



# CITY OF PETALUMA

POST OFFICE BOX 61  
PETALUMA, CA 94953-0061

Kevin McDonnell  
Mayor

## ADDENDUM NO. 2

Brian Barnacle  
Janice Cader-Thompson,  
Dist. 1  
Mike Healy  
Karen Nau, Dist. 3  
Dennis Pocekay  
John Shribbs, Dist. 2  
Councilmembers

## LUCCHESI TURF FIELD REPLACEMENT PROJECT City Project Number C14502008

March 9, 2023

### CLARIFICATION TO CONTRACTORS – QUESTION AND RESPONSE

#### Public Works & Utilities

City Engineer  
11 English Street  
Petaluma, CA 94952  
Phone (707) 778-4303

Environmental Services  
Ellis Creek Water  
Recycling Facility  
3890 Cypress Drive  
Petaluma, CA 94954  
Phone (707) 776-3777  
Fax (707) 656-4067

Facilities, Parks &  
Streets Maintenance  
840 Hopper St.  
Petaluma, CA 94952  
Phone (707) 778-4303  
Fax (707) 206-6065

Transit Division  
555 N. McDowell Blvd.  
Petaluma, CA 94954  
Phone (707) 778-4421

Utilities & Field Operations  
202 N. McDowell Blvd.  
Petaluma, CA 94954  
Phone (707) 778-4546  
Fax (707) 206-6034

E-Mail:  
publicworks@  
cityofpetaluma.org

Question #1: The demo plans (Sheet L3.0) show that we are to “Remove existing permeable rock base, subdrain rock and existing pipe, and replace with new per Detail A, Sheet LD1.0 and Sheet L5.0. Can you please confirm that the existing inverts match the proposed and that the existing trench prism is the same as the proposed?”

Response #1: Inverts for the new perforated drain lines on the northern and southern edges of the field will not match existing inverts, as these perf lines will be deeper than the existing lines. Existing 6” pipes that run along the western and eastern edges of the field are to remain and their inverts are based on as-builts of the storm drain system from the existing field project. These inverts shall be verified on site by the contractor. The existing trench width of the northern and southern trenches, per as-builts, is a min of 10” wide and vary in depth. Contractor shall be responsible for removing the existing field rock, the existing trench rock, the existing pipe, and soil on the adjacent edges as needed to widen the trench for the new proposed 3’ wide and 3’ minimum deep trench.

Question #2: Special Provision Section 3-6 calls for 2 project info signs to be provided and paid for under Traffic Control System. There is no Traffic Control System Bid Item. Are the info signs required, and if so where are they to be paid?

Response #2: A separate line item has been added to the bid schedule for the Traffic Control System which includes the project signage.

Question #3: Where is contractor to be paid for traffic control for waterline tie-in on Maria Dr.?

Response #3: A separate line item has been added to the bid schedule for the Traffic Control System.

Question #4: Technical Provisions Section 2.03, is a field office mandatory for Contractor? Note 5 states “Additional facilities and equipment as required by the Architect.” Is a field office required to be provided by contractor for the agency, and if so, please specify what facilities and equipment is required and if the equipment will be returned to the contractor at the completion of the project or remain with the Agency?

Response #4: A field office is only needed for the contractor. No field office is required for the agency.

Question #5: Bid Item 3 – Rock/Pipe Removal at Existing Perimeter Drains is for a quantity of 80 CY. If the existing trench dimensions are remotely close to the proposed, shouldn't this quantity be much higher?

Response #5: Bid schedule quantity for rock/pipe removal has been updated.

Question #6: What is the approximate depth of the existing 10” watermain being tied into on Maria Dr.?

Response #6: The standard water main depth for the City is a minimum of 3 feet. Field verification, and utility crossings shall be the responsibility of the contractor.

Question #7: The 2 sections of proposed walk (Sheet L-5.0) on the north side of the project do not have a callout for a thickened edge, and it does not appear that this quantity is included in Bid Item 27 – Concrete Thickened Edge. Please confirm that a thickened edge is required.

Response #7: The thickened edge detail (Detail K, Sheet D2.0) is for the areas shown on sheet L5.0, callout 11 only, as this is a pedestrian walk that is higher in elevation than the adjacent field. This depth is needed at this location to ensure connection of the header board to attach the synthetic turf. The rest of the proposed concrete shown on sheet L5.0 shall follow the thickness and edging shown on Detail A, sheet D2.0.

Question #8: Please provide some clarification on Bid Items 17 Miscellaneous Drainage Installation and 24 Miscellaneous Water Line Installation? There is no description in the specifications what portions of work these items are for.

Response #8: Bid schedule line item 17 and Bid schedule line item 24 are for additional drainage or water line installation cost that are not listed as a specific line items and that the contractor believes are needed to complete installation of these systems.

Question #9: Will you confirm that then engineer's estimate noted on the Planholders List is correct?

Response #9 The engineer's estimate is \$530,000.

*Additional Clarifications:*

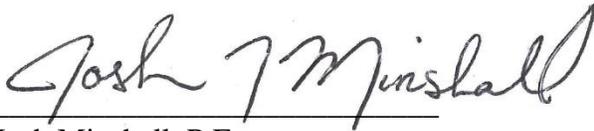
Addendum 1 included an update to specification section 32 18 14. A copy of that section is attached, with the language updated according to Addendum 1, please refer to Addendum 1.

A copy of the as built plans for the turf field has been attached for reference purposes only, and may not accurately reflect current conditions.

This Addendum No. 2 shall become part of the Contract and all provisions of the Contract shall apply thereto. Bidders shall acknowledge all Addendums in the Bid Schedule.

All other items of the documents shall remain unchanged. **A signed copy of this Addendum and the attached acknowledgement form shall be attached to the bid proposal. Failure to do so may cause rejection of your bid as being non-responsive.**

City of Petaluma,

A handwritten signature in black ink that reads "Josh Minshall". The signature is written in a cursive style and is positioned above a horizontal line.

Josh Minshall, P.E.  
Senior Civil Engineer  
Public Works & Utilities Department

**ADDENDUM NO. 2**

**LUCCHESI TURF FIELD REPLACEMENT PROJECT  
City Project Number C14502008**

**March 10, 2023**

**ACKNOWLEDGEMENT**

Receipt of Addendum No. 2 is hereby acknowledged by \_\_\_\_\_  
(Contractor's Name)

on the \_\_\_\_\_ day of \_\_\_\_\_, 2023.

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

**BID SCHEDULE**

<b>Item No.</b>	<b>Description</b>	<b>Estimated Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Total Price</b>
1	Synthetic Turf Removal and Disposal	86,660	sf		
2	Clear and Grub	30	sf		
3	Rock/Pipe Removal at Ex Perimeter Drains	264	cy		
4	Flush /Video Existing Drainage System	1	ls		
5	Hardscape Demolition	3,071	sf		
6	Saw Cut	360	lf		
7	Drinking Fountain Demolition	1	ea		
8	Miscellaneous Demolition	1	ls		
9	Tapering of Rock along edges to receive drainage / shock pad	11,621	sf		
10	Fine Grade / stringline field rock base	75,030	sf		
11	Video Existing Storm Line	1	ls		
12	Drain Rock	481	tons		
13	10" Perforated Drain Line	698	lf		
14	6" Storm Drain Line	25	lf		
15	6" Cleanout	2	ea		
16	24" Junction Box	5	ea		
17	Miscellaneous Drainage Installation	1	ls		
18	2" Domestic Water Line	140	lf		
19	3" Sanitary Sewer Line	9	lf		
20	Dry Well	1	ea		
21	Ball Valve	1	ea		
22	Water Meter	1	ea		
23	Backflow Preventer with Enclosure	1	ea		
24	Miscellaneous Water line installation	1	ls		
25	Synthetic Turf Install, Shock Pad/Drain Tile, and Fabric Install	1	ls		
26	Concrete Paving and Rough Grading	2,917	sf		
27	Concrete thickened Edge	157	lf		
28	Synthetic Turf Connection	376	lf		
29	ADA Parking Striping	1	ls		
30	Wheel Stop	2	ea		
31	ADA Parking Sign	2	ea		

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
32	Truncated Domes	1	ea		
33	3' Tall Chain Link Fencing	13	lf		
34	6" Concrete Curb	13	lf		
35	Drinking Fountain - Elkay	1	ea		
36	Root Barrier	360	lf		
37	Tow Away Sign	1	ea		
38	Asphalt Paving (including backfill at Parking)	154	sf		
39	Mobilization and Demobilization	1	ls		
40	Traffic Control	1	ls		
<b>Total Estimated Base Bid</b>					

**OPTIONAL BID ITEMS**

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
1	Replace Ex Storm Drain lines	1	ls		
2	Replace Ex Fencing Fabric	161	lf		

**\*Note:** In case of error in extension of price into the total price column, the unit price will govern.

Total Amount of Bid (written in words) is: _____ _____ Dollars and _____ Cents. In the event of discrepancy between words and figures, the words shall prevail. \$ _____ Figures
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**The award of the contract shall be awarded to the lowest price of the total of Base Bid items 1 through 39. Options Bid items should NOT be included in the Base Bid Price.**

\_\_\_\_\_  
Address of Bidder

\_\_\_\_\_  
Signature of Bidder

\_\_\_\_\_  
City

\_\_\_\_\_  
Name of Bidder (Print)

\_\_\_\_\_  
Telephone Number of Bidder

\_\_\_\_\_  
Fax Number of Bidder

\_\_\_\_\_  
Contractor's License Number

\_\_\_\_\_  
License's Expiration Date

**Addendum Acknowledgement**

Addendum No. 1    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

Addendum No. 2    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

Addendum No. 3    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

Addendum No. 4    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

Addendum No. 5    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

Addendum No. 6    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

Addendum No. 7    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

Addendum No. 8    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

SECTION 32 18 14

SYNTHETIC TURF BASE

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: Base for the synthetic turf consisting of, but is necessarily limited to, the following:
  - 1. Stone aggregate base for stability and leveling purposes, and substrate for porous drainage composite.
  - 2. Manufactured porous drainage composite, Owner Furnished, Contractor Installed (OFCI)..
- B. Related Requirements:
  - 1. Section 01 78 29 – Conformance Survey
  - 2. Section 31 20 00 – Earth Moving
  - 3. Section 31 23 00 – Excavation and Fill
  - 4. Section 32 18 13 – Synthetic Turf Playing Field

1.02 REFERENCES

- A. California Building Code (CBC):
  - 1. Chapter 33 – Site Work, Demolition, and Construction.
- B. American Society for Testing and Materials (ASTM):
  - 1. D 1557: "Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort."
  - 2. ASTM F2898-11: "Standard Test Method for Permeability of Synthetic Turf Sports Field Base Stone and Surface System by Non-confined Area Flood Test Method"
  - 3. ASTM D2434: "Standard Test Method for Permeability of Granular Soils (Constant Head)."
  - 4. ASTM C88: "Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate."
- C. California Occupational Safety and Health Standards (OSHA):
  - 1. Article 6 - Excavations and Shoring.
- D. State of California, Business and Transportation Agency, Department of Transportation (Caltrans) "Standard Specifications."

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Submittal Procedures:
  - 1. Action and Informational Submittals shall be submitted in accordance with Section 01 33 00 - Submittal Procedures.
  - 2. Closeout Submittals shall be submitted in accordance with Section 01 78 39 - Project Record Documents.

1.04 ACTION SUBMITTALS

- A. Product Data: Manufacturer's descriptive literature for pipe accessories, filter fabric, and porous drainage composite as applicable.

- B. Samples: Two 1-quart samples of each rock material and additional samples of each rock material to the Owner's testing agent as specified under Article "Material Testing," and Two 1-quart samples of Subdrain Trench Leveling Rock, as required.

1.05 INFORMATIONAL SUBMITTALS

- A. Manufacturer's installation instructions.
- B. Certification: Certification signed by Contractor and drainage system Installer that installed materials conform to specified requirements and system was successfully checked and tested prior to covering with engineered permeable rock base, trench drain rock, and/or subdrain trench leveling rock.

1.06 CLOSEOUT SUBMITTALS

- A. Project Record Drawings.

1.07 QUALITY ASSURANCE

- A. Control of Work: Conform to Section 5 of the Standard Specifications.
- B. Control of Materials: Conform to Section 6 of the Standard Specifications.
- C. Single-Source Responsibility: Crushed stone shall come from only one supplier.
- D. Material delivered to the site not meeting the Specifications will be rejected by the Owner. Material rejected by the Owner shall be removed from the site at the Contractor's expense.

1.08 DELIVERY, STORAGE, AND HANDLING

- A. Prior to trucking of material to project sites, crushed rock shall be washed so it is clean of impurities and fines created during rock crushing operations.
- B. Store products to be installed as part of the field base neatly and orderly, stacked and blocked to prevent damage and contamination.

1.09 FIELD CONDITIONS

- A. Protection of Project Site: Make provisions, and take the necessary precautions, for protect existing and completed work from damage during turf installation.
- B. Contractor shall prevent surface water and subsurface or groundwater from flowing into excavations and flooding area to receive turf base. Contractor shall not allow water to accumulate in excavations. Contractor shall remove water to prevent softening of sub grades.

1.10 PROJECT RECORD DOCUMENTS

- A. Accurately record location of pipe runs, connections, cleanouts and invert elevations. Include locations of utilities remaining, re-routed utilities, new utilities, and newly discovered utilities as applicable by horizontal dimensions, elevations, inverts, and slope gradients.

1.11 POROUS CLOSED-CELL COMPOSITE GUARANTY

- A. The manufacturer of the porous closed cell composite base shall provide a guaranty, in writing, that for a period of twenty five (25) years, the porous closed cell composite base shall be a part of a turf system

that will not exceed a field average G-max of 120 g's as tested according to the ASTM 1936 Standard Specification.

PART 2 - MATERIALS

2.01 DESIGN AND PERFORMANCE CRITERIA

- A. The finished crushed stone or aggregate base supplied shall be stable, unyielding, and permeable.

2.02 SUBDRAIN TRENCH DRAIN ROCK

- A. Shall be 3/4-inch x 1/2-inch crushed virgin, un-recycled, washed rock, meeting the following general gradation requirements:

Sieve Size	Percent Passing
1"	100
3/4"	90-100
1/2"	10-40
3/8"	0-15
#4	0-5

- B. The rock profile will extend from the bottom of the trench to the top of both sides of the subdrain trench, and to the top of rock elevation. The Engineered Permeable Base Rock shall not be installed over the subdrain trench drain rock.
- A. The Contractor is responsible for ensuring the type of rock and blend they submit and install will meet all the specified requirements, including those outlined in item 1.10 of this specification section.
  - B. Soft rock materials, including sandstone, limestone, and shale, are not suitable. Rock supplier shall certify that all supplied rock will be void of this type of rock.

2.03 SUBDRAIN TRENCH LEVELING ROCK

- A. For planarity purposes, a clean uniform 3/8-inch crushed stone material, of the same source as the subdrain trench drain rock or Engineered Permeable Rock Base may be installed over the subdrain trench profile upon approval of Owner's representative. Maximum thickness for this stone layer is 1 inch.

2.04 MANUFACTURED BASE MATERIAL (OWNER FURNISHED, CONTRACTOR INSTALLED)

- A. Manufactured Porous Closed Cell Composite Base: Resilient, interlocking, polypropylene panels specifically engineered for sports fields; "PowerBase YSR" by Brock International, 303-544-5800, or equal.
  1. Panel Size: Approximately 73.5 x 49.0 inches.
  2. Thickness: 1.0 inches, (25 mm).
  3. Weight: 5.56 lbs per panel

2.05 GEOTEXTILE FILTER FABRIC (OWNER FURNISHED, CONTRACTOR INSTALLED)

- A. Geotextile Filter Fabric: Mirafi 140 N, or accepted equal, conforming to the following minimum specifications, unless otherwise recommended by the Geotechnical Engineer:

Property	Test Method	Typical Values
Grab Strength	ASTM D 4632	80 lb.
Puncture Strength	ASTM D 4833	25 lb.
Burst Strength	ASTM D 3786	130 lb.
Trapezoid Tear	ASTM D 4533	25 lb.
Permeability	ASTM D 4491	0.1 cm/sec
Apparent Opening Size	ASTM D 4751	#50 Sieve size
Permittivity	ASTM D 4491	

2.06 DRAINAGE ELEMENTS

- A. Refer to Storm Drainage Specification Section for in-field drainage elements.

2.07 ROOT BARRIER

- A. Root Barriers: Model "BioBarrier" by Typar Geosynthetics, 877-642-9929, or equal.

PART 3 - EXECUTION

3.01 INSTALLATION OF THE SUBDRAIN TRENCH AND IN-FIELD DRAINAGE

- A. Contractor to install drain rock and piping in strict compliance with the manufacturer's written instructions and as indicated in the Drawings. Contractor to exercise caution and the appropriate sequencing of work, so as not to damage any drainage piping during the base rock installation.
- B. Contractor to protect drain trenches to ensure that pipe is not damaged in any way by construction operations and that the rock is not contaminated with native soils, unintended construction material, or deleterious materials during subsequent construction operations.

3.02 SYNTHETIC TURF ROCK BASE

- A. Finish surface planarity shall be verified, and if necessary adjusted, by the Contractor using string line method.
  1. Entire finished surface shall be "walked" with mason's line in increments of approximately 3 feet.
  2. A mason's line shall be held taught between two workers separated by a distance of approximately 40 feet then placed directly on the finished surface parallel to the direction of greatest slope.
  3. A third worker shall check for separations between the mason's line and the finished surface that are equal to or greater than the specified tolerances.
  4. Areas of separation shall be outlined with marking paint and the depth of separation indicated.
  5. Areas outlined with marking paint shall be filled with top rock to the depth indicated and raked by hand. Filled areas shall be compacted to provide a non-yielding, smooth, flat surface.
  6. Final finished surface planarity shall be approved by the Owner and the synthetic turf installer.

3.03 INSTALLATION OF MANUFACTURED DRAINAGE MATERIAL

- A. Upon successful completion of installing the base, the porous drainage composite shall be installed in accordance with the Drawings and in strict compliance with the manufacturer installation instructions. Contractor to exercise extreme care in order to avoid disturbing the crushed stone base.

- B. Contractor to take measures to ensure that the product is not exposed to the outdoor elements longer than the manufacturer's recommendations. Product that exceeds this exposure time duration shall be removed from the project site immediately and not used on the project.
- C. Sections of the material shall be interlocked and/or connected to adjacent pieces of the drainage material in strict conformance with the manufacturer's written installation instructions.
- D. Provide geotextile filter fabric in the areas designated on the Drawings. Fabric shall be laid in shingle fashion overlapping 12 inches minimum following direction of slope with upslope fabric laying atop the down slope fabric.

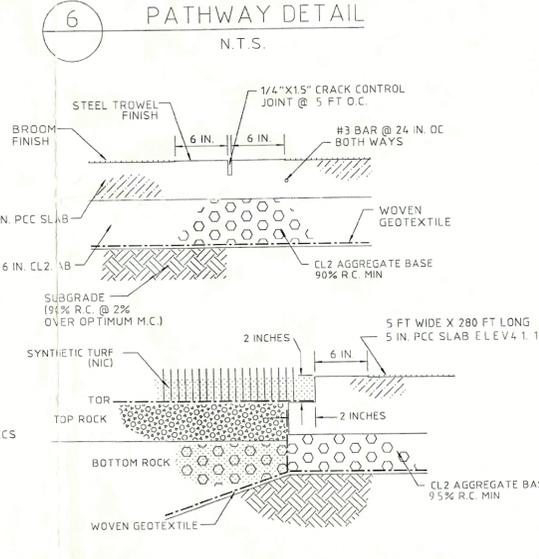
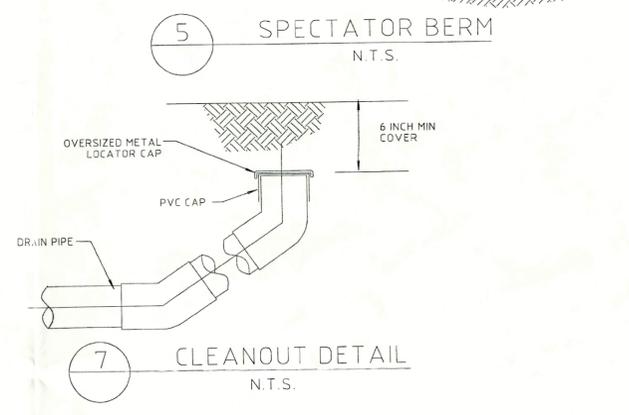
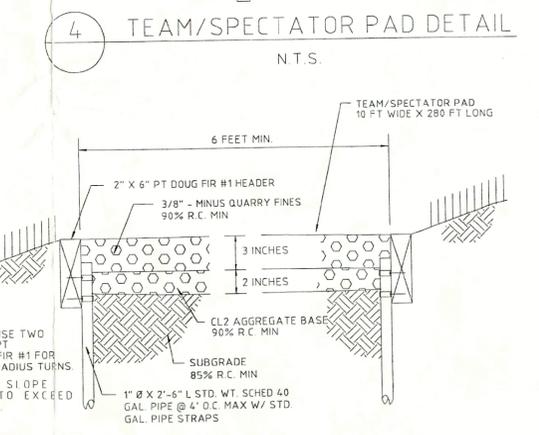
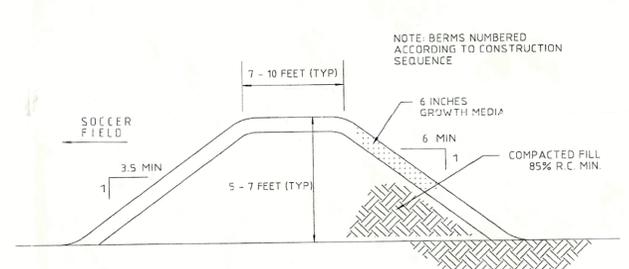
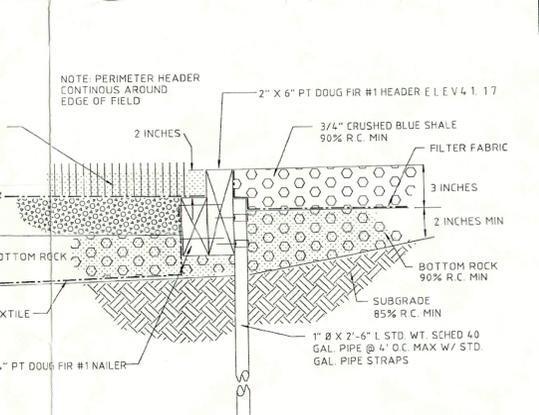
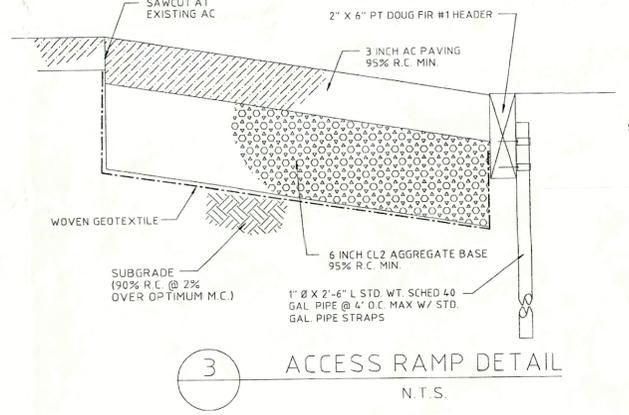
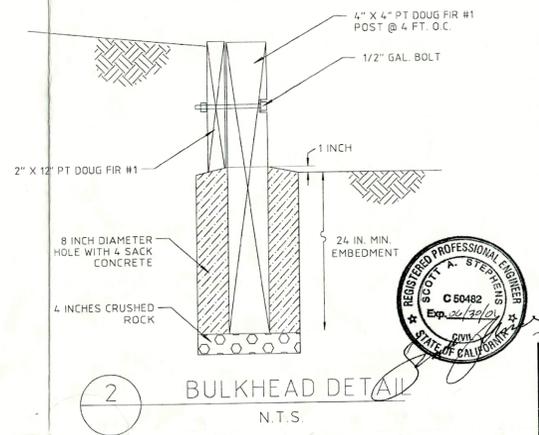
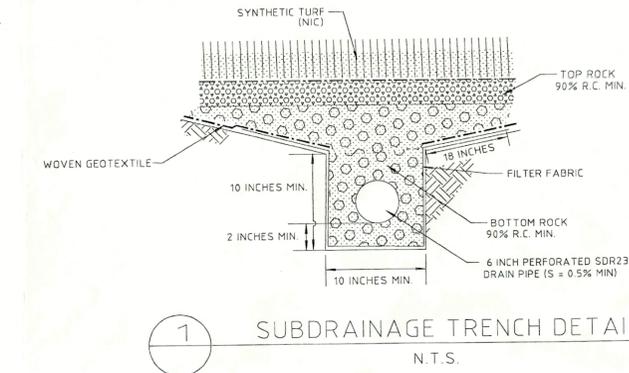
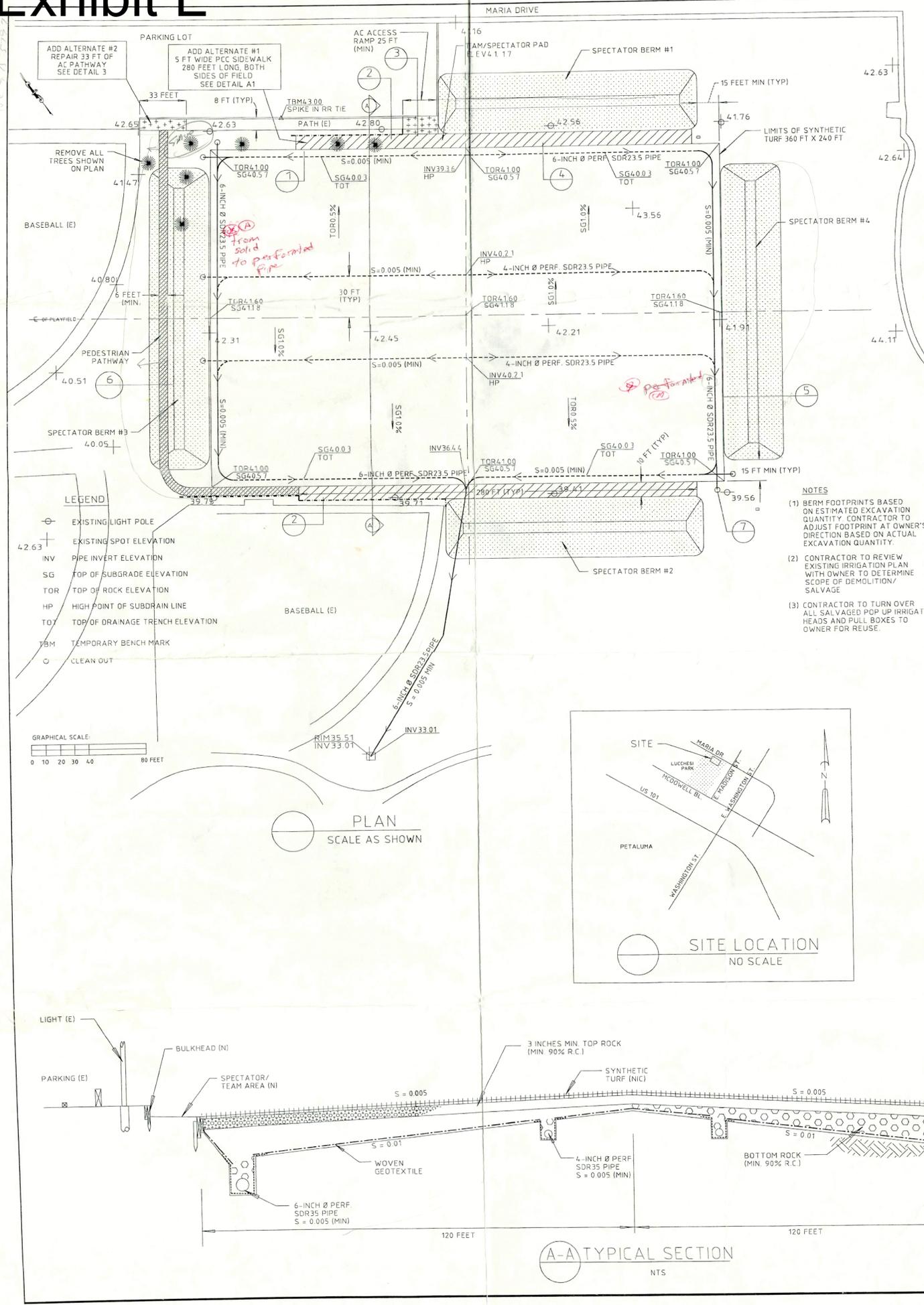
#### 3.04 MEASUREMENT AND PAYMENT

- A. The full contract cost per ton for "DRAINAGE ROCK" shall include full compensation for furnishing all labor, materials, equipment, facilities, transportation and services for performing all of the work involved, including installation of the drainage rock material as shown on the Drawings, as specified in these Technical Specifications, and as directed by the Engineer herein and no additional compensation will be allowed therefore.
- B. The full contract cost per linear foot for "ROOT BARRIER" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work, as shown on the plans, as required by the Specifications, and as directed by the Engineer for removal, replacement and/or construction of new synthetic turf base including removing and disposing of permeable rock base, subdrain rock and pipe, rough and fine grading, installation of new drain rock , complete in place and no additional compensation will be allowed therefor.

END OF SECTION

# Exhibit E

6" solid to perforated pipe  
 added in to same name 9/26/00 (vmm)



- NOTES**
- (1) BERM FOOTPRINTS BASED ON ESTIMATED EXCAVATION QUANTITY. CONTRACTOR TO ADJUST FOOTPRINT AT OWNER'S DIRECTION BASED ON ACTUAL EXCAVATION QUANTITY.
  - (2) CONTRACTOR TO REVIEW EXISTING IRRIGATION PLAN WITH OWNER TO DETERMINE SCOPE OF DEMOLITION/SALVAGE.
  - (3) CONTRACTOR TO TURN OVER ALL SALVAGED POP UP IRRIGATION HEADS AND PULL BOXES TO OWNER FOR REUSE.

NOTE: EXPANSION JOINT, FULL DEPTH @ 60 FT. OC. WITH 1/2" PREMOLDED EXP. JOINT FILLER PER SECTION 51-1.12C OF STD SPECS

By	Date	Mark	Description	Revisions
IAM			Designed	
IAM			Drawn	
SAS			Checked	

165 North Redwood Drive  
 Suite 120  
 San Rafael, California 94903  
 F 415 / 497-1831  
 T 415 / 497-1338  
 millerpac@aol.com

## Miller Pacific ENGINEERING GROUP

**GRADING PLAN AND DETAILS**  
**LUCCHESI PARK SOCCER FIELD**  
 CITY OF PETALUMA, CALIFORNIA

Date	5/3/00
1 of 1 Sheets	
Job No.	243.22
Drawing	243-2D1A DW2