

# GRADING PLANS FOR

# KONA VISTA SUBDIVISION, UNIT 4 LOT 20 GRADING & MAINTENANCE ROAD

HOLUALOA, NORTH KONA, HAWAII  
TMK: (3) 7-6-27:143

PREPARED BY:

**Dempsey Pacific Inc.**

Civil Engineering Design and Consulting Services

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CLIENT:

**KONA THREE LLC**  
101 HUALALAI STREET  
HILO, HI 96720

Should any unanticipated archaeological sites be uncovered by the grading activity, all work shall cease in the immediate area and the contractor shall notify the State Historic Preservation Office at (808) 933-7653. No work shall resume until the contractor obtains clearance from the Historic Preservation Office.

Permittee/Contractor shall provide adequate measures to minimize flooding and erosion problems to adjacent properties.

APPROVED for GRADING  
PURPOSES ONLY

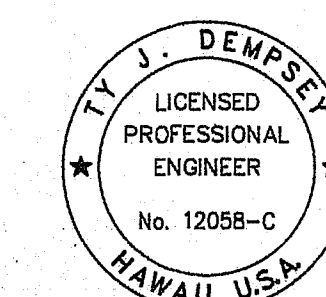
*R. J. Dempsey* 11/17/2021  
Dir. of Public Works

PW.ENG 2021-00132

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Project:  
**KONA VISTA  
SUBDIVISION, UNIT 4  
LOT 20 GRADING &  
MAINTENANCE ROAD**  
Project Location:  
HOLUALOA, NORTH KONA, HAWAII  
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Sheet Title:

TITLE SHEET

Drawing Revisions

No: Date: Description: Appr:

Date: 5/28/21

Drawn By: RF Checked By: TD

Job Number: J15.31

Sheet:

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Number: 1 of 8

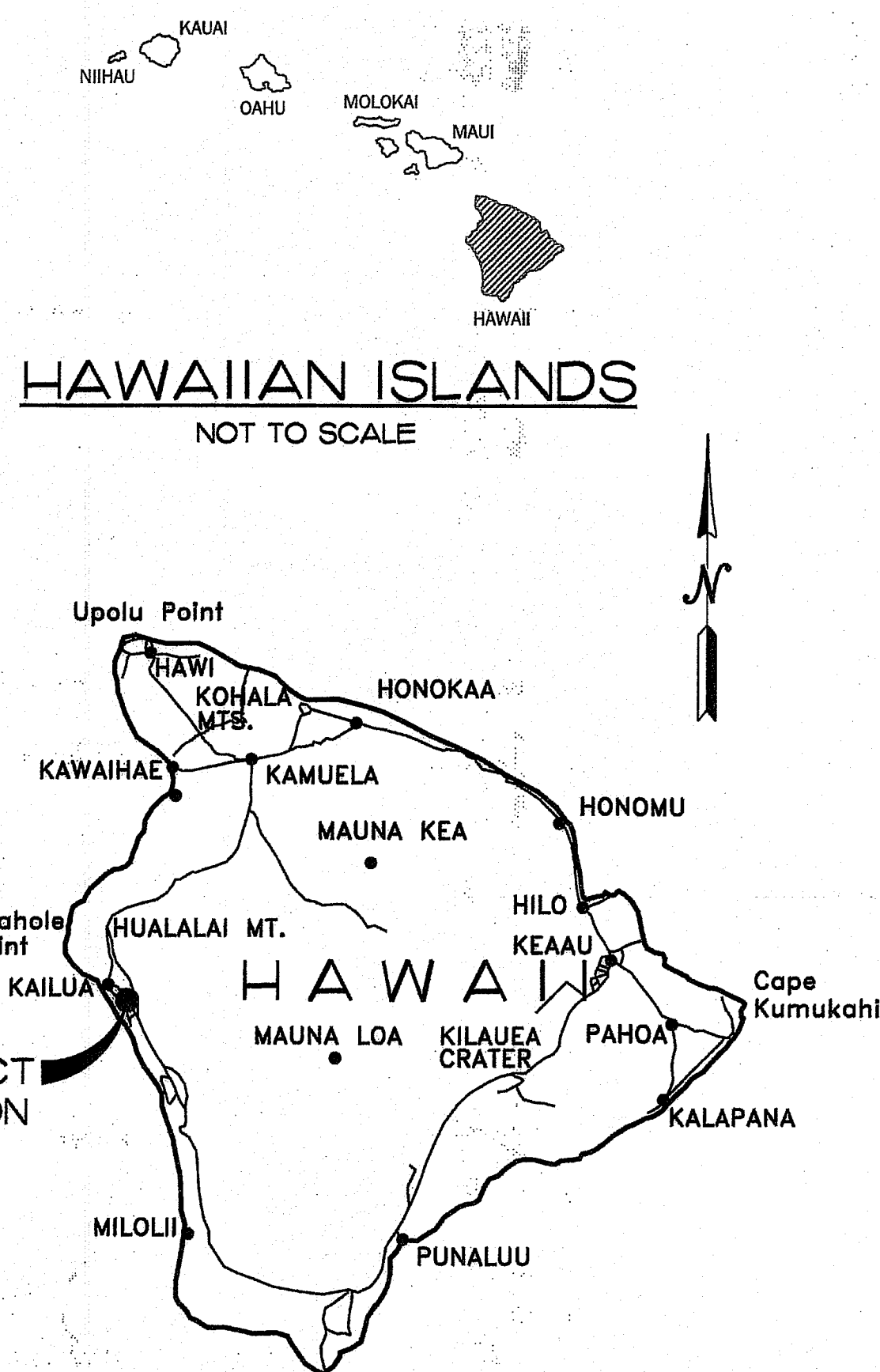
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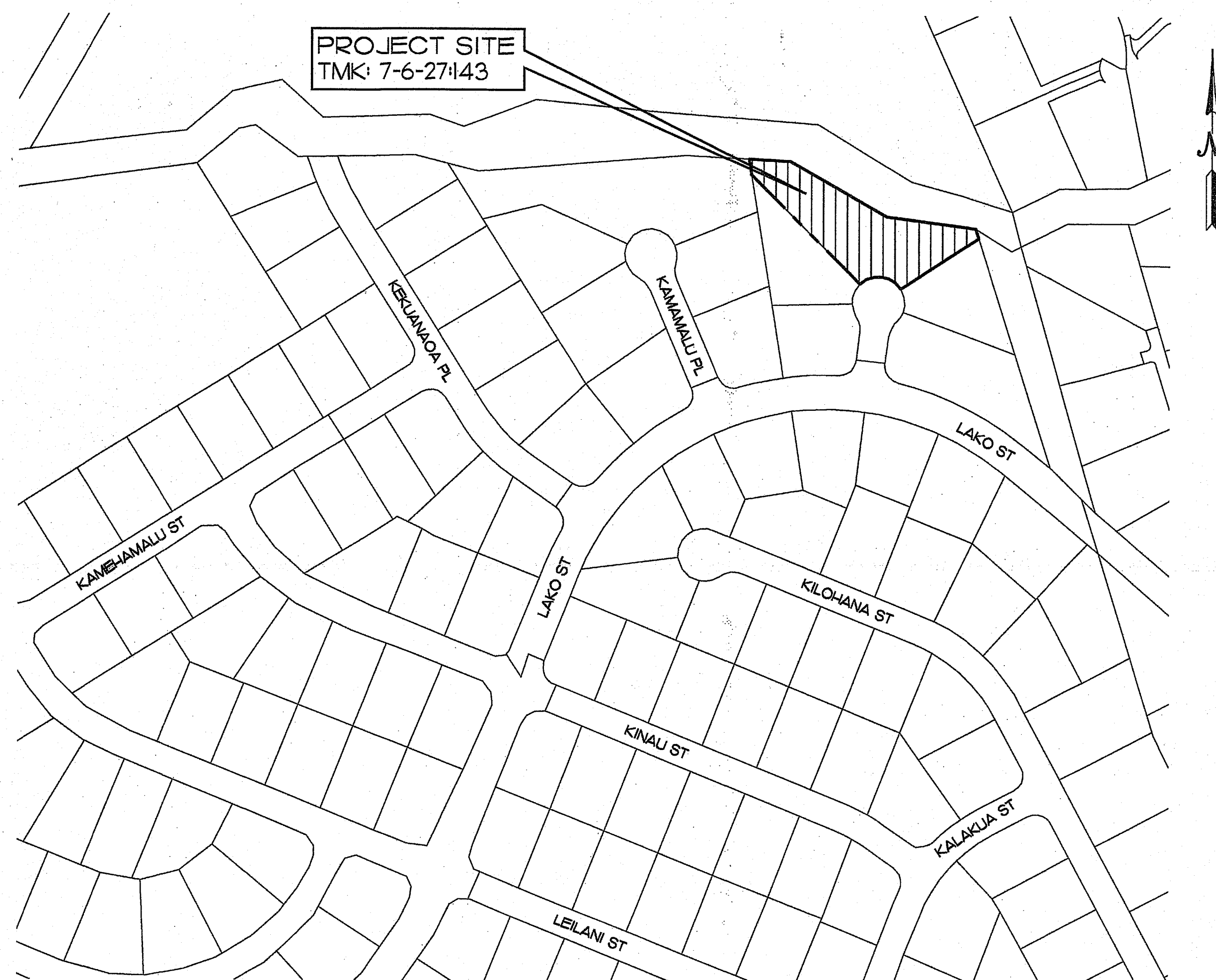
APPROVED BY:

*R. J. Dempsey*  
DIRECTOR, DEPARTMENT OF PUBLIC WORKS  
(FOR GRADING PURPOSES ONLY)

9/9/21  
DATE



VICINITY MAP  
NOT TO SCALE



LOCATION PLAN  
NOT TO SCALE



**GRADING NOTES:**

- ALL GRADING WORK SHALL CONFORM TO CHAPTER 10 OF THE HAWAII COUNTY CODE, SHOULD A GRADING PERMIT BE REQUIRED, NO WORK SHALL COMMENCE UNTIL THE DEPARTMENT OF PUBLIC WORKS (DPW) APPROVES A GRADING PERMIT.
- THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS RESULTING FROM HIS WORK. THE COSTS INCURRED FOR ANY NECESSARY REMEDIAL ACTIONS SHALL BE PAYABLE BY THE CONTRACTOR.
- THE CONTRACTOR, AT HIS OWN EXPENSE SHALL KEEP THE PROJECT AND SURROUNDING AREAS FREE FROM DUST NUISANCES. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL, RULES OF THE STATE DEPARTMENT OF HEALTH, HAR II-501, FUGITIVE DUST.
- ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE HAWAII ADMINISTRATIVE RULES, TITLE II, CHAPTER 55, WATER POLLUTION CONTROL AND CHAPTER 54, WATER QUALITY STANDARDS, AND TO THE EROSION AND SEDIMENTATION CONTROL STANDARDS AND GUIDELINES OF THE DEPARTMENT OF PUBLIC WORKS, COUNTY OF HAWAII.
- THE CONTRACTOR SHALL SO D OR PLANT ALL SLOPES AND EXPOSED AREAS IMMEDIATELY AFTER THE GRADING WORK HAS BEEN COMPLETED.
- FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE KEPT.
- IF REQUIRED, THE CONTRACTOR SHALL INFORM THE DPW OF THE LOCATION OF THE DISPOSAL AND/OR BORROW SITES REQUIRED FOR THIS PROJECT WHEN AN APPLICATION FOR A GRADING PERMIT IS MADE. THE DISPOSAL AND/OR THE BORROW SITE/S MUST ALSO FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE. NO OFF-SITE HALLING OR IMPORTING OF FILL MATERIAL FROM BORROW SITE IS ANTICIPATED FOR THIS PROJECT, APART OF ROAD BASES.
- NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS ANYTIME WITHOUT PRIOR APPROVAL FROM THE DEPARTMENT OF PUBLIC WORKS. GRADING WORK ON NORMAL WORKING DAYS SHALL BE BETWEEN THE HOURS OF 7:00 AM. TO 3:30 PM.
- FILLS SHALL BE COMPACTED TO THE REQUIREMENTS SHOWN IN THE SOILS REPORT. CONTRACTOR TO COORDINATE WITH GEOTECHNICAL ENGINEER TO SCHEDULE COMPACTING TESTING AND OBSERVATION SCHEDULES. GEOTECHNICAL ENGINEER WILL BE REQUIRED TO APPROVE THE GRADING OPERATIONS AND TEST RESULTS.
- THE CONTRACTOR SHALL REMOVE ALL VEGETATION BEFORE PLACING FILLS ON NATURAL GROUND SURFACE.
- THE CONTRACTOR SHALL OBTAIN A GRADING PERMIT TWO WEEKS PRIOR TO BEGINNING OF GRADING WORK FROM THE DEPARTMENT OF PUBLIC WORKS PERMIT SECTION. GRADING FEES SHALL BE PAID BY THE CONTRACTOR OR OWNER.
- THE LIMITS OF THE GRADED AREA SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF GRADING WORK.
- THE CONTRACTOR SHALL CONFINE ALL HIS GRADING OPERATIONS WITHIN CONTRACT LIMITS AND SHALL PROTECT EXISTING FEATURES CLOSE TO LIMITS.
- SHOULD ANY UNIDENTIFIED SITES OR REMAINS SUCH AS ARTIFACTS, SHELL, BONE OR CHARCOAL DEPOSITS, HUMAN BURIALS, ROCK OR CORAL ALIGNMENTS, PAVINGS OR WALLS BE ENCOUNTERED, WORK IN THE AFFECTED AREA SHALL CEASE AND THE PLANNING DEPARTMENT AND THE OWNER'S DESIGNATED REPRESENTATIVE IMMEDIATELY NOTIFIED. SUBSEQUENT WORK SHALL PROCEED UPON AN ARCHEOLOGICAL CLEARANCE FROM THE PLANNING DEPARTMENT. THROUGH THE OWNER'S DESIGNATED REPRESENTATIVE, WHEN IT FINDS THAT SUFFICIENT MITIGATIVE MEASURES HAVE BEEN TAKEN.
- ALL STABILIZED SHOULDERS AND GRADED AREAS SHALL IN ADDITION TO TEMPORARY EROSION CONTROL, BE PLANTED WITH PERMANENT VEGETATIVE COVER ACCORDING TO THE LANDSCAPE ARCHITECT'S REQUIREMENTS AND/OR THE FOLLOWING:
  - A. PREPARATION OF PLANTING AREA SHALL BE IN ACCORDANCE TO SECTION 50 (STANDARD SPECS). TOPSOIL SHALL BE NATIVE SOIL EXCAVATED FROM ROADWORK AMENDED AS REQUIRED BY THE ENGINEER.
  - B. PERMANENT VEGETATIVE COVER SHALL CONSIST OF A MIXTURE OF 6 LBS. ANNUAL RYE GRASS AND 60 LBS. BUFFEL GRASS SEED PER ACRE. FERTILIZER TO BE DETERMINED AFTER THE CONTRACTOR SUBMITS TOPSOIL SAMPLE FOR ANALYSIS.
  - C. PLANTING AND MAINTENANCE SHALL BE IN ACCORDANCE TO SECTION 50 (STANDARD SPECS). TEMPORARY IRRIGATION SHALL BE INSTALLED AND MAINTAINED AS NECESSARY TO ESTABLISH PLANT GROWTH FOR ACCEPTANCE.
  - D. LAVA ROCK, CINDER, AND INFILTRATION TRENCH ROCK TO BE PLACED IN SHOULDER OF ROAD AREAS.
- THE FOLLOWING QUANTITIES ARE PROVIDED FOR PERMIT PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING HIS OWN QUANTITIES, ESTIMATED EARTHWORK QUANTITIES:
 

EXCAVATION	234	CUBIC YARDS
EMBANKMENT	2123	CUBIC YARDS
GRADED AREA	0.50	ACRES
- ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH THE COUNTY'S GRADING ORDINANCE, AS AMENDED.

**EROSION / TEMPORARY DUST CONTROL:**

- DURING CONSTRUCTION, PREVENTIVE MEASURES SHALL BE USED TO CONTROL FORESEEABLE DUST, EROSION OR SEDIMENTATION PROBLEMS WHICH MAY ARISE AS THE JOB PROGRESSES.
- DRAINAGE SYSTEMS AS SHOWN ON THE CONSTRUCTION PLANS SHALL BE CONSTRUCTED AS EARLY AS PRACTICALLY POSSIBLE.
- THE CONTRACTOR SHALL CONDUCT HIS GRADING OPERATIONS SO THAT EXCAVATED, EMBANKMENT AND IMPORTED MATERIAL SHALL BE DAMPENED WITH WATER DURING HIS GRADING OPERATIONS AT ALL TIMES.
- WATER TRUCK AND/OR TEMPORARY SPRINKLERS SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES TO ENSURE BARE EARTH DOES NOT CREATE A DUST PROBLEM.
- TEMPORARY VEGETATIVE COVER SHALL BE PLANTED WITHIN A PERIOD OF 30 CALENDAR DAYS AFTER THE SITE HAS BEEN GRADED OR BARED OF VEGETATION IF FINAL GRADING OR LANDSCAPING OF THE SITE WILL BE SUSPENDED FOR MORE THAN 30 CALENDAR DAYS. TEMPORARY VEGETATIVE COVER SHALL CONSIST OF 40 LBS. COMMON RYE GRASS SEED PER ACRE, 400 LBS. ACRE 10-10-10 OR EQUIVALENT FERTILIZER WORKED INTO SEED BED BEFORE PLANTING. TEMPORARY SPRINKLER SYSTEM TO BE INSTALLED CONCURRENTLY WITH ALL PLANTINGS. PLANTING AND MAINTENANCE OF GRASS SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986.
- FUGITIVE DUST AND SOLID WASTE DISPOSAL DURING GRUBBING AND GRADING ACTIVITIES SHALL MEET REQUIREMENTS OF ADMINISTRATIVE RULES, TITLE II, CHAPTER 60, AIR POLLUTION CONTROL AND CHAPTER 56, SOLID WASTE MANAGEMENT CONTROL.

**NOTES FOR WORK WITHIN THE COUNTY RIGHT-OF-WAY:**

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE COUNTY OF HAWAII, DEPARTMENT OF PUBLIC WORKS (DPW), STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION DATED SEPTEMBER 1986 AND STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, DATED SEPTEMBER 1984.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLAN OR NOT, AND SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF SAME IN THE EVENT OF DAMAGES DUE TO HIS CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE RESPECTIVE UTILITY COMPANIES.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS, AND AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS 48 HOURS BEFORE THE COMMENCEMENT OF ANY UTILITY LINE WORK TO SCHEDULE A FIELD REVIEW AND SECURE APPROVAL OF THE PROPOSED UTILITY LINE LOCATION WITHIN THE COUNTY RIGHT-OF-WAY.
- THE PROPOSED UTILITY LINE LOCATION SHALL BE LAID OUT IN THE FIELD PRIOR TO THE CONDUCTING OF THE FIELD REVIEW BY THE DEPARTMENT OF PUBLIC WORKS.
- FIELD ADJUSTMENTS SHALL BE MADE AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS PRIOR TO THE COMMENCEMENT OF ANY UTILITY LINE WORK.
- THE REQUIRED PERMIT, UNDER CHAPTER 22, ARTICLE 3 SECTION 22-44 OF THE HAWAII COUNTY CODE, SHALL BE OBTAINED FROM THE DEPARTMENT OF PUBLIC WORKS BY THE CONTRACTOR FOR WORK WITHIN THE COUNTY RIGHT-OF-WAY.
- THE CONTRACTOR SHALL PROVIDE AT LEAST ONE (1) LANE FOR TRAFFIC MOVEMENT AT ALL TIMES, TWO (2) LANES FOR TRAFFIC MOVEMENT SHALL BE PROVIDED BETWEEN THE HOURS OF 3:30 P.M. TO 8:00 A.M.
- THE EXISTING PAVEMENT SHALL BE SAW-CUT BEFORE COMMENCEMENT OF TRENCHING WORK.
- ANY PAVEMENT OUTSIDE THE CONTRACT ZONE LIMITS DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE RESTORED TO ITS ORIGINAL CONDITION, OR BETTER, AS DIRECTED BY DPW.
- A TEMPORARY COLD MIX PATCH SHALL BE APPLIED IMMEDIATELY UPON COMPLETION OF THE BACKFILLING OPERATION AND SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL A PERMANENT PATCH IS AUTHORIZED BY THE DEPARTMENT OF PUBLIC WORKS.
- NO MATERIAL EXCEPT THE TRENCH EXCAVATED MATERIAL SHALL BE STOCKPILED CLOSER THAN SIX (6) FEET FROM THE EXISTING EDGE OF PAVEMENT.
- NO CONSTRUCTION EQUIPMENT SHALL BE PARKED WITHIN THE ROAD RIGHT-OF-WAY IN SUCH A MANNER THAT THE EQUIPMENT WILL OBSTRUCT THE NORMAL MOVEMENT AND SIGHT DISTANCE OF THE DRIVING MOTORIST, EXCEPT DURING ACTUAL WORKING HOURS.
- EXCEPT DURING ACTUAL WORKING HOURS, ALL SIGNS THAT DO NOT PERTAIN TO THE CONSTRUCTION ACTIVITY SUCH AS MEN WORKING AND FLAGMAN AHEAD SHALL BE COVERED OR LAID DOWN; HOWEVER, ALL SIGNS NECESSARY FOR THE SAFETY OF THE PUBLIC SHALL BE MAINTAINED.
- ANY PAVEMENT MARKINGS, STRUCTURES AND APPURTENANCES (WITHIN OR OUTSIDE OF THE CONTRACT ZONE LIMITS) DAMAGED AND/OR WORN AWAY UNDER THE PERMIT SHALL BE REPAIRED OR RECONSTRUCTED AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS.
- NO TRENCHING SHALL BE LEFT OPEN FOR MORE THAN FIVE (5) WORKING DAYS.
- SHOULD TRENCHING OCCUR THROUGH AN EXISTING SIDEWALK OR SHOULD DAMAGES OCCUR TO THE SIDEWALK AS A RESULT OF ANY CONSTRUCTION WORK, THE FOLLOWING PROCEDURE SHALL BE UTILIZED TO REPAIR THE SIDEWALK:
  - A. ALL PORTLAND CEMENT CONCRETE TO BE REMOVED SHALL FIRST BE CUT WITH A CONCRETE SAW THAT HAS A DIAMOND OR CARBORUNDUM ABRASIVE WHEEL. THOSE CUTS SHALL BE MADE TO A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE DEPTH OF THE SLAB, OR ENOUGH AS IS DEEMED NECESSARY BY THE DEPARTMENT OF PUBLIC WORKS, TO PERMIT BREAKING OUT THE BALANCE OF THE CONCRETE WITHOUT SPALLING OFF THE EXPOSED EDGES OF THE SLAB LEFT IN PLACE.
  - B. IF ANY CONCRETE BLOCK IS TOUCHED, THE WHOLE BLOCK SHALL BE REMOVED AND LATER REPLACED, UNLESS A MINOR VARIATION IS AUTHORIZED BY THE DPW OR ITS REPRESENTATIVE.
  - C. ANY DAMAGES TO ADJACENT AREAS DUE TO SETTLEMENT OR TO ANY OTHER EFFECTS WHATSOEVER CAUSED BY THE CONSTRUCTION WORK SHALL BE PROPERLY REPAIRED AND CORRECTED.
  - D. ALL OTHER INCIDENTAL WORK SHALL BE SATISFACTORILY PERFORMED TO EFFECT THE PROPER RESTORATION OF THE SIDEWALK AREA.
- SHOULD DAMAGES TO A SIDEWALK, CURB AND/OR GUTTER OCCUR AT A LOCATION WHERE A CURB RAMP SHOULD EXIST, OR TO A DRIVEWAY THAT DOES NOT MEET WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA), REPAIR WORK SHALL INCLUDE THE CONSTRUCTION OF A CURB RAMP, OR RECONSTRUCTION TO THE DRIVEWAY SUCH THAT THE REPAIR WORK COMPLIES WITH THE ADA AND MEETS WITH THE APPROVAL OF THE DPW.
- THE PERMITTEE SHALL MAINTAIN TO THE SATISFACTION OF THE DEPARTMENT OF PUBLIC WORKS, THE AREA WORKED WITHIN THE GOVERNMENT RIGHT-OF-WAY INCLUDING ANY REPAIRS TO PAVEMENT AND SHOULDER DAMAGE AS A RESULT OF THE INSTALLATION WORK FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL INSPECTION. THE PERMITTEE SHALL UNDERTAKE REPAIR WORKS EXPEDITIOUSLY, WHENEVER DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS DURING THE MAINTENANCE PERIOD.
- ALL WORK TO BE DEDICATED TO THE COUNTY OF HAWAII SHALL COMPLY WITH HAWAII REVISED STATUTE 103-50.
- THE CONTRACTOR SHALL PROVIDE FOR TEMPORARY SAFE PER PEDESTRIAN PASSAGE WAY AROUND THE CONSTRUCTION SITE PER THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES SECTION 4.11 (4) AS NECESSARY.

**ABBREVIATIONS:**

AC, A/C	ASPHALTIC CONCRETE	ICV	IRRIGATION CONTROL VALVE
ADA	AMERICANS WITH DISABILITIES ACT	IE	INVERT ELEVATION
APP, APPROX	APPROXIMATE	IN	INCHES
ARV	AIR RELIEF VALVE	INV	INVERT
ATB	ASPHALT TREATED BASE	IPT	INTERNAL PIPE THREAD
		ID.	INNER DIAMETER
BC	BOTTOM OF CURB / BOLT CIRCLE	JKT	JACKET
BDC	BOTTOM OF DROP CURB	LG	LONG
BFP	BACKFLOW PREVENTER	LN	LOOKNUT
BLK(S)	BLOCK(S)	LW	LOCK WASHER
BLDG	BUILDING		
BOT.	BOTTOM	MB	MAIL BOX
BRC	BOTTOM OF ROLLED CURB	MON	MONUMENT
BW	BOTTOM OF WALL	O/H	OVER-HEAD
¢	CENTERLINE	PAVT	PAVEMENT
CB	CATCH BASIN	POC	POINT OF CONNECTION
CBC	CITY AND COUNTY OF HONOLULU	PROP.	PROPOSED
CFS/CFS	CUBIC FEET PER SECOND	PSI	POUND PER SQUARE INCH
CL	CLASS	PVC	POLYVINYL CHLORIDE
CLF	CHAIN LINK FENCE	S	SEWER, SLOPE, SPREAD
CLR	CLEARANCE	SDMH	STORM DRAIN MANHOLE
CMU	CONCRETE MASONRY UNIT	SF	SQUARE FOOT
CO	CLEANOUT	SHT	SHEET
COTG	CLEANOUT TO GRADE	SL	STREET LIGHT
CONC	CONCRETE	SLB	STREET LIGHT BOX
CONN	CONNECTION	SMH	SEWER MANHOLE
CORP	CORPORATION	SYMM	SYMMETRICAL
COUNTY	COUNTY OF HAWAII	SST/SS	STAINLESS STEEL
CP	CONTROL POINT	ST	STREET
CPLG	COUPLING	STA	STATION
CRM	CEMENT RUBBLE MASONRY	STD	STANDARD
CU	CUBIC	STRUCT	STRUCTURAL
CY	CUBIC YARDS	SQ	SQUARE
D	DRAIN, DIAMETER	TC	TOP OF CURB
DEFL	DEFLECTION	TDC	TOP OF DROP CURB
DET	DETAIL	TEMP	TEMPERATURE
DI	DUCTILE IRON, DRAIN INLET, DROP INLET	THK	THICK
DIA	DIAMETER	TMH	TELEPHONE MANHOLE
DMH	DRAIN MANHOLE	TP	TELEPHONE POLE
DRWY/DW	DRIVEWAY	TRC	TOP OF ROLLED CURB
DPW	DEPARTMENT OF PUBLIC WORKS	TREE-	
DWS	DEPARTMENT OF WATER SUPPLY	(D)	DIAMETER OF TRUNK
		(H)	HEIGHT
		(S)	SPREAD
E	EAST, ELECTRIC	TSB	TRAFFIC SYSTEM BOX
EA	EACH	TSL	TRAFFIC SYSTEM LIGHT
EAC	EDGE AC PAVEMENT	TS	TOP STEM
EG	EXISTING GROUND	TV	TOP VERTICAL
EL, ELEV	ELEVATION	TW	TOP OF WALL
EMH	ELECTRIC MANHOLE	TYP	TYPICAL
EVC	END VERTICAL CURVE	UC	UNDERGROUND CABLE
ECH	ELECTRICAL OVER-HEAD	UE	UNDERGROUND ELECTRICAL
EP	ELECTRICAL POLE	UP	UTILITY POLE
EW	EACH WAY	UT	UNDERGROUND TELEPHONE
EXIST, EX	EXIST, EXISTING	VB	VALVE BOX
		VC	VERTICAL CURVE
		VH	VALVE HANDLE
		V, VERT	VERTICAL
		W	WATER, WEST
		W/	WITH
		WL	WATERLINE
		WL	WATER LEVEL
		WM	WATER METER
		WMH	WATER MANHOLE
		WV	WATER VALVE
		WVH	WATER VALVE HAND HOLE
		WWF	WELDED WIRE FABRIC
HB	HOSE BIB		
HD	HEAD		
HGL	HYDRAULIC GRADE LINE		
HT, H	HEIGHT		
HN	HEAD NUT		
HT WALL	HOLLOW TILE WALL		
HP	HIGH POINT		
HORIZ-HOR	HORIZONTAL		
HR	HOUR		
HDPE	HIGH DENSITY POLYETHYLENE		

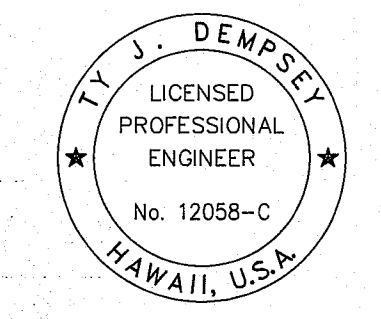
**LEGEND:**

---	PROPERTY LINE
---S8---	PROPOSED SEWERLINE
---D6---	PROPOSED DRAINLINE
---W6---	PROPOSED WATERLINE
---I6---	PROPOSED IRRIGATION
---S8---	EXIST. SEWERLINE W/ SIZE
---D6---	EXIST. DRAINAGE LINE
---W6---	EXIST. WATERLINE W/ SIZE
---I6---	EXIST. IRRIGATION LINE W/ SIZE
---	LIMITS OF GRADING
---O---	PROPOSED CONTOUR MAJOR
---S---	PROPOSED CONTOUR MINOR
---30---	EXIST. CONTOUR MAJOR
---2---	EXIST. CONTOUR MINOR
25.05	SPOT ELEVATION (PROPOSED)
25.05	SPOT ELEVATION (EXIST.)
~ ~ ~	EXIST. SURFACE FLOW
→ → →	SWALE
⊙	SEWER MANHOLE (SMH)
⊙	SEWER LATERAL & CLEAN OUT
⊙	WATER VALVE
⊙	WATER LINE REDUCER
⊙	WATER SERVICE LATERAL
⊙	FIRE HYDRANT

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**NOTES, LEGEND &  
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Drawing Revisions

No.	Date:	Description:	Appr.

Date: 5/28/21

Drawn By: RF Checked By: TD

Job Number: J15.31

Sheet:





**NOTES:**

1. STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AT THE EGRESS & INGRESS TO THE SITE.
2. DUST CONTROL SHOULD BE APPLIED TO REDUCE DUST EMISSIONS. CONTRACTOR SHALL WATER DURING CONSTRUCTION TO CONTROL DUST.
3. CONTRACTOR TO PHASE GRADING WORK SUCH THAT NO MORE THAN 20 ACRES IS CLEARED FOR GRADING AT ANY GIVEN TIME.

**BEST MANAGEMENT PRACTICES NOTES:**

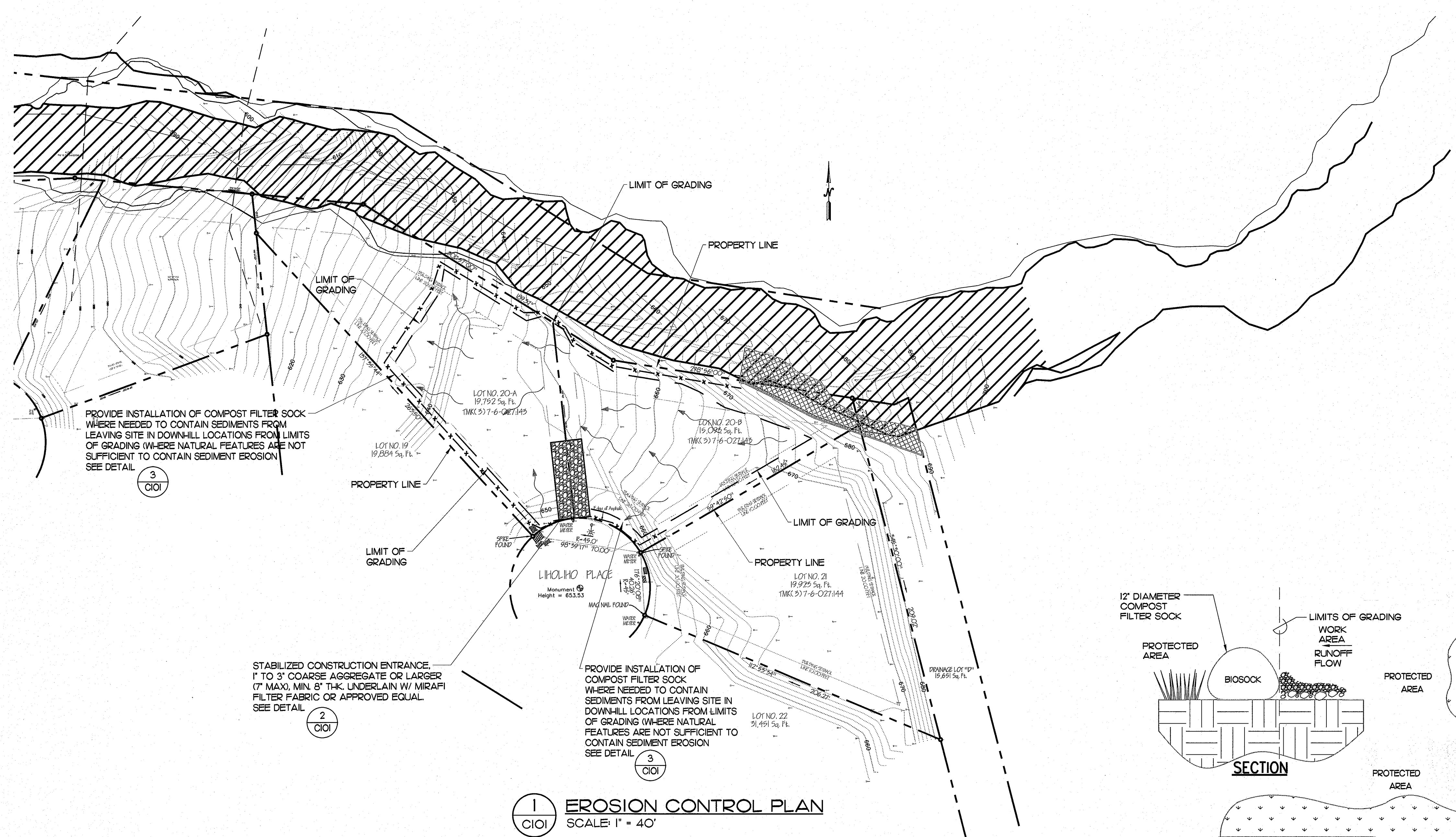
1. MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY WORK IS INITIATED UNDER NEW PERMIT. THESE MEASURES SHALL BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
2. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY.
3. STABILIZED CONSTRUCTION ENTRANCE TO BE PROVIDED.
4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED BY THE CONTRACTOR AFTER COMPLETION OF THE PROJECT PRIOR TO FINAL ACCEPTANCE OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

**EROSION & TEMPORARY DUST CONTROL:**

1. DURING CONSTRUCTION, PREVENTATIVE MEASURES SHALL BE USED TO CONTROL FORESEEABLE DUST, EROSION OR SEDIMENTATION PROBLEMS WHICH MAY ARISE AS THE JOB PROGRESSES.
2. FLUGITIVE DUST AND SOLID WASTE DISPOSAL DURING GRADING ACTIVITIES SHALL MEET REQUIREMENTS OF ADMINISTRATIVE RULES, TITLE II, CHAPTER 60I, AIR POLLUTION CONTROL AND CHAPTER 58, SOLID WASTE MANAGEMENT CONTROL.
3. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
4. ALL SLOPES AND EXPOSED AREAS SHALL BE STABILIZED OR PLANTED ONCE FINAL GRADES HAVE BEEN ESTABLISHED.

**LEGEND:**

PROPERTY OR CPR LINE	---
LIMITS OF GRADING	---
FILTER SOCK	X X X
EXIST. CONTOUR MAJOR	20
EXIST. CONTOUR MINOR	22
SURFACE FLOW	~ ~ ~



PROVIDE INSTALLATION OF COMPOST FILTER SOCK WHERE NEEDED TO CONTAIN SEDIMENTS FROM LEAVING SITE IN DOWNHILL LOCATIONS FROM LIMITS OF GRADING (WHERE NATURAL FEATURES ARE NOT SUFFICIENT TO CONTAIN SEDIMENT EROSION) SEE DETAIL

3  
C101

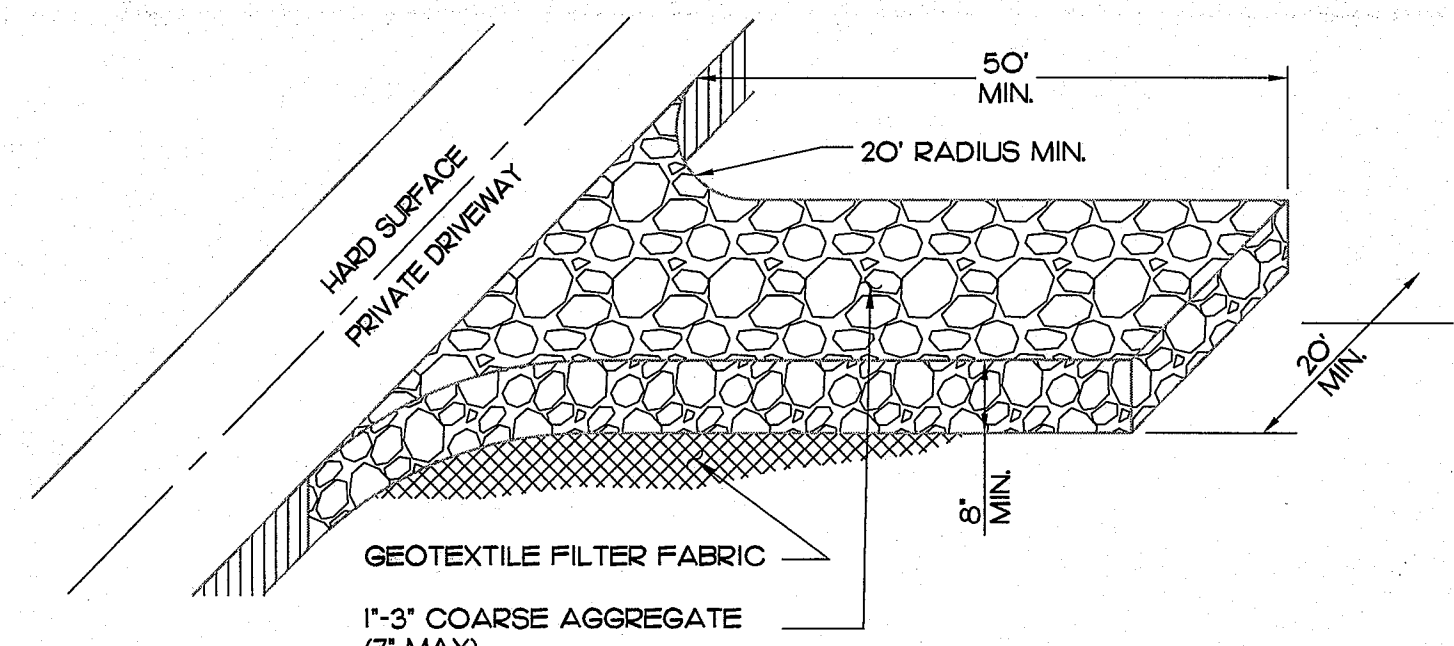
STABILIZED CONSTRUCTION ENTRANCE, 1" TO 3" COARSE AGGREGATE OR LARGER (7" MAX), MIN. 8" THK. UNDERLAIN W/ MIRAFI FILTER FABRIC OR APPROVED EQUAL. SEE DETAIL

2  
C101

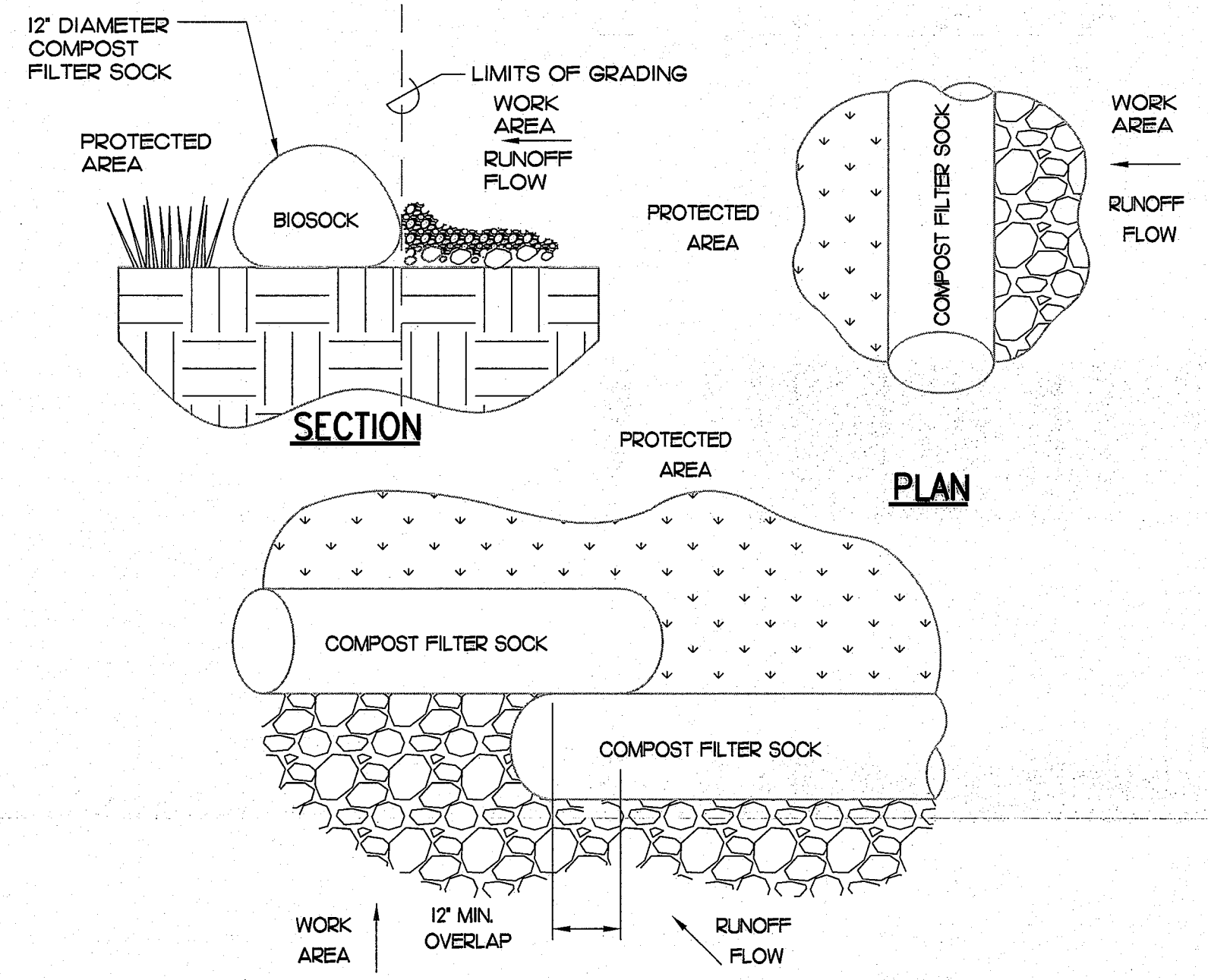
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3  
C101

**1 EROSION CONTROL PLAN**  
SCALE: 1" = 40'

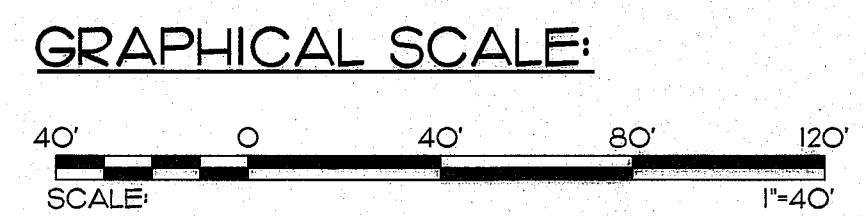


**3 DETAIL - STABILIZED CONST. ENTRANCE**  
NOT TO SCALE



**2 DETAIL - COMPOST FILTER SOCK**  
NOT TO SCALE

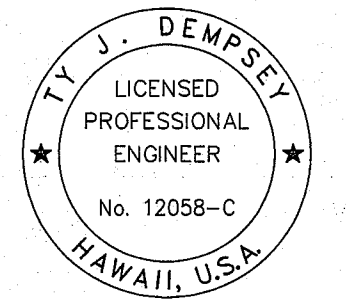
**COMPOST FILTER SOCK NOTE:**  
COMPOST SHALL NOT CONTAIN BIOSOLIDS AND SHOULD COMPLY WITH EPA GUIDELINES.



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**Project:**  
KONA VISTA  
SUBDIVISION, UNIT 4  
LOT 20 GRADING &  
MAINTENANCE ROAD

**Project Location:**  
HOLUALOA, NORTH KONA, HAWAII  
TMK: (3) 7-6-27 : 143

**Sheet Title:**  
EROSION CONTROL PLAN

**Drawing Revisions**

No.	Date:	Description:	Appr.

**Date:** 5/28/21

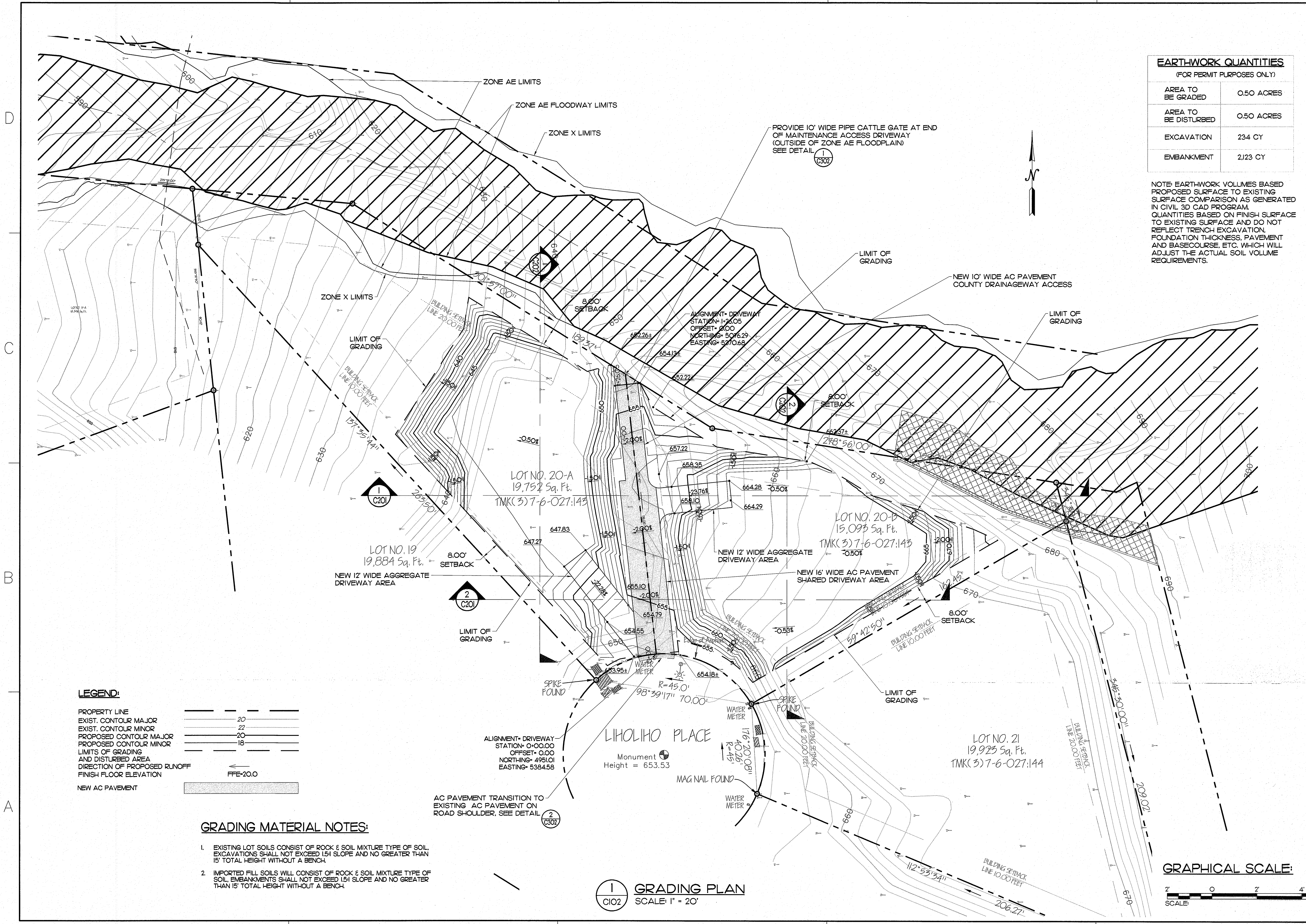
**Drawn By:** RF **Checked By:** TD

**Job Number:** J15.31

**Sheet:**







EARTHWORK QUANTITIES (FOR PERMIT PURPOSES ONLY)	
AREA TO BE GRADED	0.50 ACRES
AREA TO BE DISTURBED	0.50 ACRES
EXCAVATION	234 CY
EMBANKMENT	2123 CY

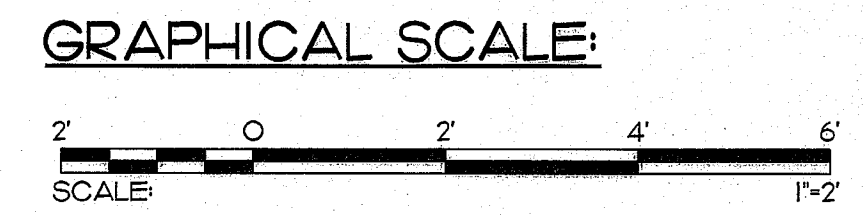
NOTE: EARTHWORK VOLUMES BASED PROPOSED SURFACE TO EXISTING SURFACE COMPARISON AS GENERATED IN CIVIL 3D CAD PROGRAM. QUANTITIES BASED ON FINISH SURFACE TO EXISTING SURFACE AND DO NOT REFLECT TRENCH EXCAVATION, FOUNDATION THICKNESS, PAVEMENT AND BASECOURSE, ETC. WHICH WILL ADJUST THE ACTUAL SOIL VOLUME REQUIREMENTS.

**LEGEND:**

PROPERTY LINE	---
EXIST. CONTOUR MAJOR	--- 20 ---
EXIST. CONTOUR MINOR	--- 22 ---
PROPOSED CONTOUR MAJOR	--- 20 ---
PROPOSED CONTOUR MINOR	--- 18 ---
LIMITS OF GRADING AND DISTURBED AREA	---
DIRECTION OF PROPOSED RUNOFF	←
FINISH FLOOR ELEVATION	FFE-20.0
NEW AC PAVEMENT	▨

- GRADING MATERIAL NOTES:**
- EXISTING LOT SOILS CONSIST OF ROCK & SOIL MIXTURE TYPE OF SOIL. EXCAVATIONS SHALL NOT EXCEED 1:51 SLOPE AND NO GREATER THAN 15' TOTAL HEIGHT WITHOUT A BENCH.
  - IMPORTED FILL SOILS WILL CONSIST OF ROCK & SOIL MIXTURE TYPE OF SOIL. EMBANKMENTS SHALL NOT EXCEED 1:51 SLOPE AND NO GREATER THAN 15' TOTAL HEIGHT WITHOUT A BENCH.

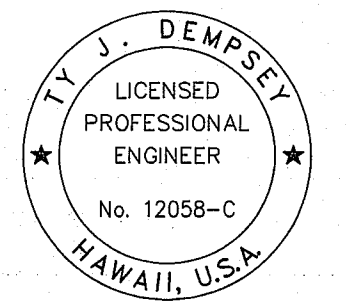
**1**  
C102 GRADING PLAN  
SCALE: 1" = 20'



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**Project:**  
KONA VISTA  
SUBDIVISION, UNIT 4  
LOT 20 GRADING &  
MAINTENANCE ROAD

**Project Location:**  
HOLUALOA, NORTH KONA, HAWAII  
TMK: (3) 7-6-27 : 143

**Sheet Title:**  
GRADING PLAN

**Drawing Revisions**

No.	Date	Description	Appr.

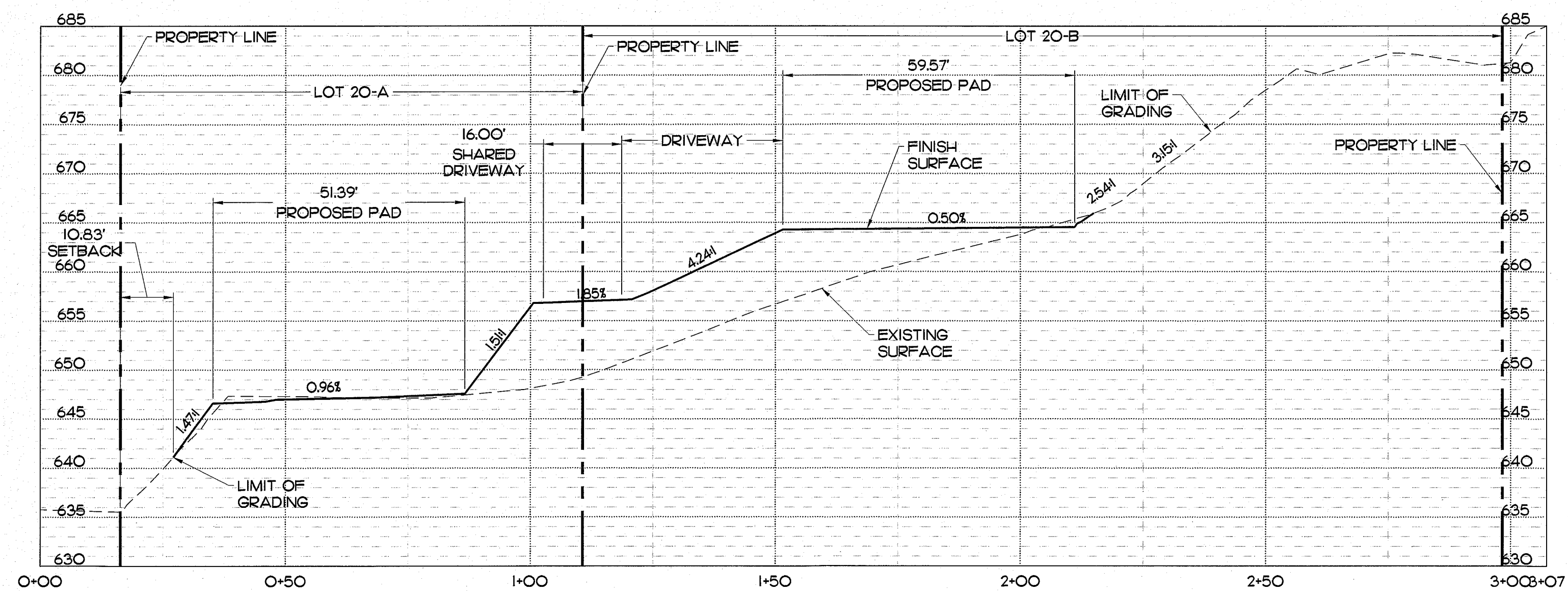
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**Drawn By:** RF **Checked By:** TD

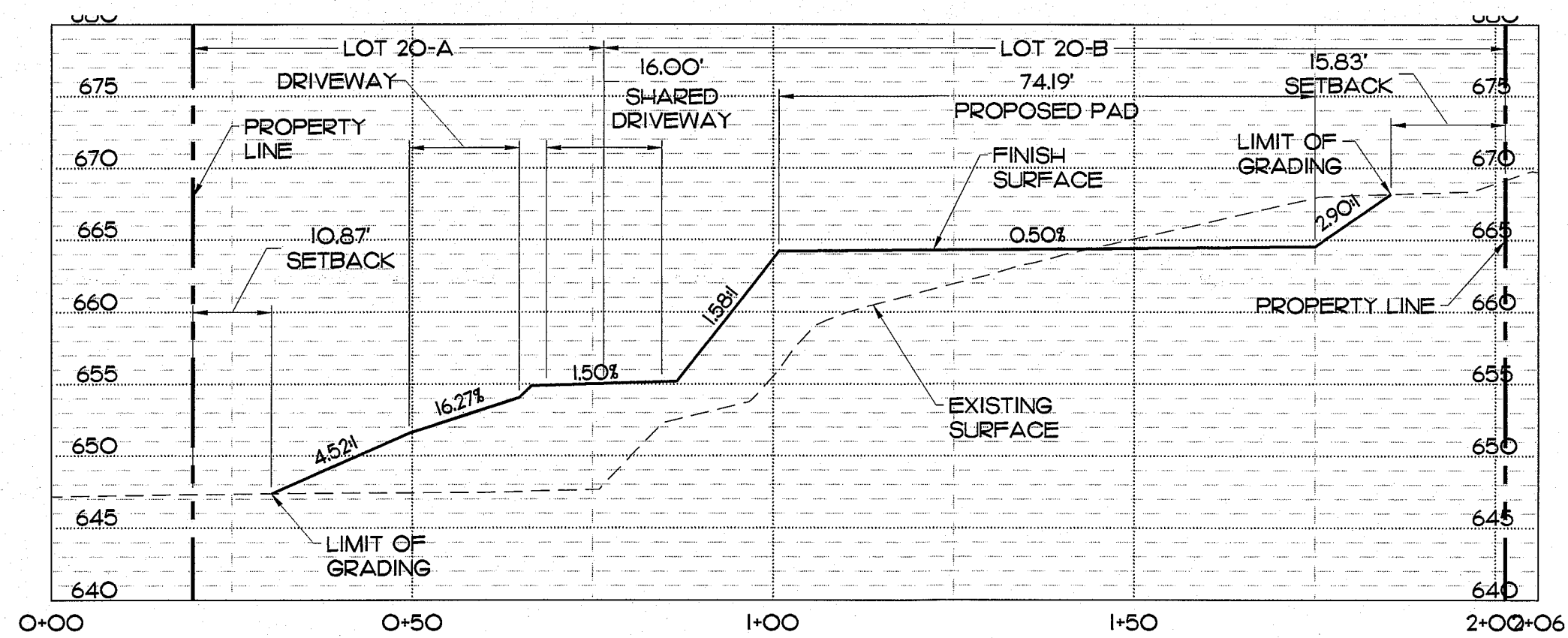
**Job Number:** J15.31

**Sheet:** C102





1 GRADING SECTION 1  
C201 SCALE: HOR. 1" = 20'  
VERT. 1" = 10'

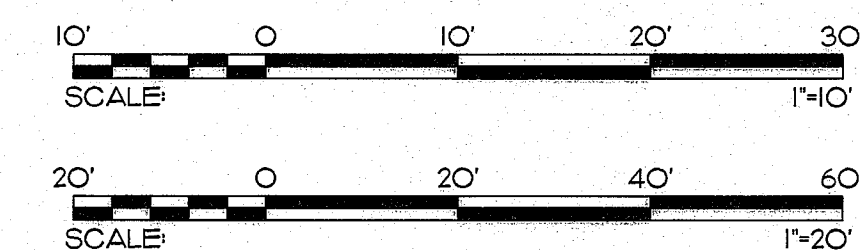


2 GRADING SECTION 2  
C201 SCALE: HOR. 1" = 20'  
VERT. 1" = 10'

GRADING MATERIAL NOTES:

- EXISTING LOT SOILS CONSIST OF ROCK & SOIL MIXTURE TYPE OF SOIL. EXCAVATIONS SHALL NOT EXCEED 1:1 SLOPE AND NO GREATER THAN 15' TOTAL HEIGHT WITHOUT A BENCH.
- IMPORTED FILL SOILS WILL CONSIST OF ROCK & SOIL MIXTURE TYPE OF SOIL. EMBANKMENTS SHALL NOT EXCEED 1:1 SLOPE AND NO GREATER THAN 15' TOTAL HEIGHT WITHOUT A BENCH.

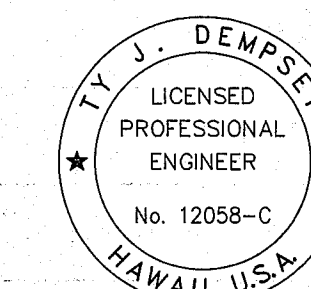
GRAPHICAL SCALE:



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KONA VISTA  
SUBDIVISION, UNIT 4  
LOT 20 GRADING &  
MAINTENANCE ROAD

Project Location:  
HOLUALOA, NORTH KONA, HAWAII  
TMK: (3) 7-6-27 : 143

Project:

Sheet Title:  
GRADING SECTIONS 1

Drawing Revisions  
No. Date: Description: Appr:

Date: 5/28/21

Drawn By: RF Checked By: TD

Job Number: J15.31

Sheet:

C201

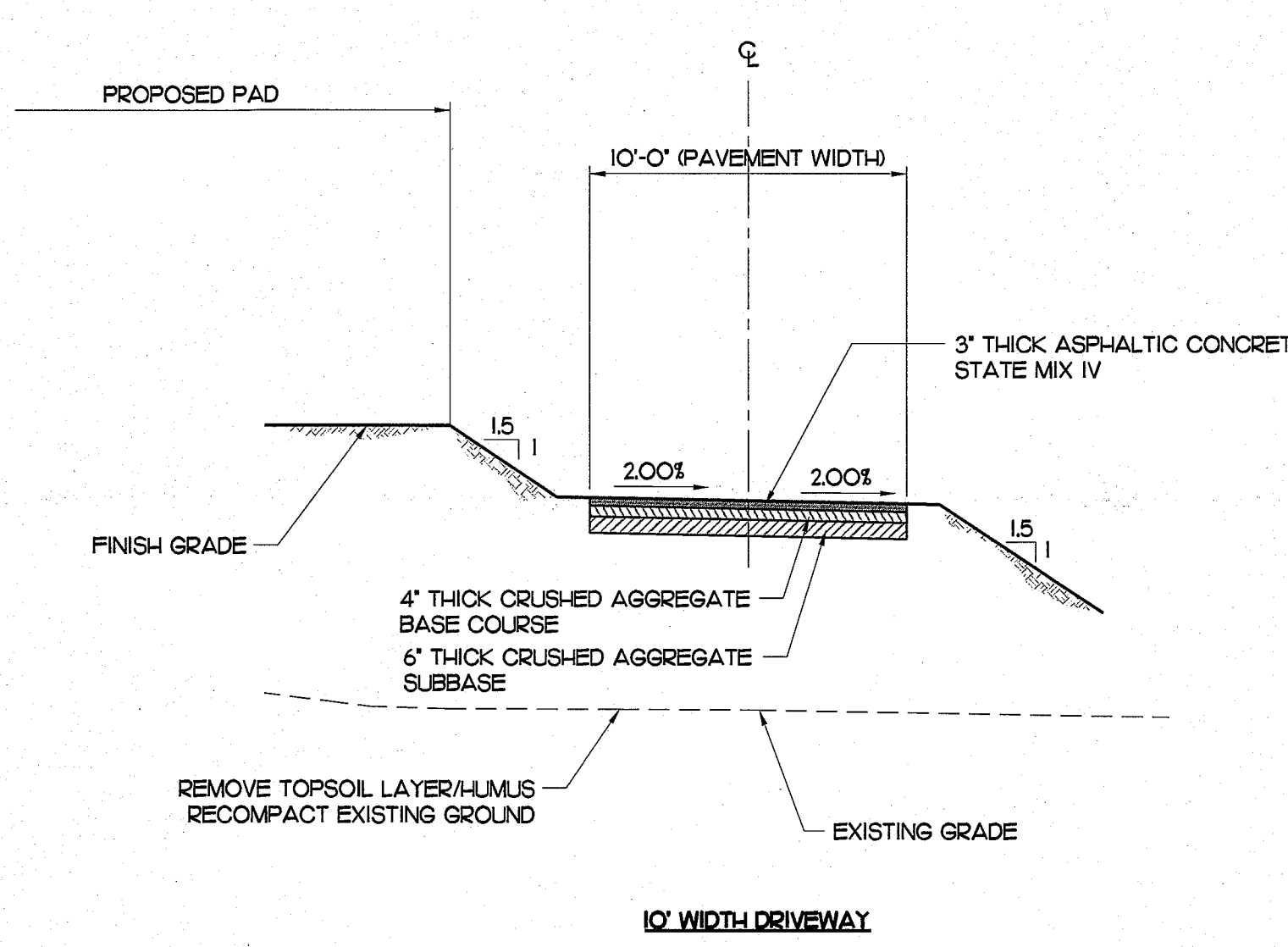
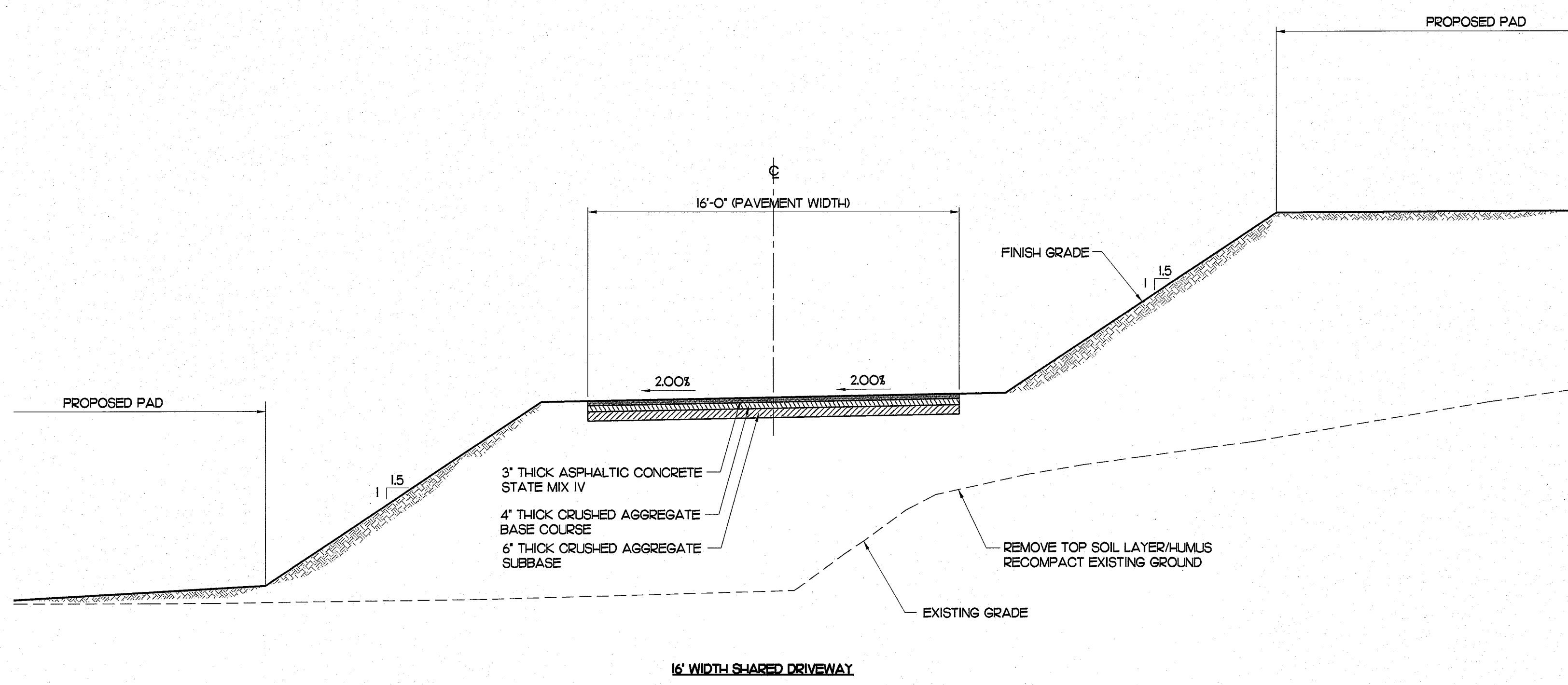
Number: 5 of 8





1 2 3 4 5

D  
C  
B  
A



**GRADING MATERIAL NOTES:**

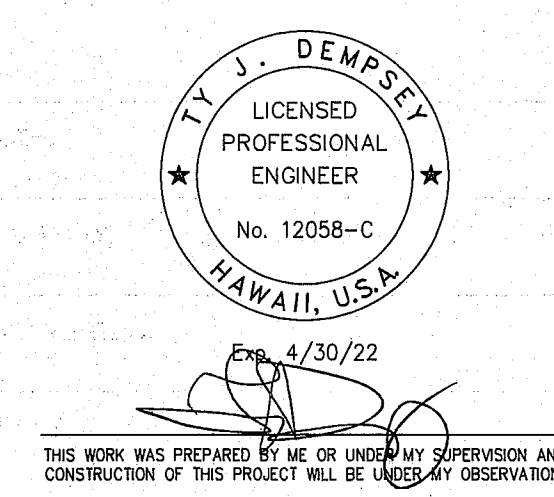
- EXISTING LOT SOILS CONSIST OF ROCK & SOIL MIXTURE TYPE OF SOIL. EXCAVATIONS SHALL NOT EXCEED 1.5:1 SLOPE AND NO GREATER THAN 15' TOTAL HEIGHT WITHOUT A BENCH.
- IMPORTED FILL SOILS WILL CONSIST OF ROCK & SOIL MIXTURE TYPE OF SOIL. EMBANKMENTS SHALL NOT EXCEED 1.5:1 SLOPE AND NO GREATER THAN 15' TOTAL HEIGHT WITHOUT A BENCH.

**1** TYPICAL DRIVEWAY DETAILS  
C301 NOT TO SCALE

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Project:  
**KONA VISTA  
SUBDIVISION, UNIT 4  
LOT 20 GRADING &  
MAINTENANCE ROAD**

Project Location:  
HOLUALOA, NORTH KONA, HAWAII  
TMK: (3) 7-6-27 : 143

Sheet Title:  
**DETAILS I**

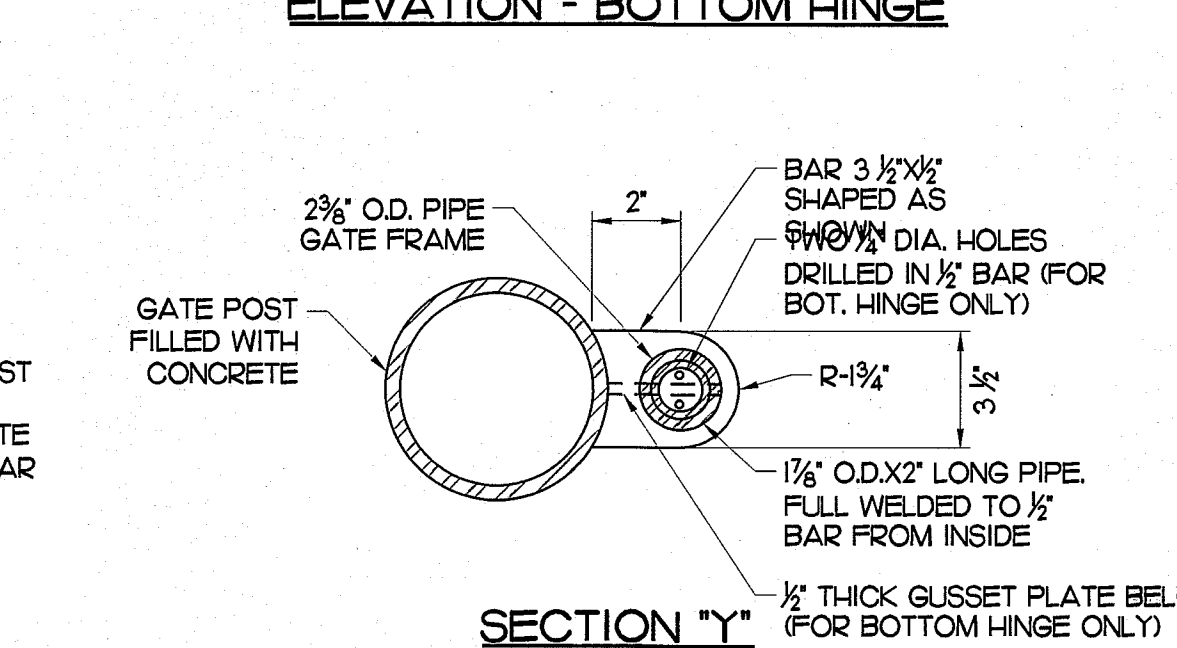
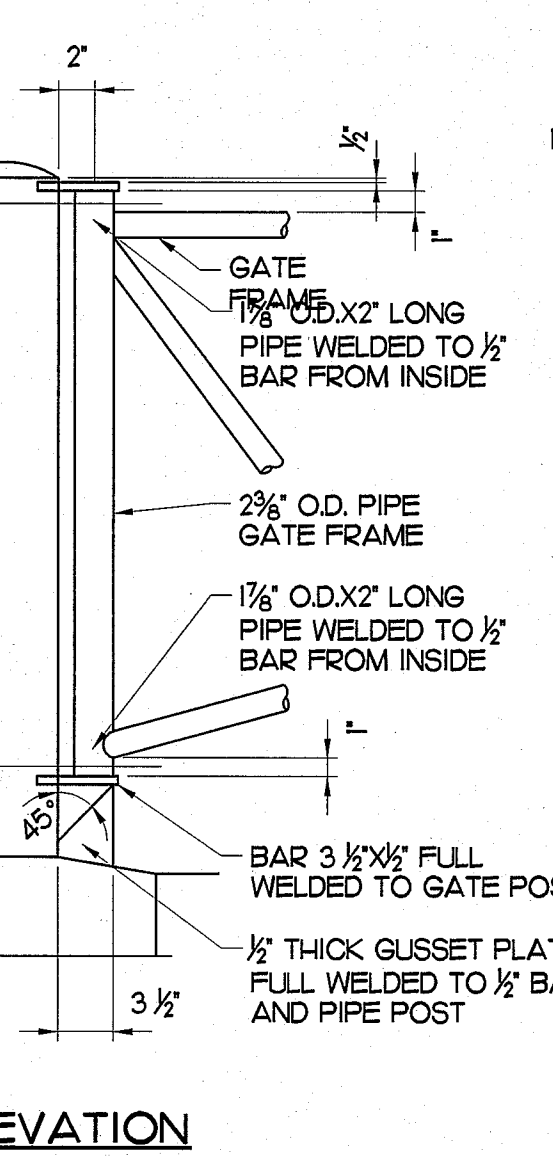
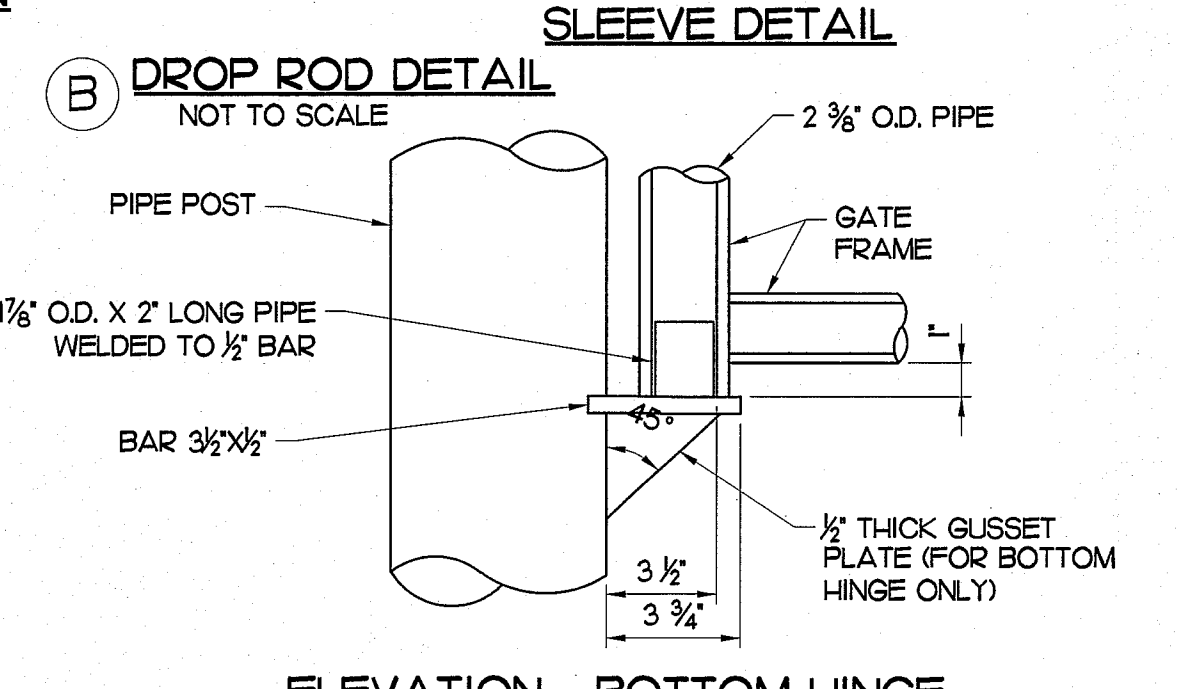
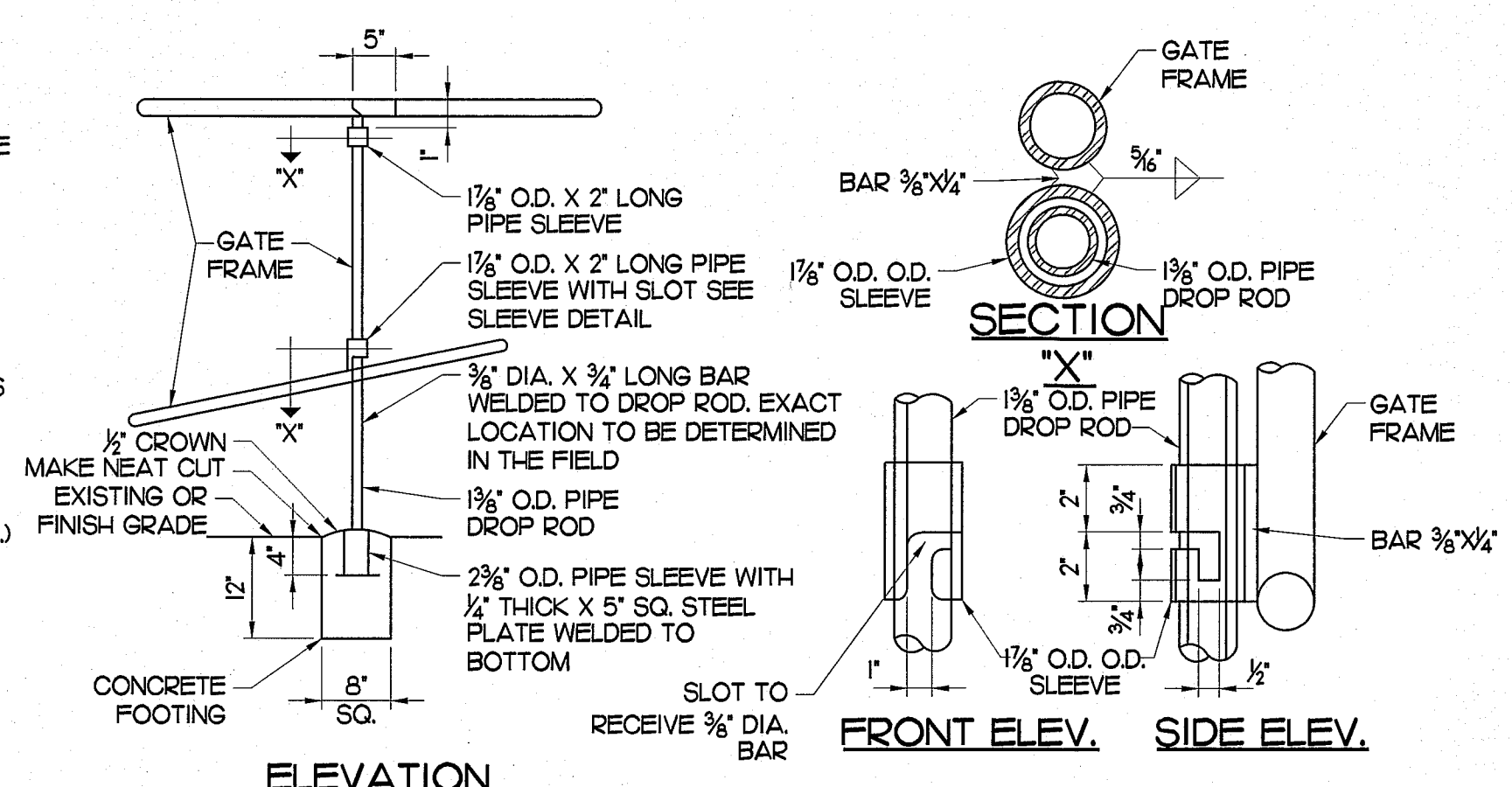
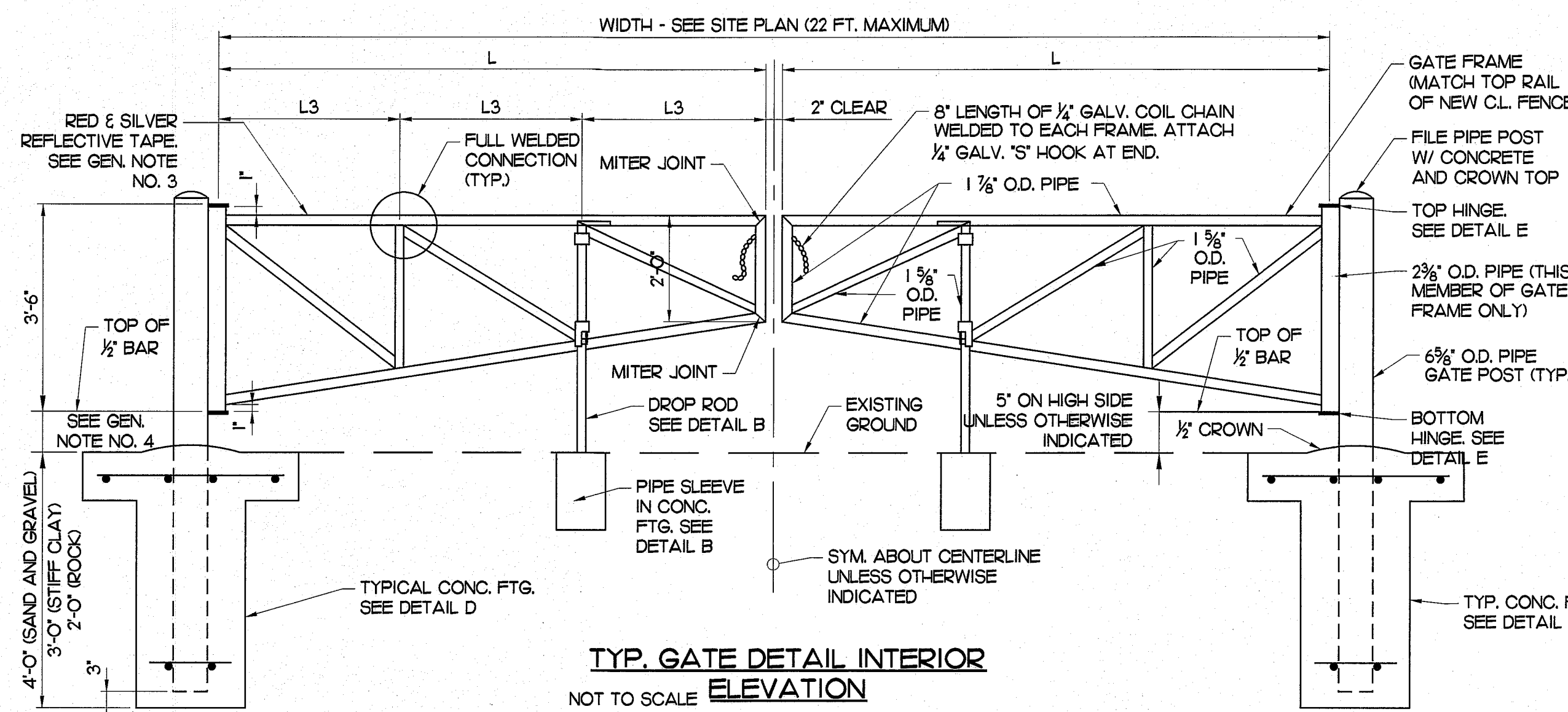
Drawing Revisions			
No.	Date	Description	Appr.

Date: 5/28/21

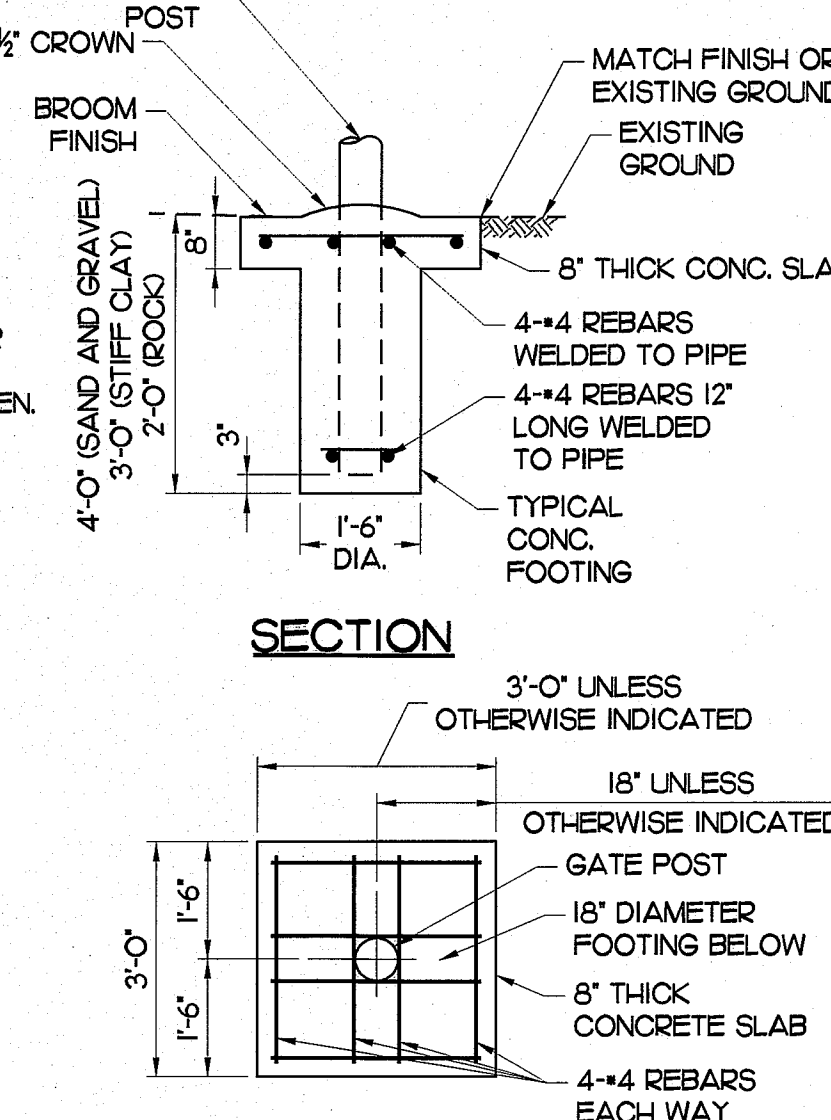
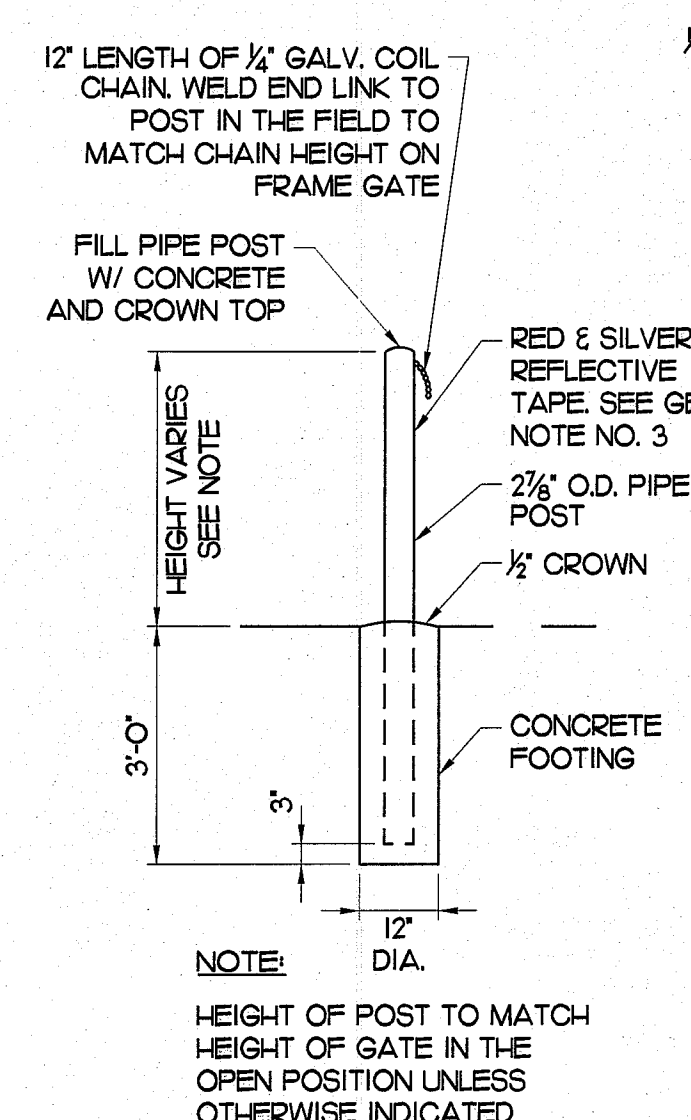
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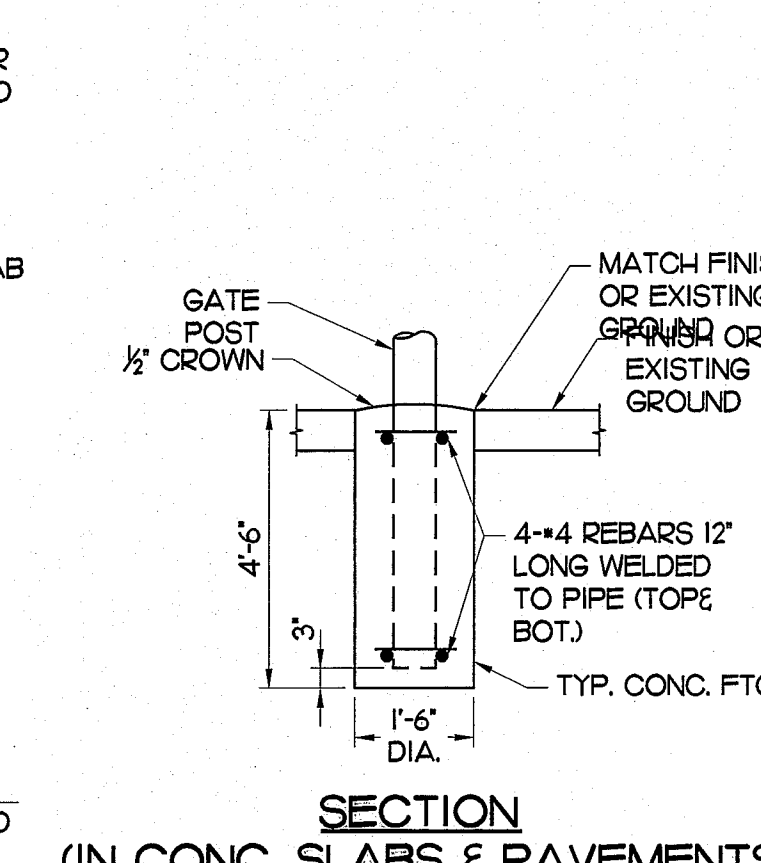
Sheet:  
**C301**  
Number: 7 of 8



**E HINGE DETAILS**  
NOT TO SCALE



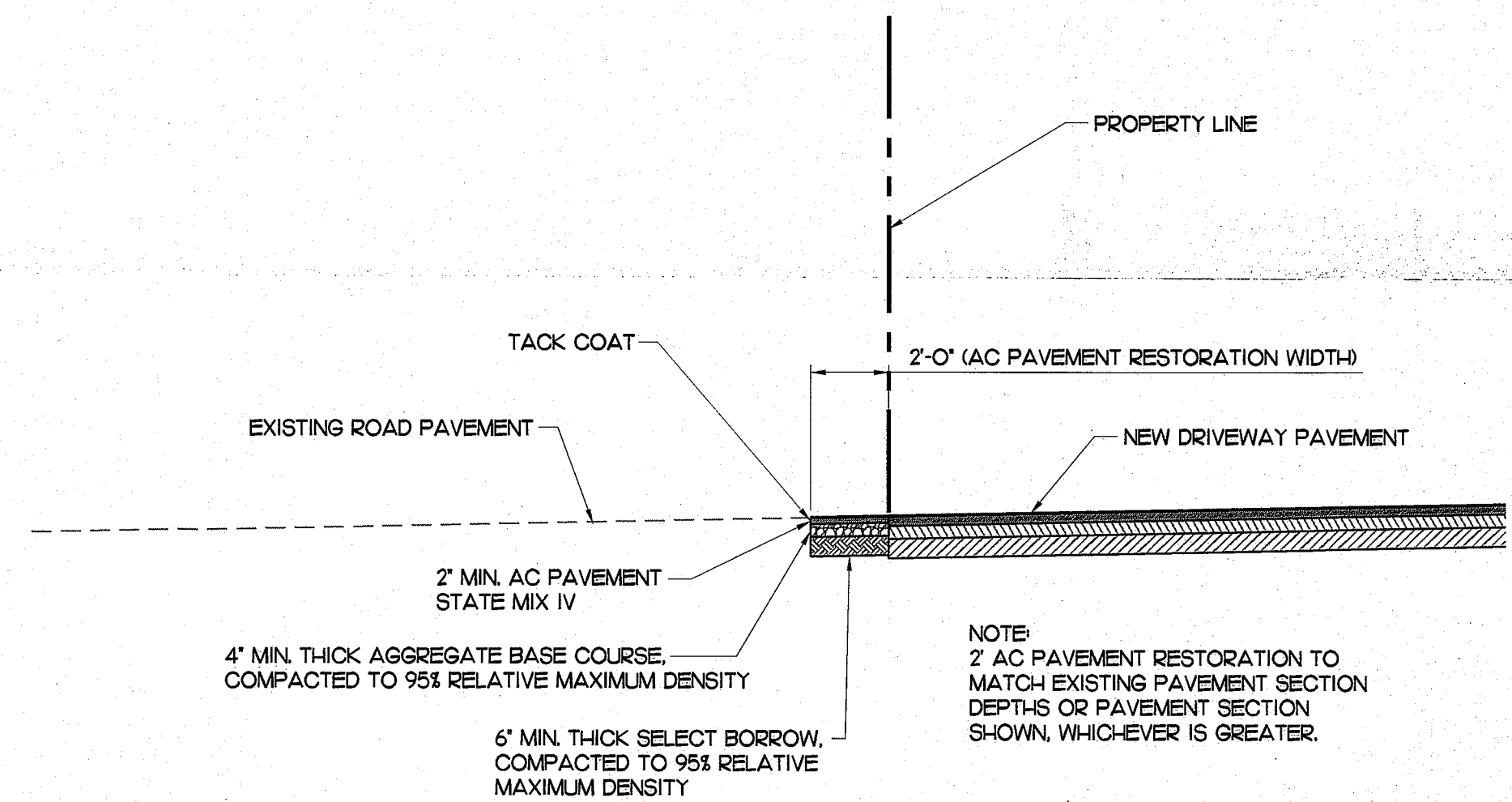
**C TYP. GATE STOP POST** NOT TO SCALE  
**D TYP. GATE POST FOOTING** NOT TO SCALE



**SECTION (IN CONC. SLABS & PAVEMENTS)**

- GENERAL NOTES:**
1. CONCRETE SHALL BE CLASS 'A'
  2. ALL WELDS SHALL BE GROUND SMOOTH.
  3. WRAP REFLECTIVE TAPE AROUND ENTIRE NEW PIPE FRAME GATES AND POSTS (EXCEPT AT WELDED CONNECTIONS). ALTERNATE 12" BANDS OF RED AND SILVER TAPE. REFLECTIVE TAPE SHALL BE SCOTCH-LITE BRAND REFLECTIVE SHEETING HIGH INTENSITY GRADE HIGH TACK PRESSURE SENSITIVE (RED-MODEL NO. 5872, SILVER -MODEL NO. 5870) OR APPROVED EQUAL.
  4. ADJUST DIMENSION TO MAKE GATE FRAME LEVEL TO EACH OTHER.
  5. PROVIDE 2 PADLOCKS FOR EACH PAIR OF DOUBLE SWING GATES. PADLOCKS SHALL BE KEYED ALIKE. LOCKS SHALL BE MASTERED-KEYED TO THE SCHOOL'S SYSTEM UNLESS OTHERWISE INDICATED.
  6. HAND EXCAVATE FOR POST FOOTINGS NEAR EXISTING UNDERGROUND UTILITIES.
  7. SEE STATE DOT HIGHWAYS STD. DETAIL B-01 FOR ADDITIONAL NOTES.
  8. NOT NCHRP 350 COMPLIANT.

**I CATTLE GATE DETAILS**  
NOT TO SCALE

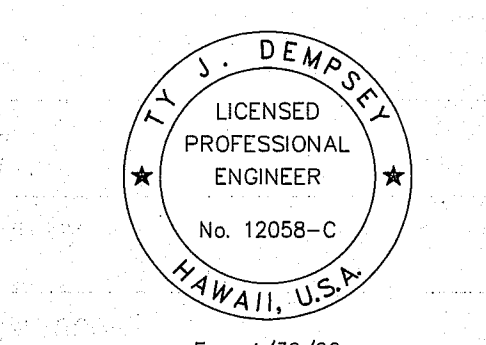


**2 AC PAVEMENT RECONNECTION DETAIL**  
NOT TO SCALE

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Project: **KONA VISTA SUBDIVISION, UNIT 4 LOT 20 GRADING & MAINTENANCE ROAD**  
Project Location: **HOLUALOA, NORTH KONA, HAWAII TMK: (3) 7-6-27 : 143**

Sheet Title: **DETAILS 2**

Drawing Revisions			
No.	Date	Description	Appr.

Date: 5/28/21

Drawn By: RF Checked By: TD

Job Number: J15.31

Sheet: C302

Number: 8 of 8