Pacific Coast Land Design, Inc.
Landscape Architecture • Urban Design • Environmental Planning
461 East Main Street, Ventura, CA 93001 805.644.9697 www.pc-ld.com

PROJECT: **OUSD MIRA MONTE FIELD RENOVATION**
RE: Bid RFI Response
DATE: May 20th, 2021

RFI Emails 1 & 2 - Sam Bennett with Summer Construction
Date: 5/18/2021

1. *Per Note 6 of General Grading Notes on Plan Page LC-1.01. Does this note apply to the Decomposed Granite Pathway? Remove 1ft then scarify an additional 8" compacted to 95 percent. Please clarify.*
    a. Yes, note 6 of General Grading Notes on Sheet LC-1.01 applies to the Decomposed Granite Pathway.
2. *IS THERE A CIVIL GEOTECHNICAL REPORT FOR THIS PROJECT, DIFFERENT FROM THE REPORT FOR THE GRASS (AGRONOMIC SOILS REPORT)? Section 312000-4 Earth Moving 1.07 Paragraph F, Item 2 States: Contractor shall be responsible for properly stabilizing the subgrade in accordance with the Geotechnical Report and at the direction of the Geotechnical Representative. Please advise.*
    a. If pumping soils are encountered, School District will hire a Geotech to define the needed fix.

RFI 05-19-21 from Chris Ngo with Marina Landscape, Inc.
Date: 5/19/2021

1. *Please provide as built irrigation plans.*
    a. Please see attached As-Built Irrigation Plans
2. *Please provide the thicknesses and material type of existing paving that is to be removed. In addition, any known reinforcements.*
    a. See Demolition Sheet LD-1.01 for extents of Existing DG paving to be removed. 4" depth with no known reinforcement at existing Gaga Pit area.
3. *Please provide details & specifications for the gabion walls.*
    a. See attached MFR details and specifications for gabion walls.
4. *Please indicate who the manufacturer is for the gabion retaining walls.*
    a. Gabion wall Manufacturer: HILFIKER RETAINING WALLS, 1902 Hilfiker Lane, Eureka, CA 95503-5711. Phone: 707-443-5093. Email: info@hilfiker.com. Product: ArtWeld Gabion, Galvanized, 9 Gauge Wire, 3"x3"
5. *Is alternate #1 part of this contract? The bid form only has a field the base bid amount.*
    b. Add Alt #1 as defined on LC-2.01 Detail F is not part of the base bid. Bidders shall provide a separate bid item for Add Alt #1.
6. *Detail I on sheet LI-2.01 shows that backflow enclosure and pressure regulator models shall be per irrigation legend. The irrigation legend does not specify any models. Please provide.*
    a. There will be no backflow enclosure for the project. Reference to backflow enclosure in Detail I on sheet LI-2.01 is removed.
    b. Pressure regulator at backflow to be Zurn 500XL 3".

ArtWeld Gabion
Product Specification
(Non-Galvanized Black Wire)

1.0 DESCRIPTION

This work shall consist of Hilfiker ArtWeld Gabions (welded wire mesh) and filling the gabions with rock in accordance with the details shown on the plans and these special provisions.

2.0 MATERIALS

Gabions shall be of a single unit construction. The base, ends, sides, and lid shall be fabricated from 3"x3" 9 Gauge Black Welded Wire Mesh and connected in such a manner that strength and flexibility at the connection are at least equal to that of the wire mesh. The gabions shall be fabricated in such a manner that they can be assembled at the construction site with Spiral Binders and pre-formed stiffeners to form rectangular baskets of the specified size.

The height, length, and width of the gabions shall not vary more than 5 percent from the dimensions shown on the plans.

Gabions shall be divided into cells of equal length, not more than 3 feet long, by diaphragms made of the same wire mesh as used for the gabion body. Each gabion shall be fabricated with the necessary diaphragm or diaphragms secured in proper position on the base in such a manner that no additional tying at the base will be necessary.

A Certificate of Compliance shall accompany each shipment of gabions to a job site.

Wire for the manufacture and assembly of gabions shall meet or exceed all of the following requirements:

Description	**Requirement**
3"x3" (9 ga. - 0.144 in. min.) Welded Wire Fabric	ASTM A1064
Exception: Weld Shear at 800 lbs of force min.	
9 ga. Pre-Formed Stiffener	ASTM A1064
9 ga. Spiral Binder	ASTM A1064

3.0 ROCK

Rock for filling the gabions shall be as listed:

100% passing 8 inches (20.3 cm), 0-5% passing 4 inches (10.2 cm)

4.0 CONSTRUCTION

Gabions shall first be assembled individually as empty units. Each gabion shall be manufactured with the necessary panels, properly spaced and secured, so they can be rotated into position at the construction site with no additional tying of the rotation joint. The panels and diaphragms shall be rotated into position and joined along vertical edges.

When 13.5-gauge tie wire is used as the joint material, all vertical edges of each gabion panel shall first be constructed to form individual empty gabions. Simple spiraling (looping without locking) of 13.5-gauge tie wire is not permitted. For welded-mesh, the joint shall be constructed using alternating single and double half hitches (locked loops) in every mesh opening along the joint.

1902 Hilfiker Lane • Eureka, CA 95503-5711 • web: www.hilfiker.com • email: info@hilfiker.com
phone: **707.443.5093** toll free: **800.762.8962** fax: **707.443.2891**

When 9-gauge spiral binders are used, the spiral shall be screwed into position such that it passes through each mesh opening along the joint. Both ends of all 9-gauge spiral binders shall be crimped to secure the spiral in place.

Temporary fasteners may be used to hold panels wherever gabion-to-gabion joints will be constructed. Temporary fasteners may remain in place.

4.1 Assembly of Successive Gabions (Gabion-to-Gabion Joints)

Empty gabions shall be set in place. Individually constructed empty gabions shall be joined successively to the next empty gabion with 13.5-gauge tie wire or 9-gauge spirals, before filling with rock begins. The 13.5-gauge tie wire or 9-gauge spiral binders shall secure, in one pass, all selvage or end wires of panels of all the adjacent gabions along the joint.

4.2 Assembly of Multiple Layered Gabions

Multi-layered gabion configurations can be stepped and staggered as shown on the plans or as directed by the Engineer. When constructing multi-layered gabion configurations, each layer of gabions can be joined to the underlying layer along the front and ends, or as shown on the plans.

4.3 Assembly of Single-Layered Gabions

Single-layered gabion configurations shall be butted and joined along the front, back, and ends as shown on the plans, including tops and bottoms of adjacent gabions.

4.4 Assembly of Shear Key Gabions

Shear key gabions (also called "counterforts") shall be spaced as shown on the plans. Shear key gabions shall be tied to adjacent gabions in the manner specified for "Assembly of Successive Gabions."

4.5 Modified Geometry

To match the geometry of the planned gabion configuration, or to meet specific conditions panels shall be folded, cut, and/or re-tied to dimensions shown on the plans or as approved by the Engineer.

4.6 Filling with Rock

Rock shall be placed in gabions to insure proper alignment, avoid bulges, and provide a minimum of voids. All exposed rock surfaces shall have a smooth and neat appearance. No sharp edges shall project through the wire mesh.

When constructing with 1.5-foot high or 3-foot high gabions, pre-formed stiffeners shall be used to produce a flat, smooth external surface.

Pre-formed Stiffeners shall be installed on the exposed face of the gabion prior to rock placement, two rows at 1/3 points on 3' high gabions, one row at 1/2 point in 1.5' high gabions.

When filling 3-foot high gabions, rock shall be placed in 3 nominal 12-inch layers; when filling 1.5-foot high gabions, rock shall be placed in two 9-inch layers.

The last layer of rock shall slightly overfill the gabions such that the lid will rest on rock when it is closed.

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4.7 Closure of Lids

Lids shall be tied along the front, ends, and diaphragms of individual gabions and to successive gabions with 9-gauge spiral binders in the same manner as specified elsewhere in this specification.

5.0 MEASUREMENT

Quantities of gabions to be paid for will be measured by the cubic yard and will be determined from the dimensions shown on the plans or the dimensions directed by the Engineer.

• End of Section •

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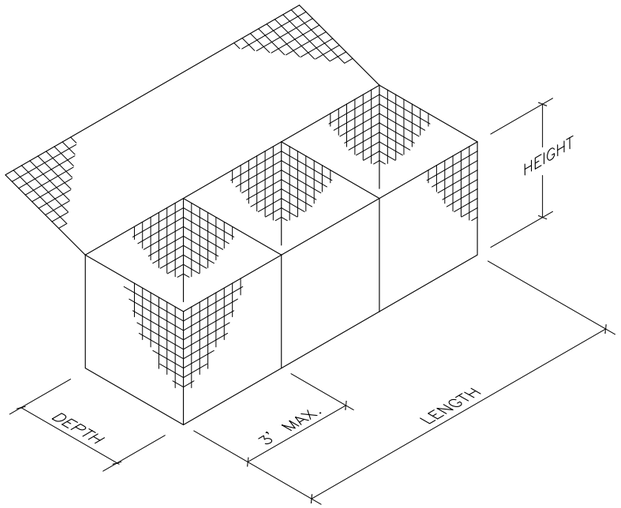
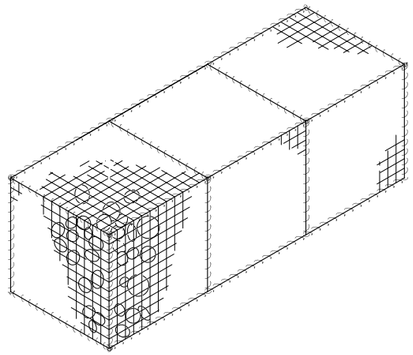
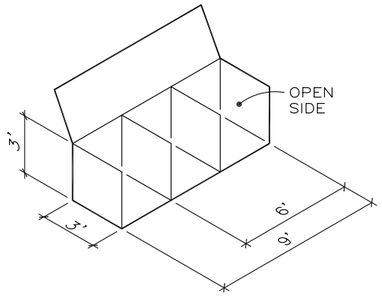


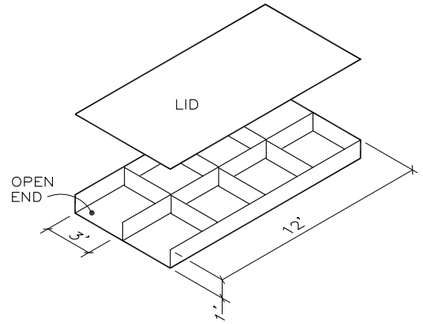
TYPICAL GABION
NOT TO SCALE



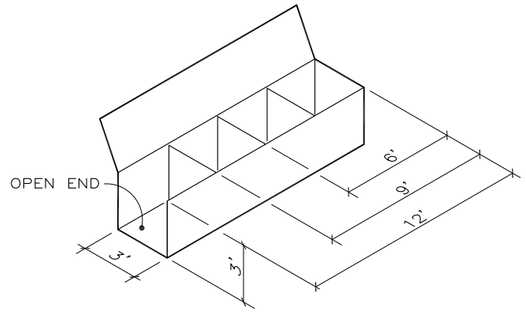
TYPICAL ASSEMBLED GABION
NOT TO SCALE



NOTE: SIZES CAN VARY
TYPICAL OPEN SIDE
NOT TO SCALE



NOTE: SIZES CAN VARY
TYPICAL MATTRESS
NOT TO SCALE



NOTE: SIZES CAN VARY
TYPICAL OPEN END
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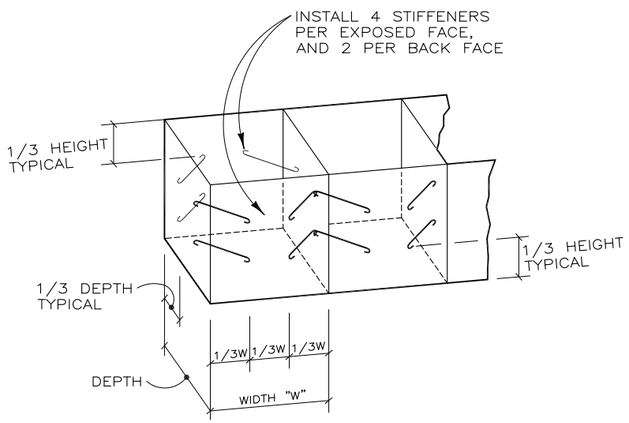
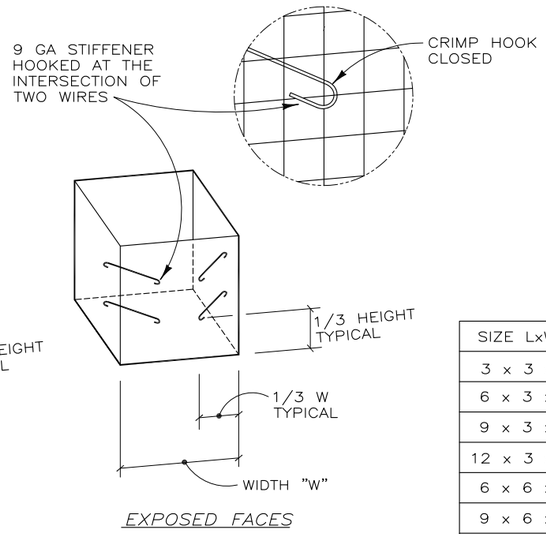


END CELLS



EXPOSED FACES

WHERE HEIGHT OF GABION IS 18" OR LESS, INSTALL 2 STIFFENERS PER FACE
WHERE HEIGHT IS 12", NO STIFFENERS REQUIRED

STIFFENER DETAILS
NOT TO SCALE

STANDARD GABION SIZES

SIZE LxWxH	CU.YD.	SIZE LxWxH	CU.YD.	SIZE LxWxH	CU.YD.
3 x 3 x 3	1	3 x 3 x 1.5	0.5	3 x 3 x 1	0.33
6 x 3 x 3	2	6 x 3 x 1.5	1	6 x 3 x 1	0.67
9 x 3 x 3	3	9 x 3 x 1.5	1.5	9 x 3 x 1	1
12 x 3 x 3	4	12 x 3 x 1.5	2	12 x 3 x 1	1.33
6 x 6 x 3	4	6 x 6 x 1.5	2	6 x 6 x 1	1.33
9 x 6 x 3	6	9 x 6 x 1.5	3	9 x 6 x 1	2
12 x 6 x 3	8	12 x 6 x 1.5	4	12 x 6 x 1	2.67
24 x 6 x 3	16	24 x 6 x 1.5	8	24 x 6 x 1	5.33

NOTES

1. GABION SIZES ARE EXPRESSED IN FEET.

2. MATTRESSES AND CUSTOM SIZES PROVIDED ON REQUEST.

3. GABIONS WHICH ARE TO BE CONNECTED TOGETHER SIDE–TO–SIDE OR END–TO–END, MAY BE PROVIDED OPEN–SIDED OR OPEN–ENDED AS SHOWN TO REDUCE WEIGHT, COST, AND ASSEMBLY TIME.

4. GABIONS ARE MANUFACTURED OF 3"x3" WELDED WIRE MESH, WIRE SIZE AND FINISH VARIES;
   9 GA. BRITE BASIC (BLACK)
   9 GA. WITH 0.9 OZ/SF ZINC COATING
   11 GA. WITH 0.85 OZ/SF ZINC COATING.
OPTIONAL 2.0 OZ/SF ZINC COATING IS AVAILABLE ON REQUEST.

STANDARD GABION DETAILS

REV.NO.	DATE	BY	DESCRIPTION
1	16 JUN 98	DR	REVISED ZINC COATING THICKNESS
2	12 APR 02	DR	UPDATED BORDER
3	15 NOV 06	AMJ	UPDATED BORDER, MINOR CHANGES
4	11 NOV 07	JTE	MINOR CHANGES

GRAPHIC SCALE
LINE IS 20 UNITS LONG ON ORIGINAL DRAWING
0 10 20

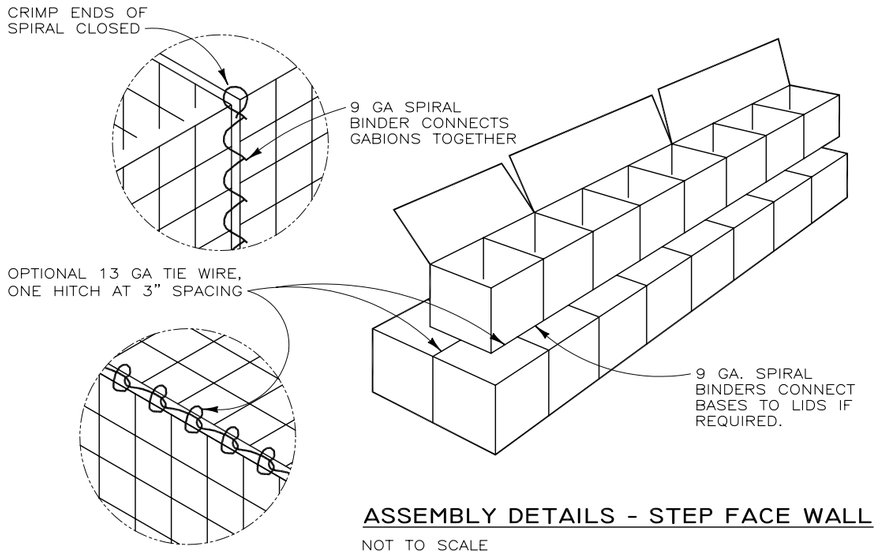
PROJ.MGR.
ENGINEER
CADD BY HRW

HILFIKER RETAINING WALLS
1902 Hilfiker Lane
Eureka, CA 95503-5711
TOLL-FREE 800.762.8962
PH 707.443.5093 FAX 707.443.2891
WEB SITE www.hilfiker.com E-MAIL info@hilfiker.com

DWG DATE 17 JUL 95
REVISION DATE 11 NOV 07
SCALE NOTED

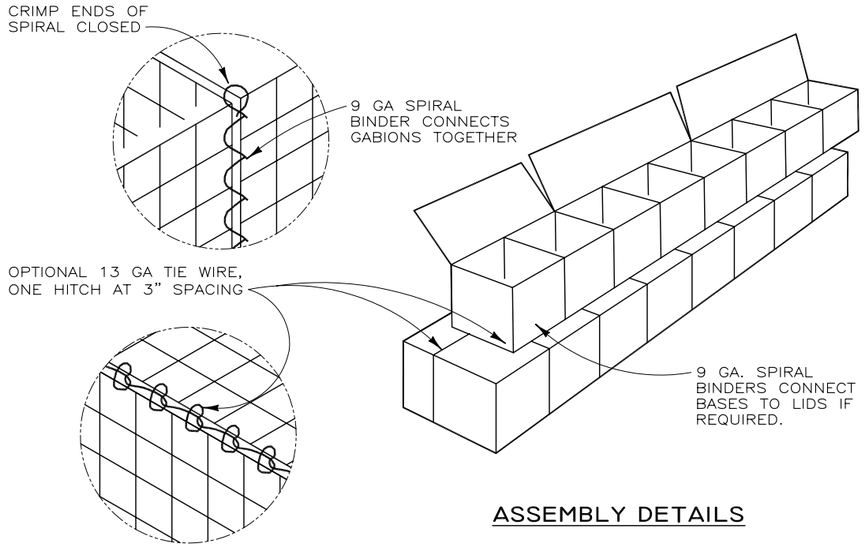
STANDARD DRAWING
ARTWELD GABIONS
DETAILS AND NOTES

PROJECT NO.
SHEET 1 OF 2

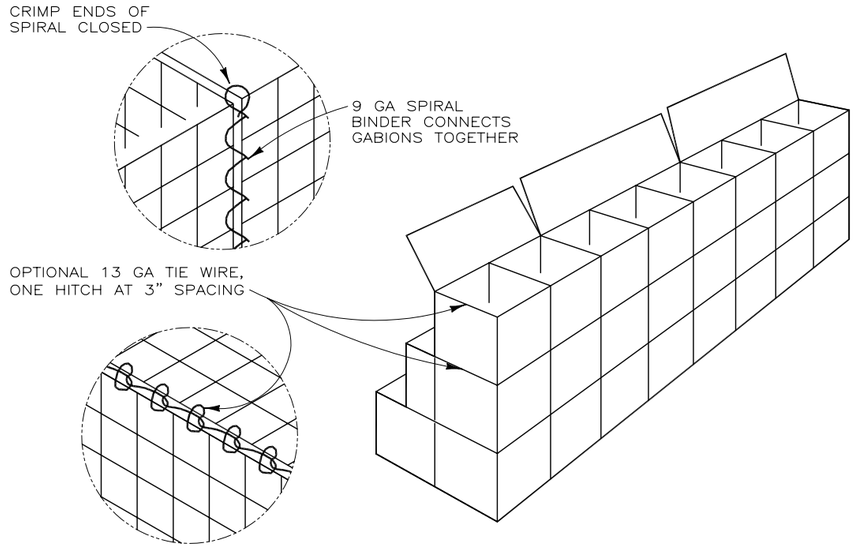


ASSEMBLY DETAILS - STEP FACE WALL

NOT TO SCALE



ASSEMBLY DETAILS



ASSEMBLY DETAILS - VERTICAL WALL

NOT TO SCALE

STANDARD GABION DETAILS

REV.NO.	DATE	BY	DESCRIPTION
1	6/16/98	DR	REVISED ZINC COATING THICKNESS
2	4/12/02	DR	UPDATED BORDER
3	15 NOV 06	AMJ	UPDATED BORDER, MINOR CHANGES
4	11 NOV 07	JTE	MINOR CHANGES

GRAPHIC SCALE

LINE IS 20 UNITS LONG ON ORIGINAL DRAWING

0 10 20

PROJ.MGR.

ENGINEER

CADD BY HRW

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PH 707.443.5093 FAX 707.443.2891
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DWG DATE MAY 08

REVISION DATE

SCALE NOTED

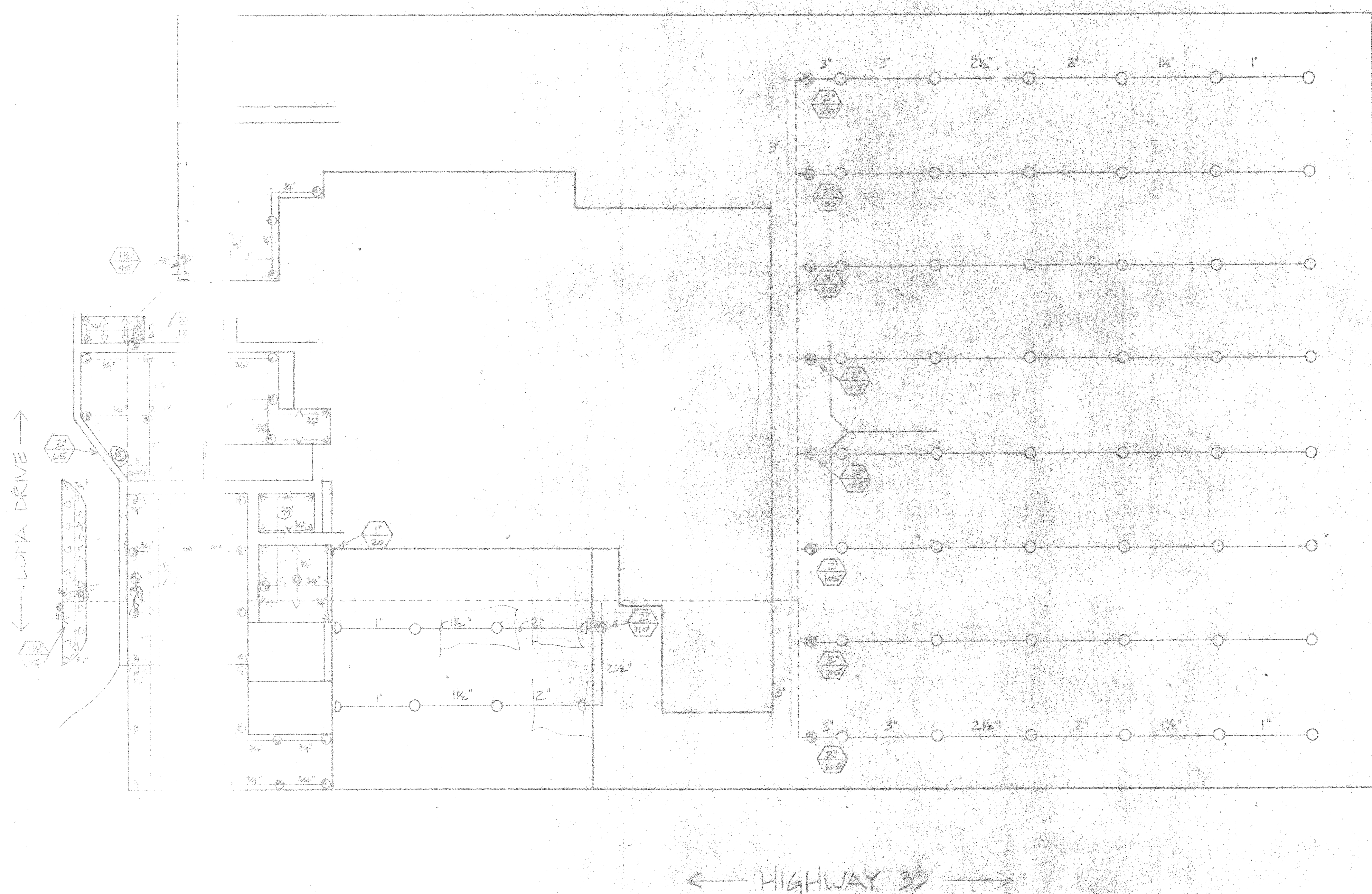
STANDARD DRAWING

ARTWELD GABIONS

DETAILS AND NOTES

PROJECT NO.

SHEET 2 OF 2



LEGEND	
SYMBOL	DESCRIPTION
⊡	2" WATER METER
●	3" FEBCO R.P. BACKFLOW UNIT
⊕	WEATHER-MATIC BRASS VALVE
○	TORO 644-02-43 ROTOR
◠	642-02-41
◉	S-600L PC 9.0
⊖	PC 6.0
◷	PC 3.0
◎	316-00-02
▽	308-00-02
▽	304-00-02
▼	308-00-01
▽	570P-15'H
▽	570P-15'Q
——	3/4"-3" CLASS 200 LATERAL
– – –	3" SCHEDULE 40 MAINLINE

NOTES:

SYSTEM DESIGNED FOR 105 GPM. WITH 100 P.S.I. AT METER

640 APPLICATION RATE = .47"/HR

600 " " = .60"/HR

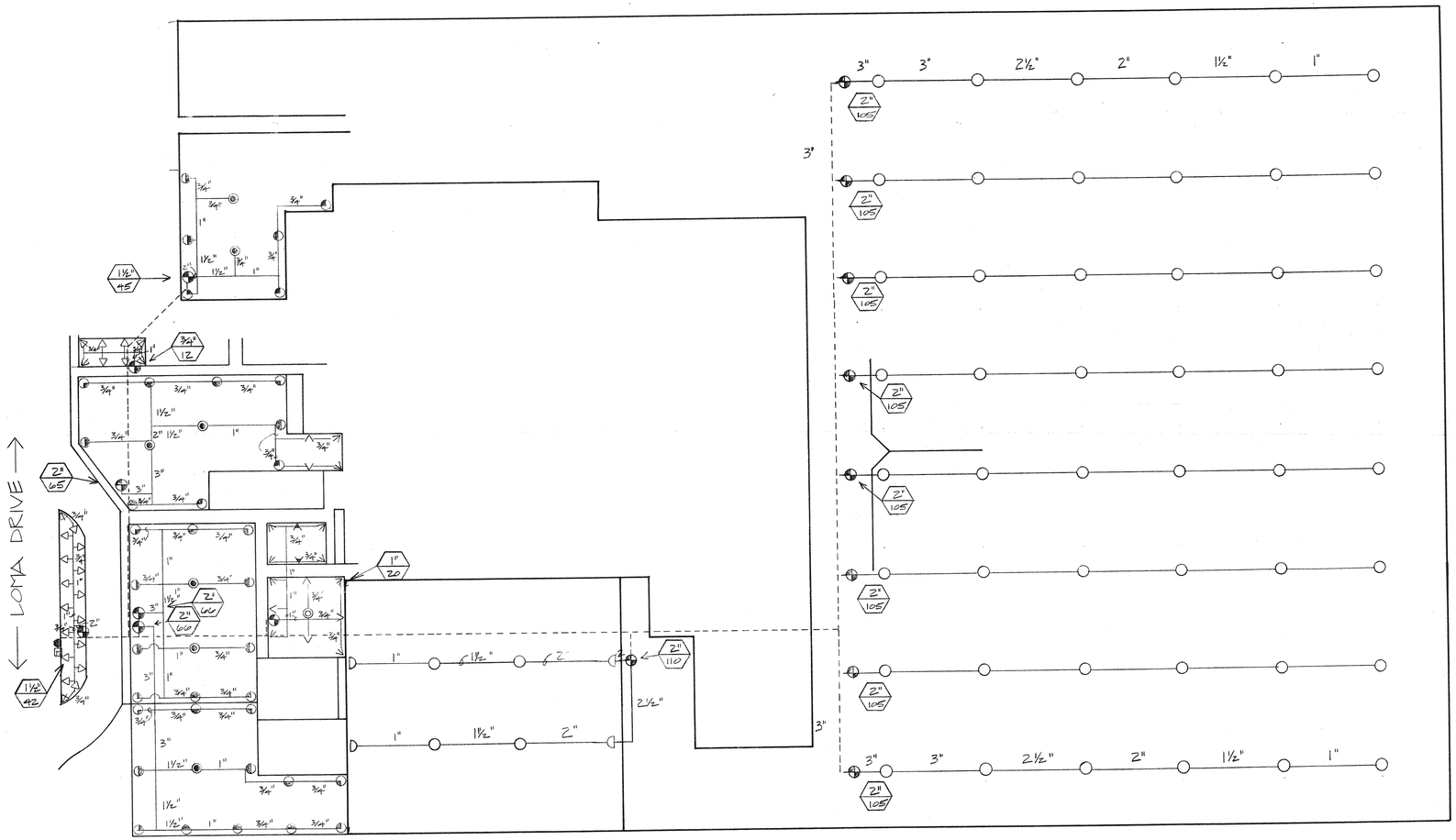
570 " " = 1.7"/HR

IRRIGATION CONTROLLER TO BE SUPPLIED BY SCHOOL DISTRICT.

⬡ ← VALVE SIZE ← GALLONS PER MINUTE

AQUA-FLO SUPPLY		
MIRA MONTE SCH		
DESIGNED BY: EILEEN FAY ...		
SCALE : 1" = 40'	DATE : 2-18-85	[illegible]

M.M. FRONT + BACK 8-18-87



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	308-00-02
	304-00-02
	308-00-01
	570P-15'H
	570P-15'G
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NOTES:

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VALVE SIZE
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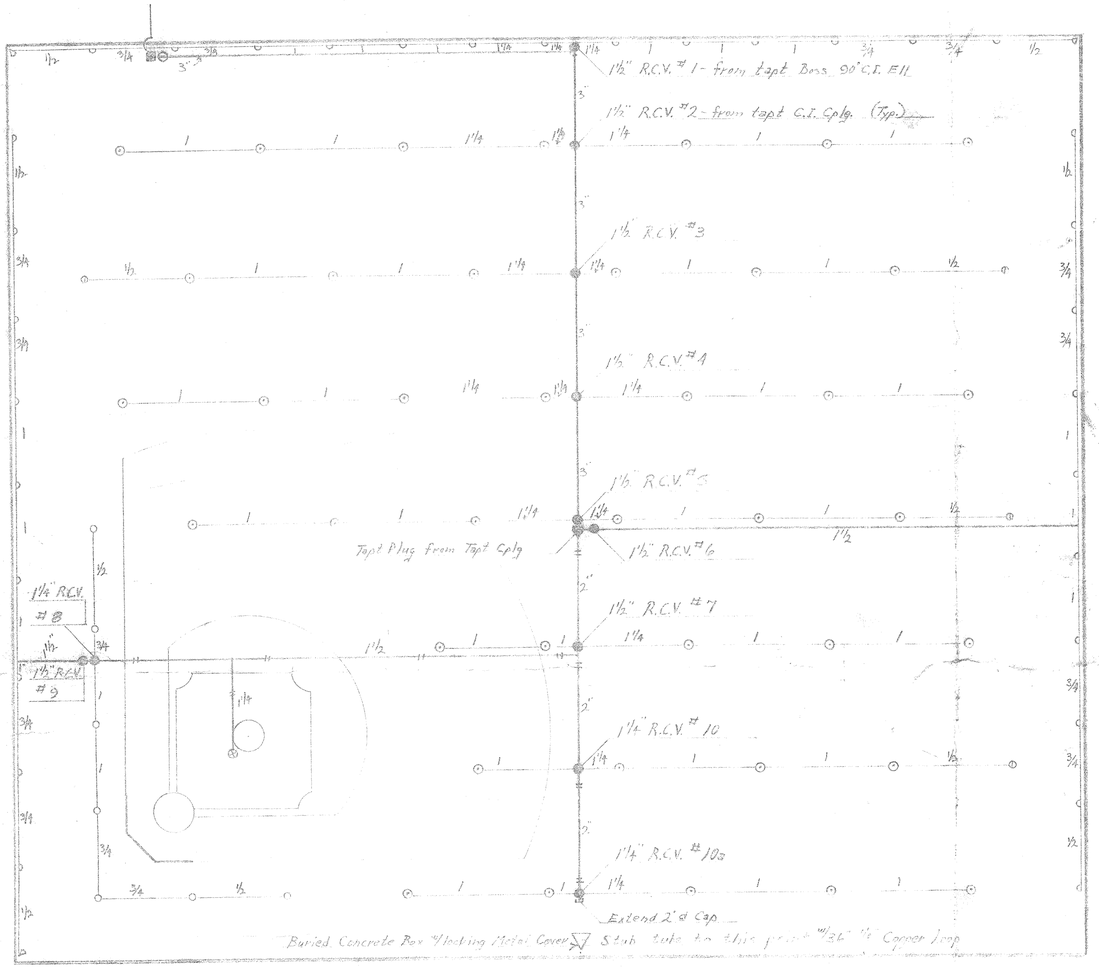
AQUA-FLO SUPPLY

MIRA MONTE SCH.

DESIGNED BY: EILEEN FAY LABER

SCALE : 1" = 40'	DATE : 2·18·85	TURF



L E G E N D

- ⊙ RAIN-O-MAT #11 FB FULL CIRCLE ROTARY POP UP SPRINKLER
- ◍ " " " #7XF " " " " " "
- ○ " " " #7F " " " " " "
- ◠ " " " #7H HALF " " " " "
- ◡ " " " #7Q QUARTER " " " " "
- ⓥ FEBCO #25A REMOTE CONTROL VALVE
- Φ " #770-3" PRESSURE TYPE VACUUM BREAKER
- ⊗ RAINBIRD #44 QUICKCOUPLER VALVE
- ⊢⊣ MAIN: I.P.S. SCH. 40 P.V.C. PIPE w/ 24" Min. Cover
- —— " :325 "HD. CEMENT ASBESTOS PIPE w/ 24" Min. Cover

Cover-Lateral Lines Min. 15"
ALL LATERAL LINES TO BE PACIFIC WESTERN IAS SCH.30 P.V.C.
Control tubing shall be 5/16" O.D. x 3/16" I.D. P.V.C. w/36"
Copper Loop @ VALVE

SCALE 1"=30' Verified PRESSURE @ Motor = 75 P.S.I. 5-29-62

Dick Ewing

Revised Turf Sprinkler Plan
for
TOPA TOPA SCHOOL
NORTHOFF AVENUE SCHOOL DIST.
CHAT