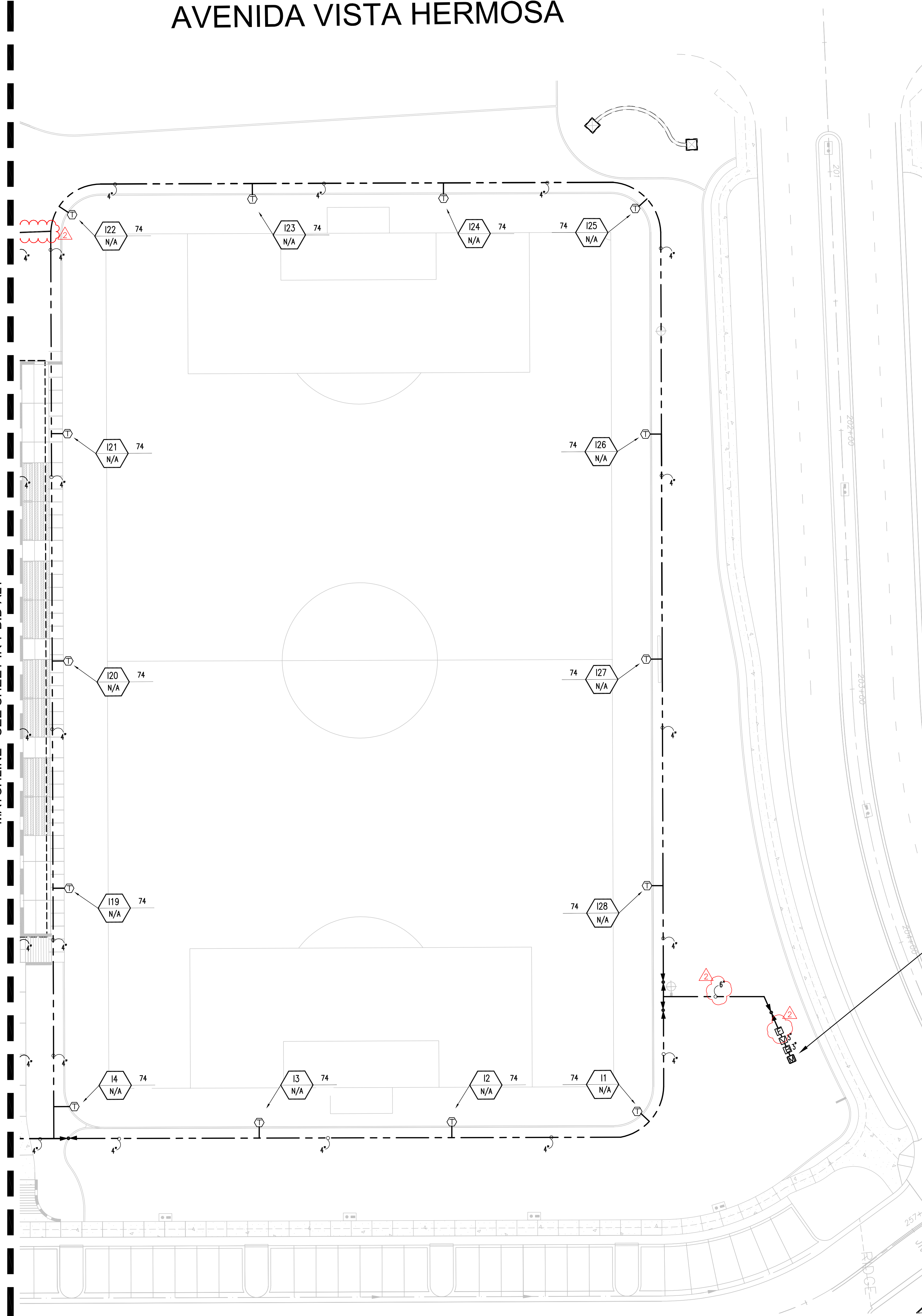


AVENIDA VISTA HERMOSA

MATCHLINE - SEE SHEET IR-7 BID-ALT



| WATER PRESSURE CALCULATIONS | | | |
|--|--|---------------------------------|------------|
| WATER METER NUMBER | 4 | WATER METER SIZE | 3" |
| HYDRAULIC GRADE LINE (FT) | 741 | WATER METER ELEVATION (FT) | 387 |
| ELEVATION DIFFERENCE (FT) | 354 | STATIC PRESSURE (PSI) | 153 |
| REMOTE CONTROL VALVE # | 110 | REMOTE CONTROL VALVE SIZE | N/A |
| R.C.V. DEMAND (GPM) | 74 | TOTAL DEMAND (GPM) | 74 |
| HIGHEST HEAD SERVED (FT) | 399 | STATIC PRESSURE AT HIGHEST HEAD | 159 |
| SIZE | DESCRIPTION | FLOW | # PSI LOSS |
| 3" | SERVICE LINE (50 FT OF TYPE K COPPER) | 74 | 11 7.8 PSI |
| 3" | WATER METER (DISC TYPE) | 74 | 2 2.8 PSI |
| 3" | BACKFLOW DEVICE | 74 | 3 11.0 PSI |
| 3" | FILTRATION (WYE FILTER) | 74 | 4 0.3 PSI |
| 3" | PRESSURE REGULATOR | 74 | 5 1.0 PSI |
| 3" | RFD ASSEMBLY PIPING (BRASS W/ 4 ELLS) | 74 | 6 9.1 PSI |
| 3" | MASTER CONTROL VALVE | 74 | 7 2.7 PSI |
| 1.5" | FLOW SENSOR | 74 | 8 1.0 PSI |
| 4" | ISOLATION VALVES (GATE TYPE) | 74 | 9 1.0 PSI |
| 4" | 170990 FEET OF LOOPED MAINLINE CL. 200 PVC | 74 | 10 1.0 PSI |
| 6" | 100 FEET OF MAINLINE CL. 200 PVC | 74 | 14 0.1 PSI |
| 3" | 0 FEET OF MAINLINE TYPE K COPPER | N/A | 15 0.0 PSI |
| 4" | S-90 DEGREE ELBOWS | 74 | 16 0.2 PSI |
| N/A | REMOTE CONTROL VALVE | 74 | 17 0.0 PSI |
| 10% | LATERAL LINE LOSS | N/A | 18 9.0 PSI |
| 20% | FITTING LOSS (IN ADDITION TO ELBOWS SHOWN) | N/A | 19 0.2 PSI |
| 12 | ELEVATION CHANGE (P.O.C. TO HIGHEST HEAD) | N/A | 20 5.2 PSI |
| TOTAL SYSTEM PRESSURE LOSS (SUM OF #1 THRU #17) | | 21 | 46.1 PSI |
| PRESSURE REQUIRED AT HEAD | | 22 | 80.0 PSI |
| TOTAL PRESSURE REQUIRED (SUM OF #21 AND #22) | | 23 | 126.1 PSI |
| STATIC WATER PRESSURE (FROM ABOVE) | | 24 | 159.0 PSI |
| RESIDUAL PRESSURE (SUBTRACT #23 FROM #24) | | 25 | 32.9 PSI |
| SET PRV OR MCV AT (#23 PLUS 10 PSI) | | 26 | 136.1 PSI |
| PRESSURE BOOST, IF REQUIRED (SET TO ACHIEVE 30 PSI RESIDUAL) | | 27 | N/A PSI |

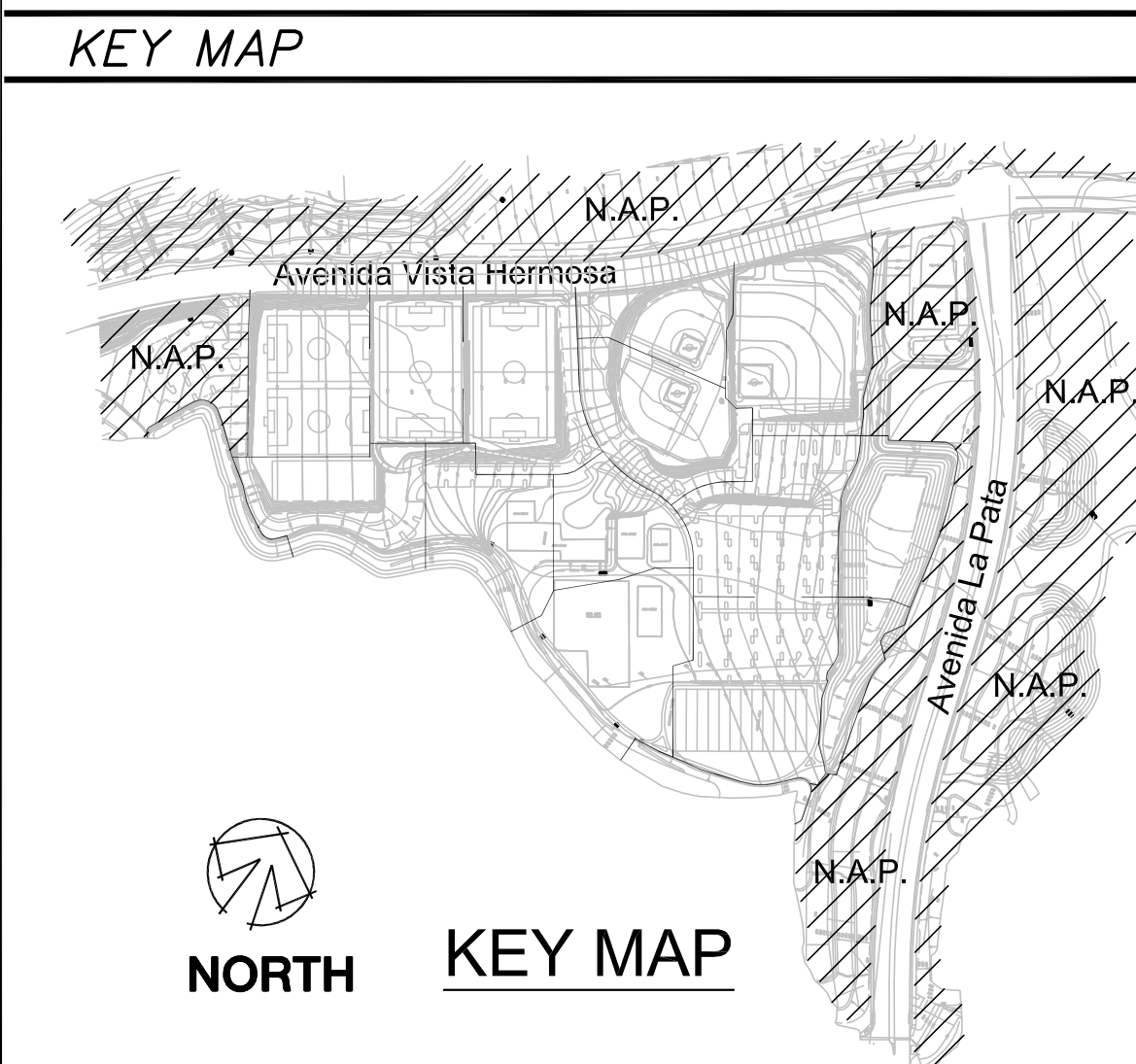
NOTE A:
POINT OF CONNECTION #4 SHALL BE A 3" DOMESTIC WATER METER WITH A 3" SERVICE LINE. VERIFY THE ACTUAL LOCATION, SIZE AND WATER PRESSURE IN THE FIELD PRIOR TO STARTING WORK. IF ANY OF THE POC INFORMATION SHOWN ON THESE DRAWINGS IS FOUND TO BE DIFFERENT THAN THE ACTUAL POC INFORMATION GATHERED IN THE FIELD, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT AND IRRIGATION CONSULTANT. SHOULD THE CONTRACTOR FAIL TO VERIFY THE POC INFORMATION ANY CHANGES REQUIRED BY LOW PRESSURE OR VOLUME SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

STATIC WATER PRESSURE
DESIGN WATER PRESSURE 153 PSI
MAXIMUM SYSTEM DEMAND 74 GPM
SET PRESSURE REGULATOR @ 136 PSI

NOTE:
MAINLINE SHOWN WITHIN PAVING FOR CLARITY ONLY. ACTUAL MAINLINE LOCATION TO BE A MINIMUM OF 18" OFF ADJACENT HARDSCAPE AND OTHER OBSTACLES TYP.

NOTE:
CONTRACTOR SHALL ADJUST ALL HEADS AS REQUIRED TO ACCOMMODATE ANY VERTICAL OBSTRUCTIONS THAT MAY OCCUR, INCLUDING BUT NOT LIMITED TO LIGHT POLES, FIRE HYDRANTS, ETC. VERIFY ALL HEAD LAYOUT WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.

NOTE:
BUBBLERS AND LATERAL LINES ARE SHOWN WITHIN PAVING FOR CLARITY ONLY. ACTUAL LOCATION TO BE WITHIN PLANTER. BUBBLERS SHALL BE ALIGNED WITH TREES AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE. CONFIRM ALL LAYOUT IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.



sweeney + associates
IRRIGATION DESIGN AND CONSULTING
California
38730 Sky Canyon Drive, Suite C
Murrieta, CA 92563
951-461-6830 | 951-461-6850 F
email@sweeneyassoc.com
www.sweeneyassoc.com
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APPROVED BY: _____
AL KING, DIRECTOR OF BEACHES, PARKS, & RECREATION DATE: _____

| REVISIONS | | | |
|-----------|-------------|---------|---------------|
| NO. | DESCRIPTION | REVISED | APPROVED DATE |
| 2 | ADDENDUM 3 | | 03-04-10 |

JOB NO.: 03-100467
SMP NO.: 649-560
SCALE: AS SHOWN
DESIGNED BY: SMP
PREPARED UNDER THE SUPERVISION OF: PATRICK MURPHY

REGISTERED LANDSCAPE ARCHITECT
Patrick C. Murphy No. 100467
STATE OF CALIFORNIA

PLANS PREPARED BY:
SMP
PREPARED UNDER THE SUPERVISION OF: PATRICK MURPHY
DATE: R.L.A. # 1881

CITY OF SAN CLEMENTE
DEPARTMENT OF BEACHES, PARKS, & RECREATION
LA PATA PARK
IRRIGATION PLAN - BID ALTERNATIVE

DRAWING NO.: IR-6 BID-ALT
SHEET NO.: 70
OF 178