINT OF CONNECTION AND SET AT 69 PSI IF PRESSURE (5) EXCEEDS 75 PSI. IF PRESSURE IS LESS THAN 65 PSI, PLEASE CONTACT OWNER'S REPRESENTATIVE FOR COORDINATION.



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	DESCRIPTION	DATE
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PROJECT NO:	2017 / 4010
DATE ISSUED:	12/18/201

SCALE:

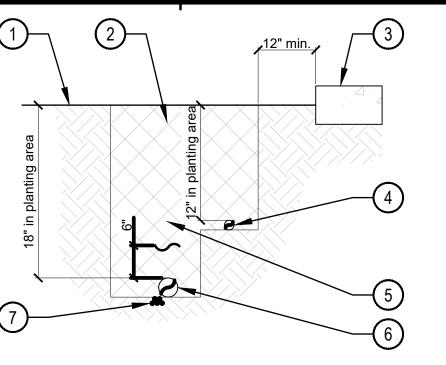
IRRIGATION PLAN



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TRENCHES SHALL BE IN **CONFORMANCE WITH CBC** 1809A.14

1. ALL MAINLINES TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER' SPECIFICATIONS.

2. ALL 120 VOLT WIRING IN CONDUIT TO BE INSTALLED AS PER LOCAL CODES.

3. BUNDLE AND TAPE WIRING AT 10' INTERVALS. 4. PIGTAIL AND LOOP CONTROL WIRES AT ALL 90 DEGREE CHANGES IN DIRECTION.

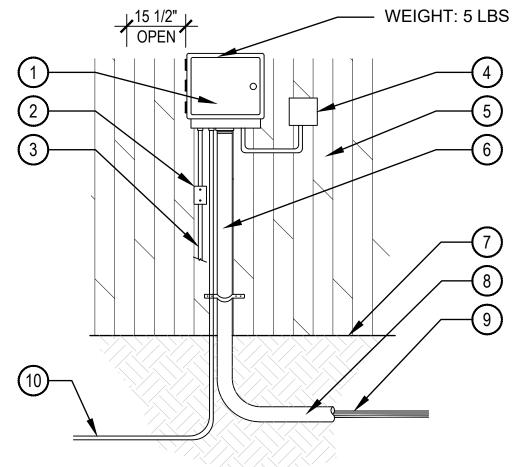
5. VALVE WIRES TO BE INSTALLED WITHIN MAINLINE TRENCH WHEREVER POSSIBLE. 6. BEDDING MATERIAL SHALL BE 1/4" MINUS SAND, AND SHALL BE 3" BELOW LOWEST PIPE OR WIRE AND 3" ABOVE HIGHEST PIPE OR WEIR WITHIN TRENCH.

7. BEDDING MATERIAL SHALL BE IN MAINLINE TRENCH ONLY.

8. EXCAVATED COVER MATERIAL SHALL BE FREE FROM DEBRIS AND ROCKS 1/2" OR GREATER.

9. PIPE BEDDING MATERIAL TO BE ROCK AND DEBRIS FREE, BACKFILL IN 6" LIFTS, PUDDLE WITH WATER, BETWEEN LIFTS. 10. DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

PIPE TRENCH



1. ALL ELECTRICAL AND CONTROLLER WIRE TO BE INSTALLED PER LOCAL CODE AND MANUFACTURER'S SPECIFICATIONS.

2. GROUND CONTROLLER PER LOCAL CODE AND MANUFACTURER'S SPECIFICATIONS. 3. PROVIDE WATERPROOF SEALANT FOR ALL CONDUIT AND WIRE ACCESS POINTS. 4. PROVIDE LOCK FOR ENCLOSURE.

EACH QUICK COUPLER SHALL BE IN A SEPARATE VALVE BOX

3. QUICK COUPLER SHALL HAVE LOCKING RUBBER COVER.

AS ADJACENT UNDISTURBED SUB-GRADE.

QUICK COUPLER VALVE

2. PROVIDE (1) QUICK COUPLER KEY FOR EACH QUICK COUPLER VALVE.

4. COMPACT SOIL AROUND GATE VALVE ASSEMBLY TO THE SAME DENSITY

5. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.

**CONTROLLER - EXTERIOR WALL MOUNT** 

(1) CONTROLLER MOUNT AT EYE-LEVEL PER MANUFACTURER'S RECOMMENDATIONS

(2) DISCONNECT SWITCH (3) 120V POWER SOURCE IN STEEL

CONDUIT (4) WIRELESS SENSOR RECEIVER

(5) EXISTING BUILDING EXTERIOR WALL; CONTRACTOR TO VERIFY EXTERIOR WALL AND FOLLOW MANUFACTURER'S RECOMMENDATIONS ON MOUNTING CONTROLLER TO

(6) RIGID STEEL CONDUIT W/ CONTROL WIRES TO VALVES

(7) FINISH GRADE

(8) CONDUIT TO EXTEND 5 FT. **BEYOND WALL** 

(9) UF DIRECT BURIAL WIRE TO

CONTROL VALVES (10) UF DIRECT BURIAL WIRE TO

GROUNDING PER ASIC **GUIDELINES** 

1) 10" DIA. PURPLE LOCKING ROUND

COUPLER VALVE (4) #3 REBAR 20" LONG W/ (2) STAINLESS

RISER (LENGTH VARIES)

(7) (3) PVC SCH 80 NIPPLE (LENGTH VARIES)

9 PURPLE PVC MAINLINE

VALVE BOX 2 FINISH GRADE

(3) PURPLE QUICK

CLAMPS (5) PVC SCH 80

(6) PVC SCH 80 ELLS

(8) PVC SCH 40 TEE/ ELL

1. CONTRACTOR TO INSTALL RCV PER MANUFACTURER'S RECOMMENDATIONS.

NOTES:

1. ALL SLEEVES TO BE SCH 40 PVC.

TO SURFACE AS A LOCATING DEVICE.

PIPE SLEEVING

CAP SLEEVES UNTIL USE.

ALL SLEEVES SHALL BE INSPECTED PRIOR TO BACKFILLING.

IRRIGATION PIPE AND WIRE SHALL NOT SHARE THE SAME SLEEVE.

MARK / STAMP - 'X' AND/OR INSTALL PLACARD AT BACK OF CURB.

1. PROVIDE WATERPROOF SEALANT FOR ALL CONDUIT AND WIRE ACCESS POINTS.

SYSTEM OR UNDER EAVE OF HOUSE.

RAIN SENSOR

2. FINAL LOCATION AND MOUNTING SYSTEM TO BE DETERMINED BY OWNER'S REPRESENTATIVE.

3. SENSOR SHOULD NOT BE MOUNTED UNDER TREES, IN AREAS AFFECTED BY SPRINKLER

EXTEND ALL SLEEVES 1' MIN. BEYOND EDGE OF HARDSCAPE BOTH SIDES.

MULTIPLE SLEEVES REQUIRE 4" HORIZONTAL SEPARATION WITHIN SAME SLEEVE TRENCH.

WRAP 12 GAUGE GALVANIZED WIRE AROUND EACH END OF SLEEVE (10 WRAPS MIN.) AND EXTEND

REMOTE CONTROL VALVE

1) PURPLE PVC MAINLINE PIPE

1) SUITABLE FASCIA, WALL, PEDESTAL OR

GUTTER MOUNT. MOUNT IN LOCATION

WHERE SENSOR CAN RECEIVE FULL

SUN AND IS OPEN TO RAINFALL.

WITHIN 500' OF THE CONTROLLER

SURFACE PER MANUFACTURER'S

(2) WIRELESS RAIN SENSOR, LOCATE

(3) SECURE MOUNTING BRACKET TO

RECOMMENDATIONS

TRENCHES SHALL BE IN

1809A.14

CONFORMANCE WITH CBC

(2) BRICK SUPPORTS (1 OF 4) (3) CONTROL AND COMMON WIRE

TO NEXT VALVE 4) PURPLE PVC LATERAL PIPE

(5) PVC MALE ADAPTER

(6) SCH. 80 PVC UNION (THREADED) 7) WATERPROOF CONNECTIONS

(8) SCH. 80 PVC NIPPLE (SIZE & LENGTH VARY) (9) PURPLE REMOTE CONTROL

10) PURPLE VALVE ID TAG

(11) SCH. 80 PVC BALL VALVE 12) VALVE BOX W/ PURPLE LOCKING

(13) FINISH GRADE

(14) PVC ELBOW (TxT)

(15) 3" MIN. DEPTH OF 3/4" WASHED **GRAVEL** 

16 PVC TEE (SxSxT)

VALVE

LID

45 DEGREE ELL 45 DEGREE ELL

MINIMUM THRUST BLOCK AREA (X x Y) TEE, DEAD END  $90^{\circ}$  BEND 2" & LESS | NOT REQUIRED | NOT REQUIRED 2 S.F. 2 S.F. 6" 4 S.F.

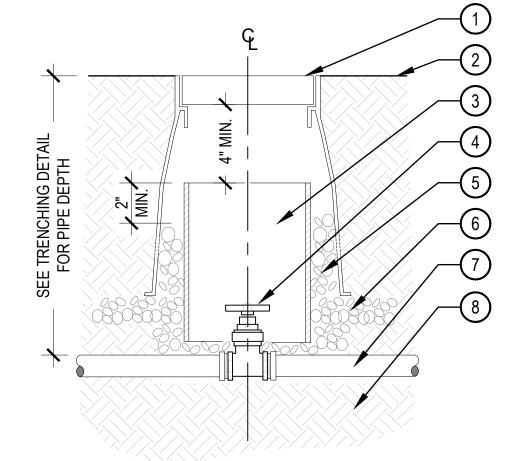
I. SUPPLY LINES 2-1/2 INCHES IN DIAMETER AND LARGER SHALL RECEIVE CONCRETE THRUST BLOCKING.

2. ALL THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED SOIL. 3. ALL CONCRETE SHALL BE A CLASS 'C' CONCRETE.

4. THRUST BLOCKS SHALL BE A MIN. OF 1 CU. FT. OF CONCRETE. PIPE SHALL NOT BE ENCASED IN CONCRETE.

5. FITTINGS IN CONTACT WITH CONCRETE SHALL BE WRAPPED USING PIPE TAPE.

THRUST BLOCK



. COMPACT SOIL AROUND BALL VALVE ASSEMBLY TO THE SAME DENSITY AS ADJACENT UNDISTURBED SUBGRADE.

2. DO NOT REST VALVE BOX ON MAINLINE OR LATERAL LINE. 3. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.

3. PROVIDE GATE VALVE KEY - LENGTH AS REQUIRED.

GATE VALVE - 3" AND SMALLER

1) FINISH GRADE

ELL (S x T)

(2) GEAR DRIVE ROTOR, PURPLE

(3) PURPLE PVC LATERAL PIPE

(5) PURPLE PVC SCH. 40 TEE OR

(6) WALLS, WALKS, COURTS, CURB,

(4) SWING JOINT ASSEMBLY

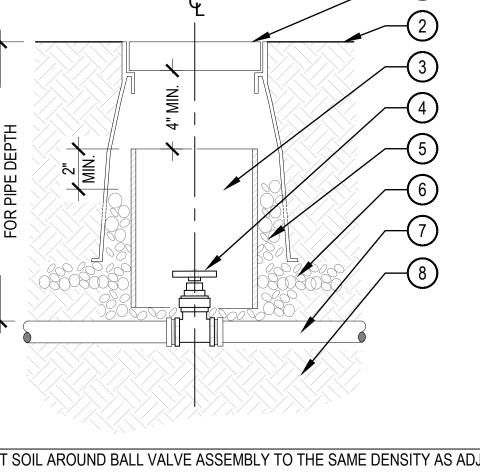
6" MIN. OR PER LOCAL CODE

1. SET TOP OF HEAD FLUSH WITH FINISH GRADE. 2. ADJUSTABLE ARC NOZZLES SHALL BE USED ON CURVED OR NON-STANDARD ANGLED EDGES.

3. ROTORS SHALL BE INSTALLED 6" MININUM FROM ANY WALLS, WALKS, COURTS, ETC. PER LOCAL CODES 4. ADJUST ALL ROTOR HEADS SO THAT NO OVERSPRAY OCCURS ON ANY WALLS, WALKS,

COURTS, ETC. 5. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.

**ROTOR POP-UP** 



1) PURPLE LOCKING ROUND BOX & COVER, TOP OF BOX TO BE FLUSH WITH FINISH GRADE

(2) FINISH GRADE

(3) 8" SCH 40 PVC ACCESS SLEEVE LENGTH AS REQUIRED.

(4) GATE VALVE W/ PURPLE CROSS HANDLE AND SOLID WEDGE DISC PER SCHEDULE

(5) 3/4" GRAVEL SUMP FILL IN AND AROUND BOX AS REQUIRED

(6) 3" DEPTH 3/4: GRAVEL EXTEND 6" BEYOND EDGE OF

7) PURPLE PVC MAINLINE

(8) COMPACTED SUBGRADE

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IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC

REVIEWED FOR

SS 🗹 FLS 🗹 ACS 🗹

APP: 01-119706 INC:

DATE: 10/27/2021

	DESCRIPTION	DATE
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2017 / 40104 PROJECT NO: **DATE ISSUED:** 12/18/2018 SCALE: As indicated

**IRRIGATION DETAILS** 

IR2.00

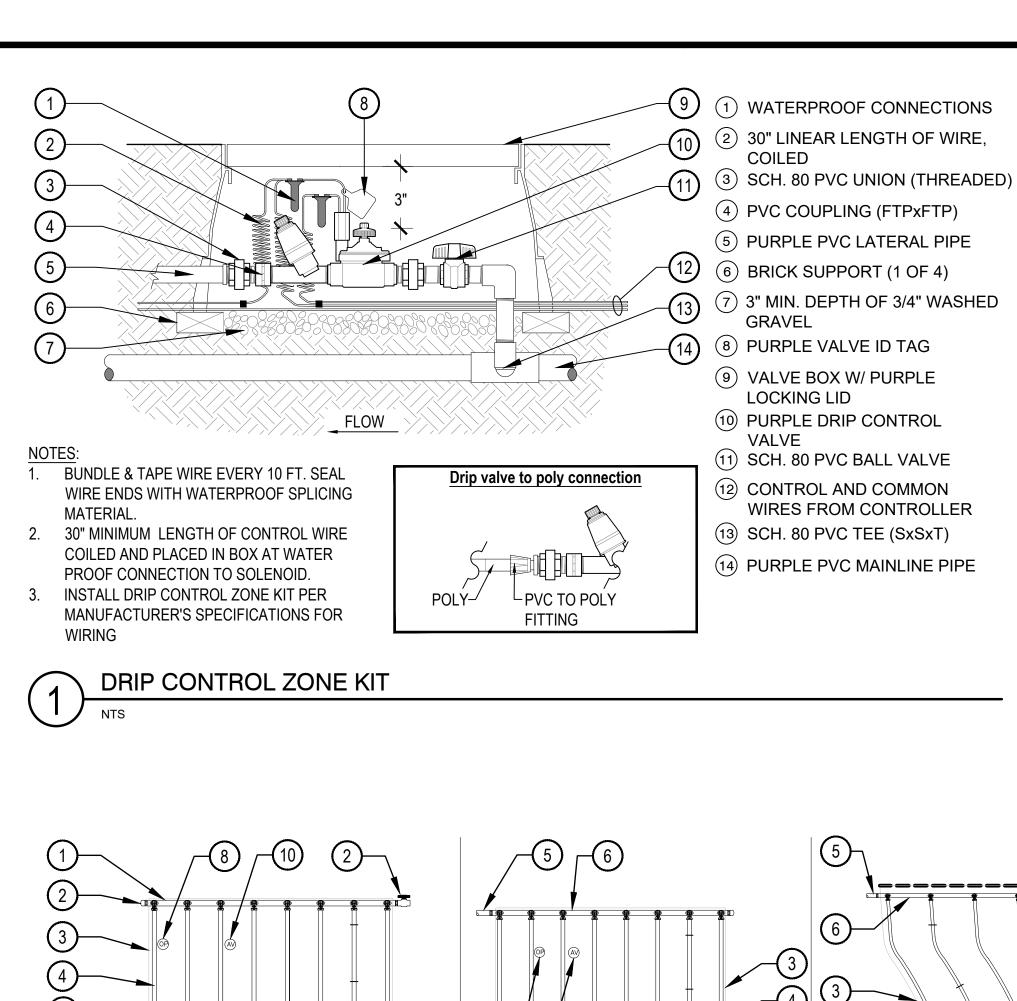


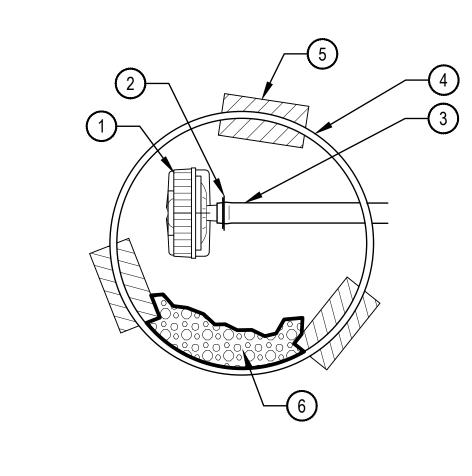
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT 2335 BROADWAY #301 T 510.267.3180 WWW.SVA-ARCHITECTS.COM

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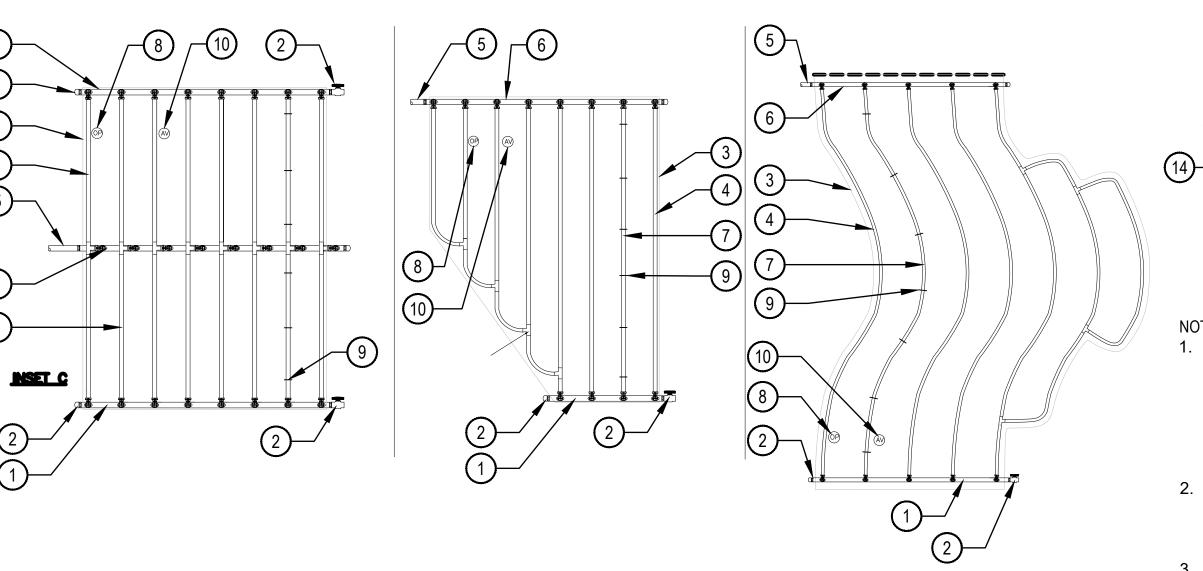
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1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

FLUSH VALVE NTS



1) FINISH GRADE

ROTARY

2 PURPLE POP-UP SPRAY/

4 SWING JOINT ASSEMBLY

6 HARDSCAPE EDGE

5 PVC SCH. 40 FITTING (SxT)

3 PURPLE PVC LATERAL PIPE

14)\_/

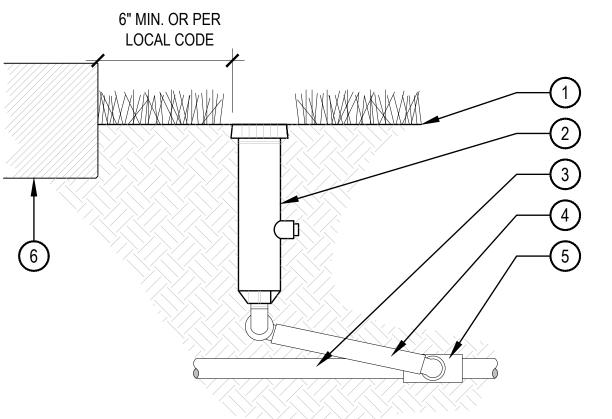
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON MANUFACTURER'S RECOMMENDATIONS FOR SUGGESTED

SPACING. 2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING PER MANUFACTURER'S

RECOMMENDATIONS. 3. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

- 1) PURPLE FLUSH HEADER
- 2 FLUSH POINT WITH PVC CAP OR OPTIONAL PVC BALL VALVE (3) PERIMETER OF AREA
- (4) PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- (5) PURPLE PVC SUPPLY LINE
- (6) PURPLE SUPPLY HEADER
- 7 PURPLE DRIPLINE (TYPICAL) (8) OPERATIONAL INDICATOR
- (9) DRIPLINE TIE-DOWN STAKES REFER TO MANUFACTURER'S DRIPLINE DESIGN GUIDE FOR PROPER SPACING
- (10) AIR RELIEF VALVE
- (1) DRIPLINE FITTING
- 12) INLINE DRIP EMITTER

13 MULCH (14) FINISH GRADE



1. AFTER FLUSHING HEADS, REGRADE AND COMPACT AS NEEDED TO RETURN TO FINISH GRADE. 2. SPRINKLERS SHALL BE MIN. 6" FROM ANY WALLS, WALKS, COURTS, AND 12" FROM TURF EDGE. 3. ADJUST ALL SPRINKLERS HEADS SO THAT NO OVERSPRAY OCCURS ON ANY WALLS, WALKS,

COURTS, ETC. 4. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE. 5. COMPACT SOIL AROUND HEAD TO THE SAME DENSITY AS ADJACENT UNDISTURBED SUBGRADE.

POP-UP SPRAY/ ROTARY

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ORIPLINE LAYOUT

			Time		Total
	Precip Rate	Weekly Water	cycle	No. of	Times
Type	(in/ hr)	Req. (in/wk)	(min/wk)	Zones	(hr/wk)
Shrub Dripline	0.85	0.52	37	1	0.61
Shrub Spray	1.64	0.62	23	2	0.76
Shrub Rotaries	0.40	0.58	87	2	2.92
Shrub Rotors	0.64	0.58	55	7	6.38
Turf MPR Rotors	0.64	1.17	109	9	16.40
Turf Rotors	0.44	1.17	159	7	18.55
Water window per loc	cal codes: 9 PM	to 6 AM (9 Hou	ırs)	<u>l</u>	

MAINTENANCE

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Monthly Eto	1.43	2.03	3.26	4.53	5.35	5.95	6.22	5.52	4.46	3.2	1.78	1.29	45.02
Estimated Percent Run Time Per Month of July													
Run Time	23%	33%	52%	73%	86%	96%	100%	89%	72%	51%	29%	21%	
													Minutes/ Week
Estimated Number	of Watering	Days Per N	<b>Jonth</b>										Based on July
Shrub Dripline	2	3	4	6	7	8	8	7	6	4	2	2	37
om an omplific	_	-											
Shrub Spray	2	3	4	6	7	8	8	7	6	4	2	2	23
•	2 2	3	4	6 6	7	8	8	7 7	6 6	4	2	2 2	23 87
Shrub Spray	2				/	-		7 7 7	-	4			
Shrub Spray Shrub Rotaries	2 2	3	4	6	7	8	8		6	4	2	2	87

Month	   Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Monthly Eto	1.43	2.03	3.26	4.53	5.35	5.95	6.22	5.52	4.46	3.2	1.78	1.29	45.02
Estimated Percent					0.00	3.33	0.22	3.32	1.10	0.2	1.70	1.23	10.02
Run Time	23%	33%	52%	73%	86%	96%	100%	89%	72%	51%	29%	21%	
	•	•		•	•				•	•	•	•	
													Minutes/ Wee
Estimated Number	of Watering	Days Per N	/lonth										,
Estimated Number	of Watering	Days Per N	<b>Month</b>	12	14	15	16	14	12	8	5	3	-
	T .	Days Per N 5	_	12 12	14 14	15 15	16 16	14 14	12 12	8	5	3	Based on July
Shrub Dripline	4	<b>Days Per N</b> 5 5 5	8							-	5 5 5		Based on July
Shrub Dripline Shrub Spray	4 4	5	8	12	14	15	16	14	12	8	5 5 5 5	3	46
Shrub Dripline Shrub Spray Turf Dripline	4 4 4	5	8 8 8	12 12	14 14	15 15	16 16	14 14	12 12	8	5 5 5 5	3	73 46 175

1. TOTAL WATERING TIME WOULD BE DIVIDED BY THE NUMBER OF WATERING DAYS PER WEEK.

2. CONTRACTOR TO VERIFY AND ADJUST WATERING SCHEDULE SOAK AND CYCLE PER FIELD CONDITIONS IN ORDER TO AVOID WATER RUNOFF.

3. CONTRACTOT SHALL PROGRAM THE CONTROLLER TO MEET THE WEEKLY RUNTIME MINUTES WHILE ACHIEVING THE NUMBER OF DAYS PER MONTH. 4. THE CONTRACTOR SHALL ADJUST THE WEEKLY MINUTES PER THE MONTHLY PERCENTAGES BASED ON ET.

5. DRIP IRRIGATION CAN RUN OUTSIDE OF WATERING WINDOW.

A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 01-119706 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 DATE: 10/27/2021

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	DESCRIPTION	DATE
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2017 / 40104 **PROJECT NO:** 12/18/2018 DATE ISSUED: As indicated SCALE:

IR2.01

IRRIGATION DETAILS



2335 BROADWAY #301 T 510.267.3180 WWW.SVA-ARCHITECTS.COM

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All work shall be performed by a contractor with a C-27 license or greater. The work required is indicated on the drawings and includes, but is not limited to new irrigation systems in medians and retrofitted irrigation systems on each side of roadway, automatic controller, remote control valves, quick coupler valves, water connections, and electric connections.

#### 1.02 Inspections and Tests

- A. It is the landscape contractors responsibility to contact the Owner's Representative, 48 hours prior to desired inspection of an item.
- Prior to release of utilities or maintenance period commencement, the following inspections are
- 1. Construction of irrigation system in open trench condition (prior to backfill). Pressure test 150 PSI for a three (3) hour continuous period.
- 2. An irrigation coverage test. 3. Planting, including street trees. Contact the Owner's Representative, Engineering Division for species
- and locations.
- 4. Finish grade prior to seeding.
- 5. Compliance with approved landscape plans. 6. Any special conditions of approval attached to project.
- 7. Final inspection.
- 8. The owner's representative and landscape contractor shall be present at this inspection.

#### 1.03 Maintenance Guidelines

- A. Landscape shall be maintained in a neat, clean, weed-free and healthy condition. This shall
- include but not limited to:
- 1. Cultivation of planted beds at intervals not to exceed 10 days. 2. Regular moving to maintain a lawn height not to exceed 2" (may vary per species).
- Regular pruning of plants as necessary to control and direct growth. 4. Scheduled maintenance of irrigation controller to assure proper application rate of water
- necessary for proper plant growth. Drip irrigation may require specialized landscape maintenance care.
- Immediate replacement of plant material as needed due to death, disease, or lack of growth. 6. Fertilization on a regular schedule as recommended by the manufacturer to provide proper plant growth.
- 7. Stakes, guys, and ties on trees shall be checked regularly for correct function. Ties are to
- be adjusted to avoid abrasions or girdling of trunks or branches. 8. Upon completion of the maintenance period, an inspection shall be made by the Owner's
- 9. The landscape shall be maintained in accordance with these landscape maintenance
- standards. 10. Maintenance bonding shall be released at the end of the appropriate period if the landscape
- is maintained according to plans and specifications. 11. The principal bond holder is responsible to contact the Owner/Owner's Representative and schedule the maintenance inspection.

# 1.04 Turnover Irrigation Items

- A. Provide one controller chart (of the maximum size the inside of the controller door will allow) for each automatic controller. The chart shall diagram the area covered by the controller and shall be prepared from record drawings.
- B. Operation and maintenance manuals: 1. Two individually bound copies of operation and maintenance manuals shall be delivered.
- 2. Supply as part of this contract the following items: 2.1. Two keys for each automatic irrigation controller.
- 2.2. One valve box cover wrench.
- C. Complete material list shall be submitted to the on-site Construction Manager prior to performing any work. Catalog data and full descriptive literature must be submitted whenever the use of items different than those specified is requested. Material list shall be submitted using the following example:

Description	Manufacturer	Model
Pressure supply lines	Lasco	Schedule 40
Turf spray head	Hunter	Pros-06-PRS30-12

- Record drawings for new systems- Contractor shall provide completed as-built drawings which shall be mylar copies of the project plans and shall conform to the following: 1. Record accurately on one set of contract drawings all changes in the work constituting
- departures from the original contract drawings 2. The changes and dimensions shall be recorded in a legible and workmanlike manner to the satisfaction of the Inspectors. Prior to final inspection of work, submit record drawings to Inspectors for approval.
- 3. Dimensions from two permanent points of reference (walls, sidewalks, curbs, etc.). Data shown on record drawings shall be recorded day to day as the project is being installed. All lettering on drawings shall be a minimum of 1/8 " in size.
- 4. Show locations and depths of the following items for new systems: 4.1. Point of connection for water and electrical service.
- 4.2. Routing of sprinkler pressure lines. Dimension maximum 100 feet along routing,.
- 4.3. Remote control valves. 4.4. Quick coupling valves.
- 4.5. Routing of control wires.
- 4.6. Electrical service lines.
- 4.7. Sprinkler heads. Lateral lines. 4.8. Related equipment (as may be directed).
- 4.9. Maintain record drawings on site at all times.
- The entire irrigation system, including all work done under this contract, shall be guaranteed by the contractor against all defects, fault of material, and workmanship, for one year from the date of final inspection.
- The contractor shall instruct the Owner's Representative in the operation and maintenance of the system and shall furnish a complete set of operating instructions.

# **Part II - Materials**

## 2.01 General

Materials and equipment installed or furnished that do not meet these standards will be rejected and shall be removed from the site at no expense.

#### 2.02 Galvanized Steel Pipe and Fittings (if applicable)

- A. All galvanized steel pipe shall be Schedule 40, threaded, coupled, and hot-dipped galvanized, and shall comply with the requirements of ASTM A120-66 or ASTM A53-67.
- B. All fittings for galvanized steel pipe shall be 150 pound rated galvanized malleable iron, banded pattern. C. Pipe sizes indicated on the drawings are nominal inside diameter, unless otherwise noted.

#### 2.03 Brass Pipe and Fittings (if applicable)

- A. All brass pipes and fittings to be IPS standard weight, 125 UBS, 85% red brass, and are to be used as standpipes on backflow preventer.
- B. Where galvanized risers and/or fittings are required, a dielectric union shall be installed at connection point of galvanized and bronze material.

#### 2.04 Plastic Pipe and Fittings

- A. All plastic pipe shall bear the following markings: manufacturer's name, nominal pipe size, schedule or class, type of material, pressure rating in PSI, NSF seal of approval, and the date of extrusion.
- B. Pressure supply lines 1½" or smaller in diameter located downstream from the backflow prevention device shall be Schedule 40 PVC. Pressure supply lines 2" or larger shall be either Class 315 solvent weld PVC or Class 200 rubber gasket type PVC. Solvent weld and ring type pipe shall not be used together on the same pressurized line.
- C. Non-pressure lines shall be Schedule 40 PVC.
- D. All fittings shall be standard weight Schedule 40 and shall be injection molded of an improved PVC
- fitting compound. Threaded plastic fittings shall be injection molded. All threaded nipples shall be standard weight Schedule 80 with molded threads unless otherwise specified.
- F. All solvent cementing of plastic pipe and fittings shall be a two-step process, using primer and solvent cement applied per manufacturer's specifications. Cement shall be of a fluid consistency,not gel-like or ropy. Primer and solvent shall be applied to both mating surfaces.

#### 2.05 Backflow Prevention Devices

Backflow preventer shall be as shown on drawings.

# 2.06 Valves

- A. Ball valves:
- 1) Ball valves 2" or smaller shall have screwed joints and brass bodies. 2) All ball valves shall have a maximum working pressure of no less than 150 PSI and shall
- conform to AWWA.
- B. Remote control valves: Valves shall be as shown on the drawings. Connect to the controller in the operating sequence indicated on the drawings.

# 2.07 Valve boxes

- A. Valve boxes shall be fabricated from a durable, weather resistant plastic material, resistant to sunlight and chemical actions of soil.
- B. The valve box cover shall be secured with a hidden latch mechanism or bolts.
- C. The cover and box shall be capable of sustaining a load of 1,500 pounds. D. Valve box extensions shall be by the same manufacturer as the valve box.
- E. Ball valve/ gate valve boxes shall be round plastic boxes with bolt-down covers marked "BALL VALVE" or "GATE VALVE".
- F. Remote control valve boxes shall be rectangular plastic boxes with bolt-down covers marked with the valve identification numbers stenciled in 2" high letters/ numbers using epoxy resin base paint of a contrasting color.

# 2.08 Automatic controller

Automatic controllers shall be as indicated on the drawings complete with hookup to electrical sources. All controllers shall be enclosed in a vandal-resistant, waterproof enclosure, LeMeur or approved equal, or as shown on the drawings. All wiring from electrical meter to pedestal mount controller to be

underground and sleeved through concrete pads. 2.09 Electrical-primary

- A. All electrical equipment shall be NEMA Type 3, waterproofed for exterior installations. B. All electrical work shall conform to local codes and ordinances. Above ground wires shall be conduit
- enclosed.

# 2.10 Wiring - Low Voltage

- A. Remote control wire shall be direct burial AWG-UF type, 14 gauge as per manufacturer's specifications.
- B. Connections shall be either epoxy-sealed packet type or Scotch Lock connectors.
- C. Ground wires shall be white in color. Control wires shall be of same color for a given controller. Where more than one controller occupies a single trench, each controller shall have different color control wires.

# 2.11 Sprinkler heads

Sprinkler heads shall be as indicated on the drawings. Anti-drain valves shall be installed as required for elimination of low head drainage.

# 2.12 Irrigation sleeves

Irrigation sleeves shall be Schedule 40 PVC. Size shall be twice the diameter of the size of pipe, electrical wiring and pipes to be sleeved separately. Sleeving is required under all paved surfaces.

2.13 Water saving system The water saving system shall be as indicated on the drawings. It shall consist of one main component: the rain collection unit.

# Part III - Execution

#### 3.01 General Installation

- A. Water supply: Connections to proposed water meter (meter installation by others) shall be at the location shown on the drawings. Minor changes caused by actual site conditions shall be made at no additional cost to the city.
- B. Layout: Layout irrigation systems and make minor adjustments required due to differences between site and drawings. Where piping is shown on drawings under paved areas, but running parallel and adjacent to planted areas, install the piping in the planted areas.
- C. Diagrammatic intent: The drawings are essentially diagrammatic. The size and location of equipment and fixtures are drawn to scale where possible. Provide offsets in piping and changes in equipment locations as necessary to conform with structures and to avoid obstructions or conflicts with other work.
- D. Grades: Before starting work, carefully check all grades to determine that work may safely proceed, keeping within the specified material depths with respect to finish grade.
- E. Inspection: Before starting work, carefully check all grades to determine that work may safely proceed, keeping within the specified material depths with respect to finish grade.
- 1) Prior to all work of this section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence
- 2) Verify that the irrigation system may be installed in strict accordance with all pertinent codes and regulations, the original design, the referenced standards, and the various manufacturer's
- 3) Verify pressure in pounds per square inch (PSI) prior to any work. Contact Landscape Architect if pressure varies from that indicated on plans.
- F. Discrepancies: Do not proceed with installation in areas of discrepancy until all discrepancies have been resolved.
- G. Field Measurements: Make all necessary measurements in the field to ensure precise fit of items in accordance with the original design.

#### 3.02 Trenching

- A. Contractor shall notify UNDERGROUND SERVICE ALERT 811 at least two working days before beginning to dig.
- B. Dig trenches and support pipe continuously on bottom of ditch. Lay pipe to an even grade. Trenching excavation shall follow layout indicated on drawings to the depths below finished grade
- C. Tree roots shall be protected. Cut no roots over  $\frac{1}{2}$ " diameter. Reroute pipe above or below all roots. Preservation of all roots to take precedence over pipe depth requirement. All trenching to maximize distance from existing mature trees. Hand digging is required where trenching might impact existing
- tree roots. D. Provide minimum cover of 24 inches over pressure supply lines under paved areas.
- E. Provide minimum cover of 18 inches over pressure supply lines  $2\frac{1}{2}$ " in diameter or smaller.
- F. Provide minimum cover of 18 inches over control wires.

#### G. Provide minimum cover of 12 inches over non-pressure lines. 3.03 Backfilling

- A. Initial backfill on all lines shall be of fine granular material with no foreign matter larger than  $\frac{1}{2}$  " in
- size, 6" above pipe. B. Backfill shall be tamped in 4" layers under the pipe and uniformly on both sides for the full width of the trench and the full length of the pipe. Materials shall be sufficiently damp to permit thorough compaction, free of voids. Backfill shall be compacted to dry density equal to adjacent undisturbed
- C. Flooding in lieu of tamping is not allowed without specific prior approval. D. Under no circumstances shall truck wheels be used to compact soil.

soil and shall conform to adjacent grades.

E. Provide sand backfill a minimum of 6" over and under all piping routed under paving areas.

# 3.04 Piping

- A. Piping under existing concrete pavement must be installed in sleeves 2 times the outer diameter of the pipe which is being sleeved. No hydraulic driving is permitted under any concrete pavement.
- B. Cutting or breaking of existing pavement is not permitted without written permission from the owner.
- C. Install pipe with all marking up for visual inspection and verification.
- D. Remove all dented and damaged pipe sections.
- E. Contractor shall install concrete thrust blocking at all changes of direction and terminal points of
- other trades. Follow city ordinance if stricter.
- G. Parallel lines shall not be installed directly over one another.
- H. Make all joints in strict accordance with the manufacturer's recommended methods; allow solvent welds at least 15 minutes setup time before moving or handling and 24 hours curing time before

F. All lines shall have a minimum clearance of 4 inches from each other and 6 inches from lines of

- I. All threaded plastic-to-plastic connections shall be assembled using Teflon tape.
- J. For plastic-to-metal connections, use non-hardening pipe dope on all threaded plastic-to-metal connections, except where noted otherwise.

K. Piping shall be snaked from side to side in trench bottom to allow for expansion and contraction

- A. Install all assemblies specified herein according to the respective detail drawings or specifications, using best standard practice.
- B. Install backflow assemblies in shrub areas and/ or adjacent to other hardscape items rather
- than turf areas, when possible, and at height required by local codes.
- D. Each valve box shall be installed on a foundation of pea gravel, backfill one cubic foot

#### 3.06 Controller

- A. Controller shall be located behind shrubs and/or adjacent to other hardscape items.
- Maintenance access shall be provided. B. The irrigation system shall be programmed to operate during the periods of minimal use of the design area and at time of least evaporation and wind turbulence, generally 9:00 pm to
- C. The controller shall be programmed so that each valve operates separately.

#### 3.07 Wiring

- A. Wiring shall occupy the same trench and shall be installed along the same route as the
- pressure supply lines wherever possible. B. Where more than one wire is placed in a trench, the wiring shall be taped together at
- intervals of 12 feet.
- C. All connections shall be of an approved type and shall occur in a valve box. Provide an 18 inch service loop at each connection.
- turn, and one of 24 inches shall be provided at each remote control valve. E. A continuous run of wire shall be used between the controller and each remote control valve.
- F. Wire running from controller to control valves shall be AWG-UF 600V, No. 14 minimum, solid

# inch expansion loop at valve box.

- A. Prior to installation of sprinkler heads, the valves shall be opened and full head of water used to flush out the lines and risers. B. Sprinkler heads shall be installed after system flush has been completed.
- unit per three designated valves, and will use irrigation wiring.
- time clock wires from power of valve to part of water saving system. D. The rain collection unit shall not require any down time field maintenance.

- A. Sprinkler heads shall be installed as designated on the drawings.
- C. Head height in relation to finish grades shall be as indicated on the drawings at the time of

Contractor shall adjust valves, align sprinkler heads of each system to maximize coverage to 100% and

# Provide minimum cover of 18 inches on irrigation sleeves to be provided under all

3.12 Irrigation Sleeving

3.13 Completion Cleaning Upon completion of work, Contractor shall smooth all ground surfaces; remove excess materials,

## 3.05 Assemblies

- C. Valves shall be installed in shrub areas whenever possible.
- minimum. Valve boxes shall be installed with the box tops one inch above the surface of surrounding finish grade in shrub area, and flush with turf areas.

- D. An expansion loop of 12 inches shall be provided at each wire connection and/ or directional
- Under no circumstances shall splices be used without prior approval.
- core, single conductor copper wire, and style Br. (direct burial type). G. Spare control wires shall be run to valve box locations as shown on the plans. Provide an 18

#### 3.08 Flushing the System

- 3.09 Water Saving System
- A. The water saving system shall have one rain collection unit connected to the time clock. B. The system shall have one or more rain collection units per time clock and one rain collection
- C. The rain collection unit shall be wired to the existing solenoid wires, and allow switch of use of

# 3.10 Sprinkler Heads

B. Spacing of heads shall not exceed maximum indicated on the drawings or in manufacturer's directions.

# 3.11 Adjusting the System

minimize overspray prior to planting.

# paving. See 3.02 (Trenching) and 3.03 (Backfilling) for further information.

rubbish, debris, etc.; sweep adjacent streets, curbs, gutters, walkways, and trails; and remove construction equipment from the premises.

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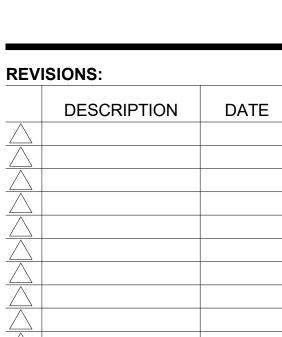
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IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC

REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹

APP: 01-119706 INC:

DATE: 10/27/2021



PROJECT NO: 2017 / 40104 **DATE ISSUED:** 12/18/2018 SCALE: As indicated

**IRRIGATION SPECIFICATIONS** 

IR3.00



**ARCHITECTS** 

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