



Business Services

Contracts Office

5735 47th Avenue • Sacramento, CA 95824

(916) 643-2464

Gerardo Castillo, Chief Business Officer

Jessica Sulli, Contract Specialist

ADDENDUM NO. 1

Date: March 28, 2018

Issued by: Sacramento City Unified School District

Project: Earl Warren, John Bidwell and Tahoe ES Irrigation Improvements

You are hereby notified of the following changes, clarifications, or modifications to the original Contract Documents, Specifications, and Drawings. This Addendum shall supersede the original project documents, and shall take precedence over anything to the contrary therein. All Addenda shall be acknowledged in the Bid Form. Failure to do so may result in disqualification of the bid. All other conditions remain unchanged.

1. DRAWINGS – L1.1A, L1.2A, L1.3A
 - a. Note added to demo the existing irrigation pump and controller to the legend
 - b. Note revised to ‘place’ aggregate.
2. DRAWING – L1.4A
 - a. Note added to demo the existing irrigation pump and controller to the legend
 - b. Note revised to ‘place’ aggregate.
 - c. Added callout identifying location of existing irrigation pump and controller
 - d. Added irrigation area at front of campus that needs to have existing irrigation removed.
3. DRAWING – L2.1A
 - a. Revised master valve model number.
 - b. Revised irrigation mainline pipe material in legend.
 - c. Added note to 1” steel conduit for two-wire cable in legend.
 - d. Added grounding rod assembly symbol to legend.
 - e. Added callout and symbol for ground rod assembly on plans
 - f. Added point of connection symbol on plans.
4. DRAWING – L2.2A
 - a. Revised sheet number from ‘4’ to ‘7’

- b. Revised master valve model number.
 - c. Revised irrigation mainline pipe material in legend.
 - d. Added note to 1" steel conduit for two-wire cable in legend.
 - e. Added grounding rod assembly symbol to legend.
- 5. DRAWING – L2.3A
 - a. Revised master valve model number.
 - b. Revised irrigation mainline pipe material in legend.
 - c. Added note to 1" steel conduit for two-wire cable in legend.
 - d. Added grounding rod assembly symbol to legend.
 - e. Added pipe size to lateral lines connected to valve #25, and added a point of connection for valves #24-25, and renumbered valves #24, 25, 28.
- 6. DRAWING – L2.4A
 - a. Revised master valve model number.
 - b. Revised irrigation mainline pipe material in legend.
 - c. Added note to 1" steel conduit for two-wire cable in legend.
 - d. Added grounding rod assembly symbol to legend.
 - e. Added a point of connection for valves #26-27, and renumbered valves #26, 27, 29.
- 7. DRAWINGS – L1.1B, L1.2B, L1.3B, L1.4B
 - a. Added locations for asphalt/concrete saw cutting for new piping.
 - b. Note revised to 'place' aggregate.
 - c. Revised total sheet number count.
- 8. DRAWING – L2.1B
 - a. Added information on Automatic Controller callout
 - b. Added callout for existing fence to remain.
 - c. Added symbols for Master Valve Assembly.
 - d. Revised master valve model number.
 - e. Revised irrigation mainline pipe material in legend.
 - f. Revised total sheet number count.
- 9. DRAWINGS – L2.2B, L2.3B
 - a. Revised total sheet number count.
- 10. DRAWING – L2.4B
 - a. Revised sheet note #13, to include L3.1
 - b. Revised total sheet number count.
- 11. DRAWING – L1.1C
 - a. Removed a new concrete mowstrip from showing on this sheet
 - b. Added locations for asphalt/concrete saw cutting for new piping.
 - c. Note revised to 'place' aggregate.
 - d. Revised total sheet number count.



12. DRAWING – L1.2C

- a. Note revised to 'place' aggregate.
- b. Revised total sheet number count.

13. DRAWINGS – L1.3C, L1.4C

- a. Added locations for asphalt/concrete saw cutting for new piping.
- b. Note revised to 'place' aggregate.
- c. Revised total sheet number count.

14. DRAWINGS – L2.1C, L2.2C, L2.3C, L2.4C

- a. Revised irrigation mainline pipe material in legend.
- b. Revised total sheet number count.

15. DRAWING – L3.1

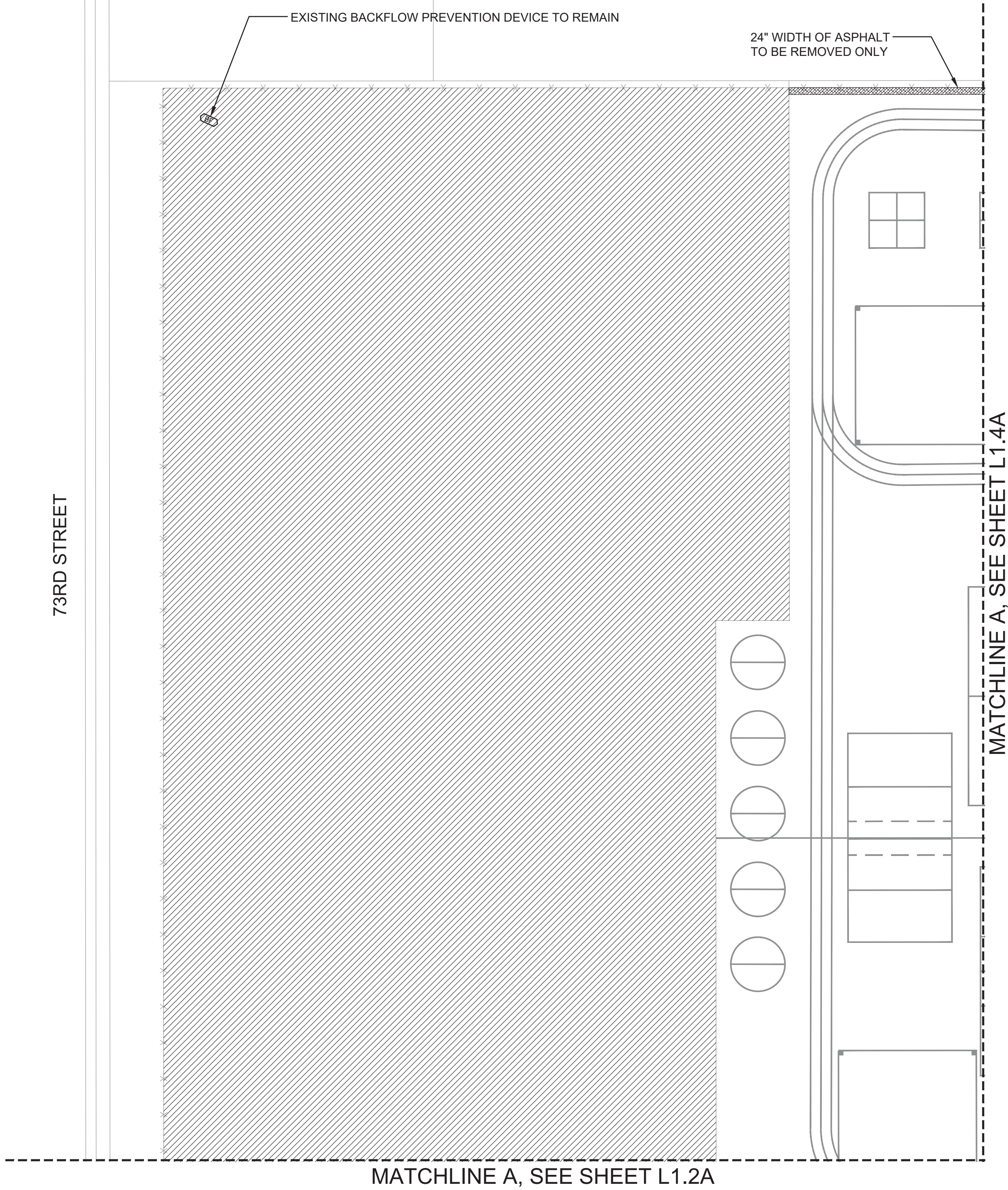
- a. Revised detail #4 to clarify that it is for Earl Warren and Tahoe ES.

16. DRAWING – L3.3

- a. Revised detail #6 to clarify compacted aggregate, subgrade compaction, concrete and compacted aggregate depth, and the use of concrete dobies to elevate the rebar.
- b. Added detail #9 for valve box locations in shrub beds. This was in response to an RFI.

END OF ADDENDUM NO. 1

Attachments



KEY

BF

1

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1

EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN

PIPES ABOVE GROUND TO BE CUT AND CAPPED AND ELECTRICAL TO BE DISCONNECTED.
EXISTING CHAIN LINK FENCE TO REMAIN

EXISTING PUMP TO BE DEMOLISHED

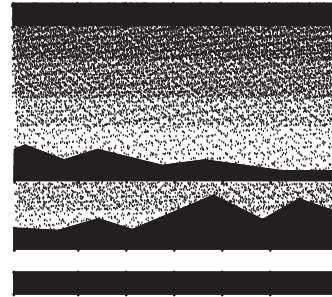
SPRINKLER HEADS TO BE REMOVED, VALVE BOXES TO BE REMOVED,
AND MAINLINE TO BE CAPPED. LATERAL LINES, MAINLINE AND WIRES TO
BE ABANDONED.

EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED

ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE
AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE)
UNLESS OTHERWISE SPECIFIED.

ASPHALT/CONCRETE TO BE SAWCUT

CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS



MTWgroup

LANDSCAPE ARCHITECTURE
AND PLANNING
10411 Old Placerville Road
Suite 205
Sacramento, CA 95827
916 369-3990

Peter D. LarimerC-5284

The Landscape Architects do not represent that these plans or the specifications in connection therewith are suitable, whether or not modified for any other site than the one for which they were specifically prepared. The Landscape Architects disclaim responsibility for these plans and specifications if they are used in whole or in part at any other site.

REVISIONS		
NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS

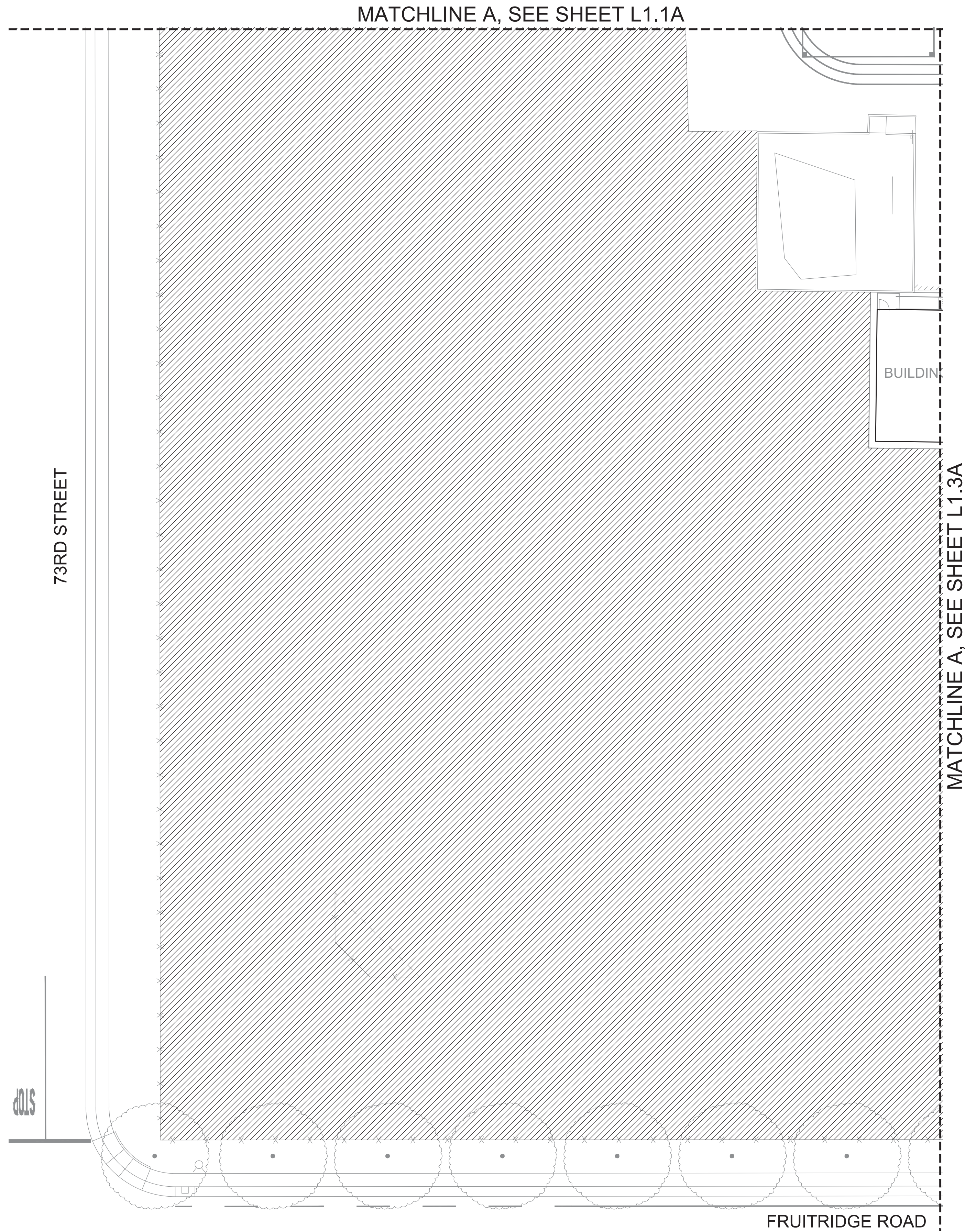
SACRAMENTO, CA 95820

DATE	2/15/18
JOB NO.	17-68
SHEET TITLE EARL WARREN ES DEMOLITION PLAN	

SHEET NO.

L1.1A

SHEET 2 OF 35



KEY

BF

1

EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN

1

EXISTING PUMP TO BE DEMOLISHED

PIPES ABOVE GROUND TO BE CUT AND CAPPED AND ELECTRICAL TO BE DISCONNECTED.
EXISTING CHAIN LINK FENCE TO REMAIN

1

EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED

SPRINKLER HEADS TO BE REMOVED, VALVE BOXES TO BE REMOVED,
AND MAINLINE TO BE CAPPED. LATERAL LINES, MAINLINE AND WIRES TO
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ASPHALT/CONCRETE TO BE SAWCUT

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UNLESS OTHERWISE SPECIFIED.

NOTE:
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ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS

SACRAMENTO, CA 95820

DATE2/15/18

JOB NO.17-68

SHEET TITLE
EARL WARREN ES
DEMOLITION
PLAN

SHEET NO.

L1.2A

SHEET 3 OF 35

SCALE: 1"= 20'-0"

[illegible]

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS

SACRAMENTO CA 95830

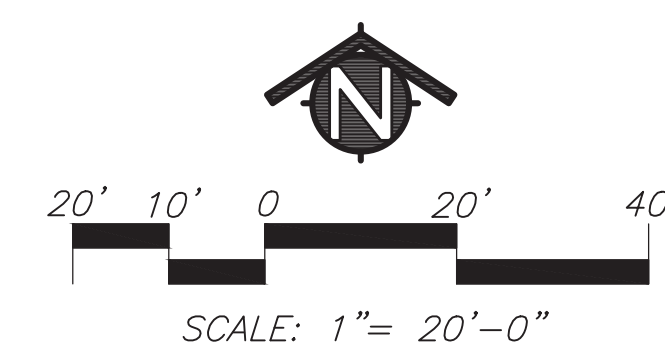
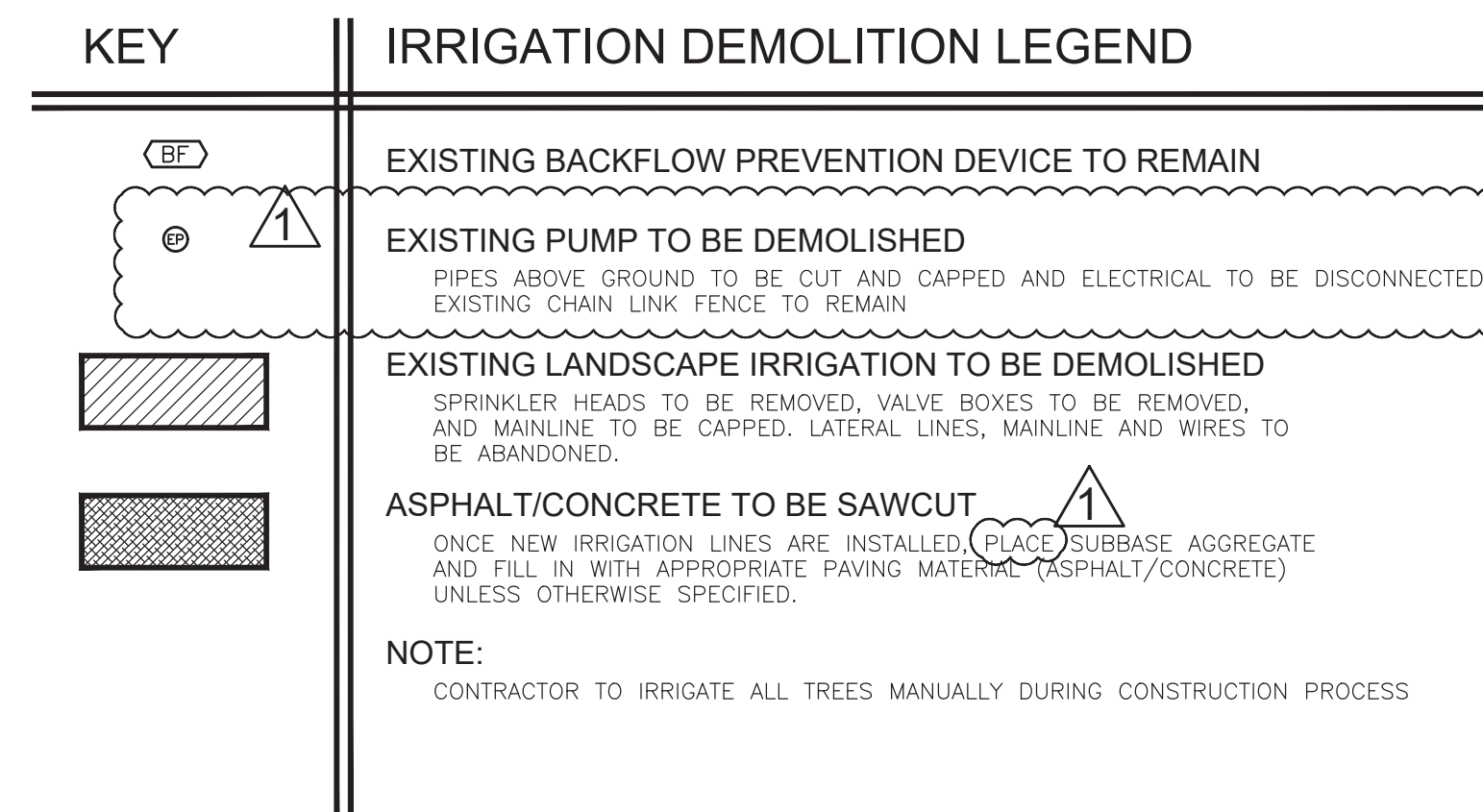
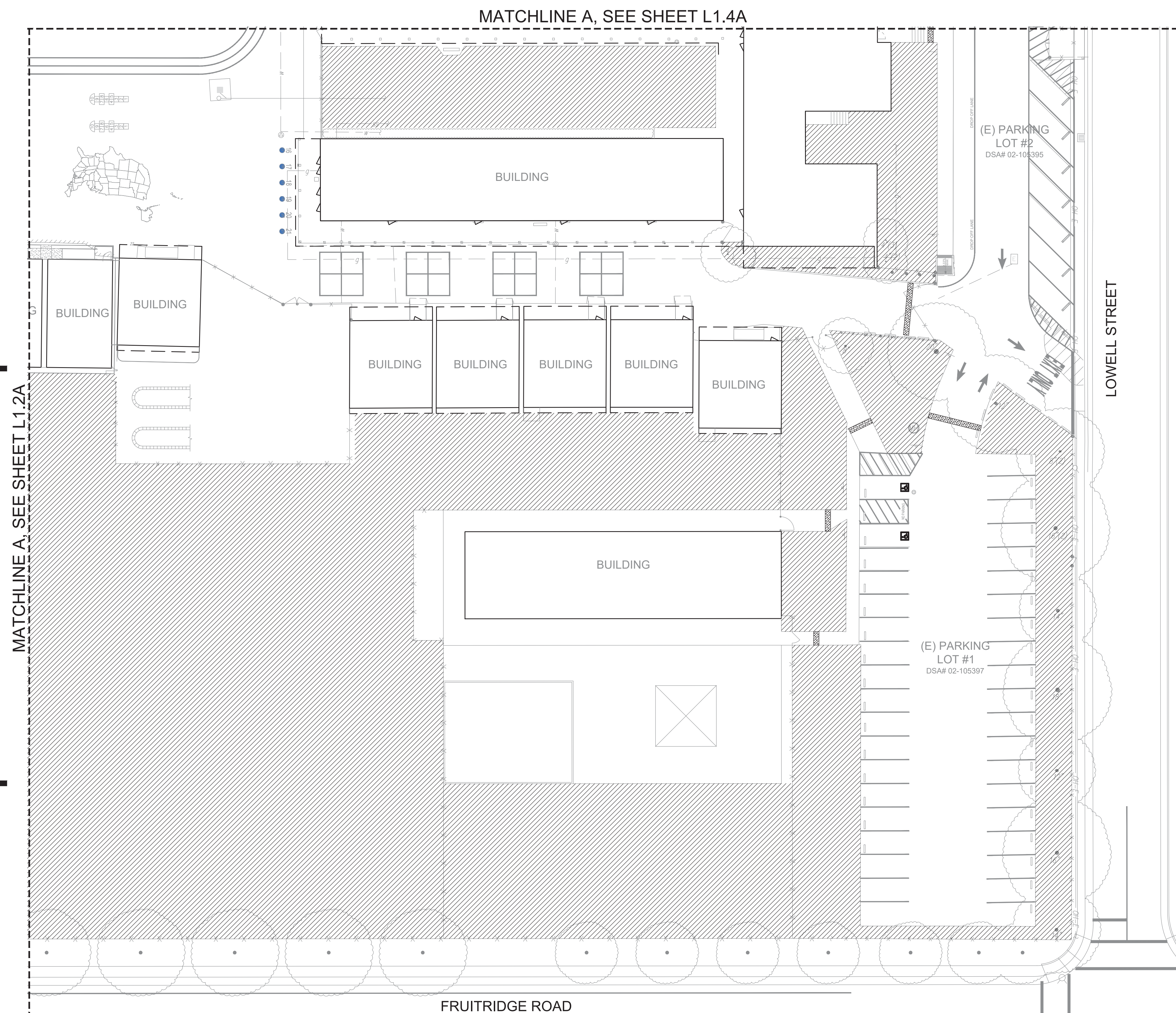
DATE 2/15/18

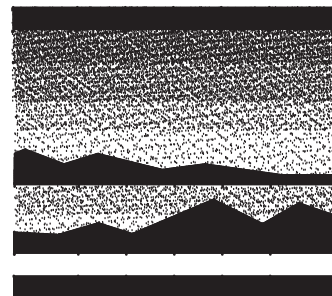
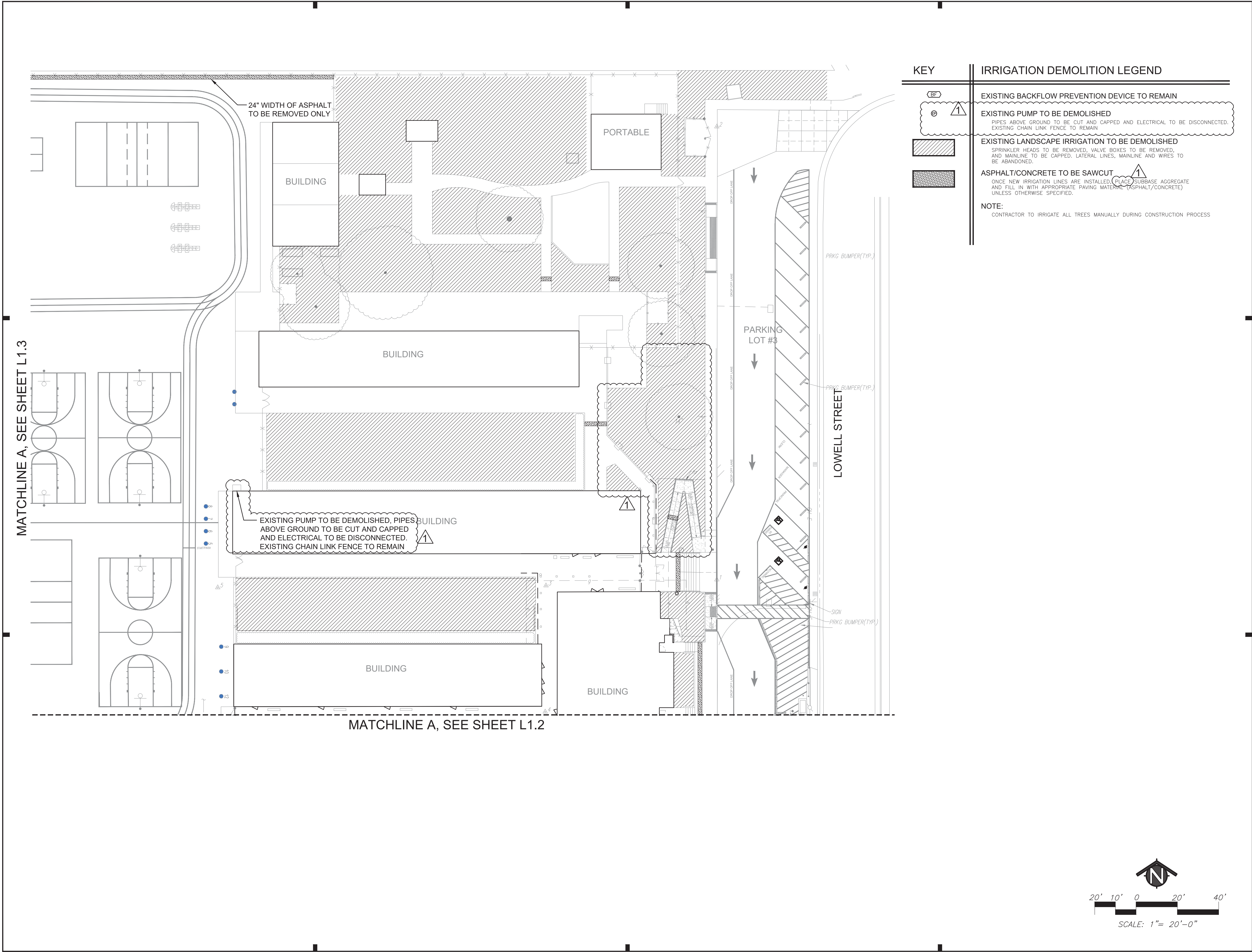
JOB NO. 17-68

SHEET TITLE
EARL WARREN ES
DEMOLITION
PLAN

SHEET NO. _____

L1.3A

SHEET 4 OF 35



MTW *group*
LANDSCAPE ARCHITECTURE
AND PLANNING
10411 Old Placerville Road
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Sacramento, CA 95827
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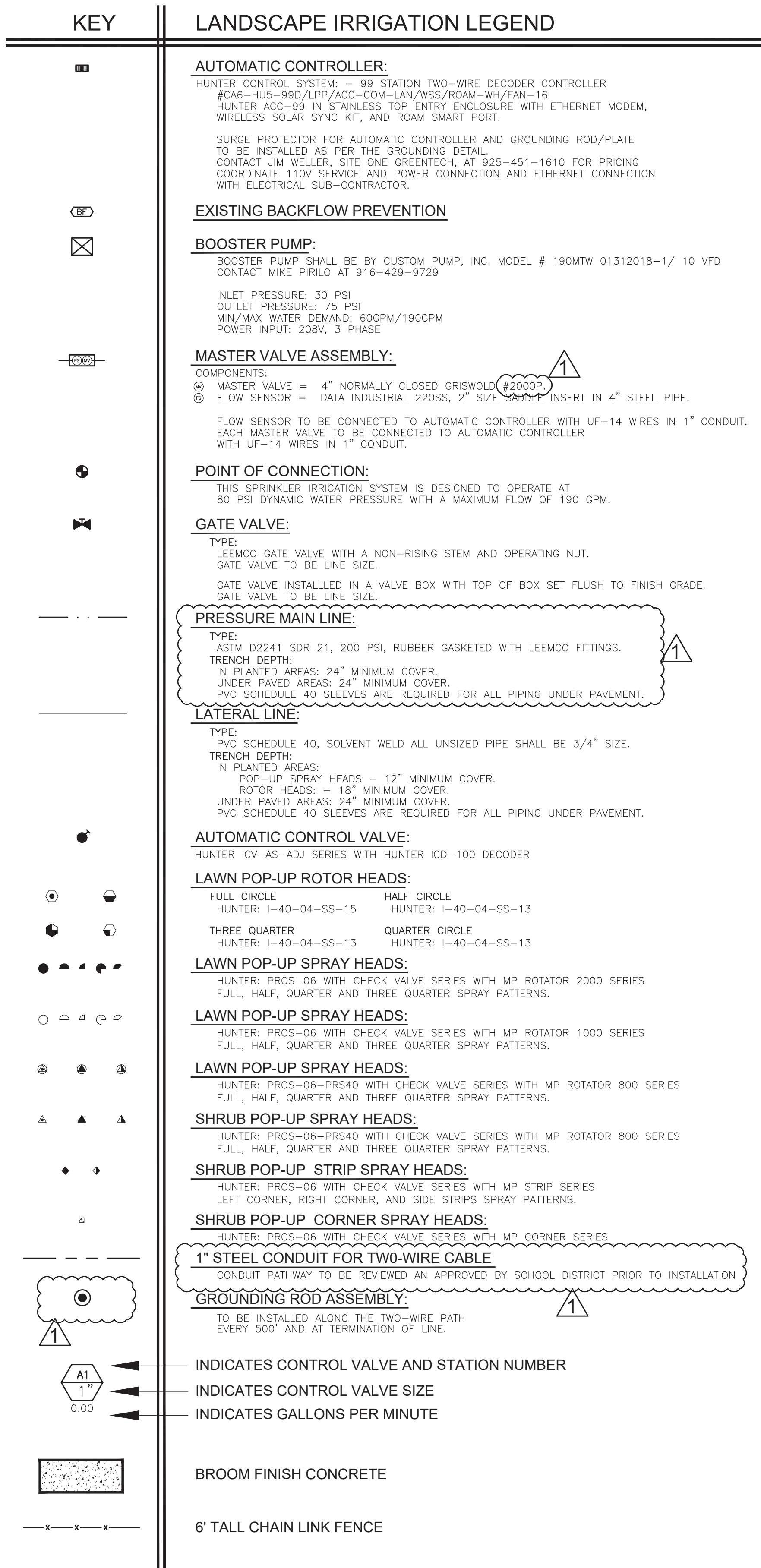
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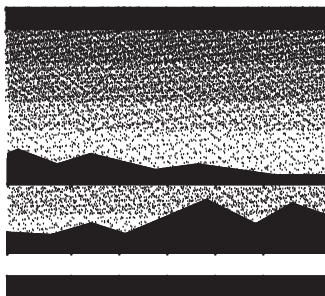
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NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS
SACRAMENTO, CA 95820

DATE 2/15/18
JOB NO. 17-68
SHEET TITLE
EARL WARREN ES
DEMOLITION
PLAN

SHEET NO.
L1.4A
SHEET 5 OF 35





MTW group
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EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS

SACRAMENTO, CA 95820

DATE 2/15/18
JOB NO. 17-68
SHEET TITLE
EARL WARREN ES
LANDSCAPE
IRRIGATION
PLAN

SHEET NO.

1 L2.2A
SHEET 7 OF 35



20' 10' 0 20' 40'
SCALE: 1"= 20'-0"

KEY

AUTOMATIC CONTROLLER:
HUNTER CONTROL SYSTEM: 99 STATION TWO-WIRE DECODER CONTROLLER
#C46-HU5-99D/LPT/ACC-COM-LAN/WSS/ROAM-WH/TAN-16
HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM,
WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.

SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE
TO BE INSTALLED AS PER THE GROUNDING DETAIL.
CONTACT JIM WELER, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING
COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION
WITH ELECTRICAL SUB-CONTRACTOR.

EXISTING BACKFLOW PREVENTION

BOOSTER PUMP:
BOOSTER PUMP SHALL BE BY CUSTOM PUMP, INC. MODEL # 190MTW 01312018-1/ 10 VFD
CONTACT MIKE PIRILO AT 916-429-9729

INLET PRESSURE: 30 PSI
OUTLET PRESSURE: 75 PSI
MIN/MAX WATER DEMAND: 60GPM/190GPM
POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:
COMPONENTS:
⊗ MASTER VALVE = 4" NORMALLY CLOSED GRISWOLD #2000P
⊙ FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 4" STEEL PIPE.

FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER
WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:
THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT
80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 190 GPM.

GATE VALVE:
TYPE:
LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
GATE VALVE TO BE LINE SIZE.

GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
GATE VALVE TO BE LINE SIZE.

PRESSURE MAIN LINE:
TYPE:
ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.
TRENCH DEPTH:
IN PLANTED AREAS: 24" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

LATERAL LINE:
TYPE:
PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.
TRENCH DEPTH:
IN PLANTED AREAS:
POP-UP SPRAY HEADS - 12" MINIMUM COVER.
ROTOR HEADS: - 18" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

AUTOMATIC CONTROL VALVE:
HUNTER ICDV-AS-ADJ SERIES WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:
FULL CIRCLE HUNTER: I-40-04-SS-15 HALF CIRCLE HUNTER: I-40-04-SS-13
THREE QUARTER HUNTER: I-40-04-SS-13 QUARTER CIRCLE HUNTER: I-40-04-SS-13

LAWN POP-UP SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE. SERIES WITH MP ROTATOR 2000 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE. SERIES WITH MP ROTATOR 1000 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:
HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

SHRUB POP-UP SPRAY HEADS:
HUNTER: PROS-06-PRS40 WITH CHECK VALVE. SERIES WITH MP ROTATOR 800 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

SHRUB POP-UP STRIP SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE. SERIES WITH MP STRIP SERIES
LEFT CORNER, RIGHT CORNER, AND SIDE STRIPS SPRAY PATTERNS.

SHRUB POP-UP CORNER SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE. SERIES WITH MP CORNER SERIES

1" STEEL CONDUIT FOR TWO-WIRE CABLE
CONDUIT PATHWAY TO BE REVIEWED AND APPROVED BY SCHOOL DISTRICT PRIOR TO INSTALLATION.

GROUNDING ROD ASSEMBLY:
TO BE INSTALLED ALONG THE TWO-WIRE PATH
EVERY 500' AND AT TERMINATION OF LINE.

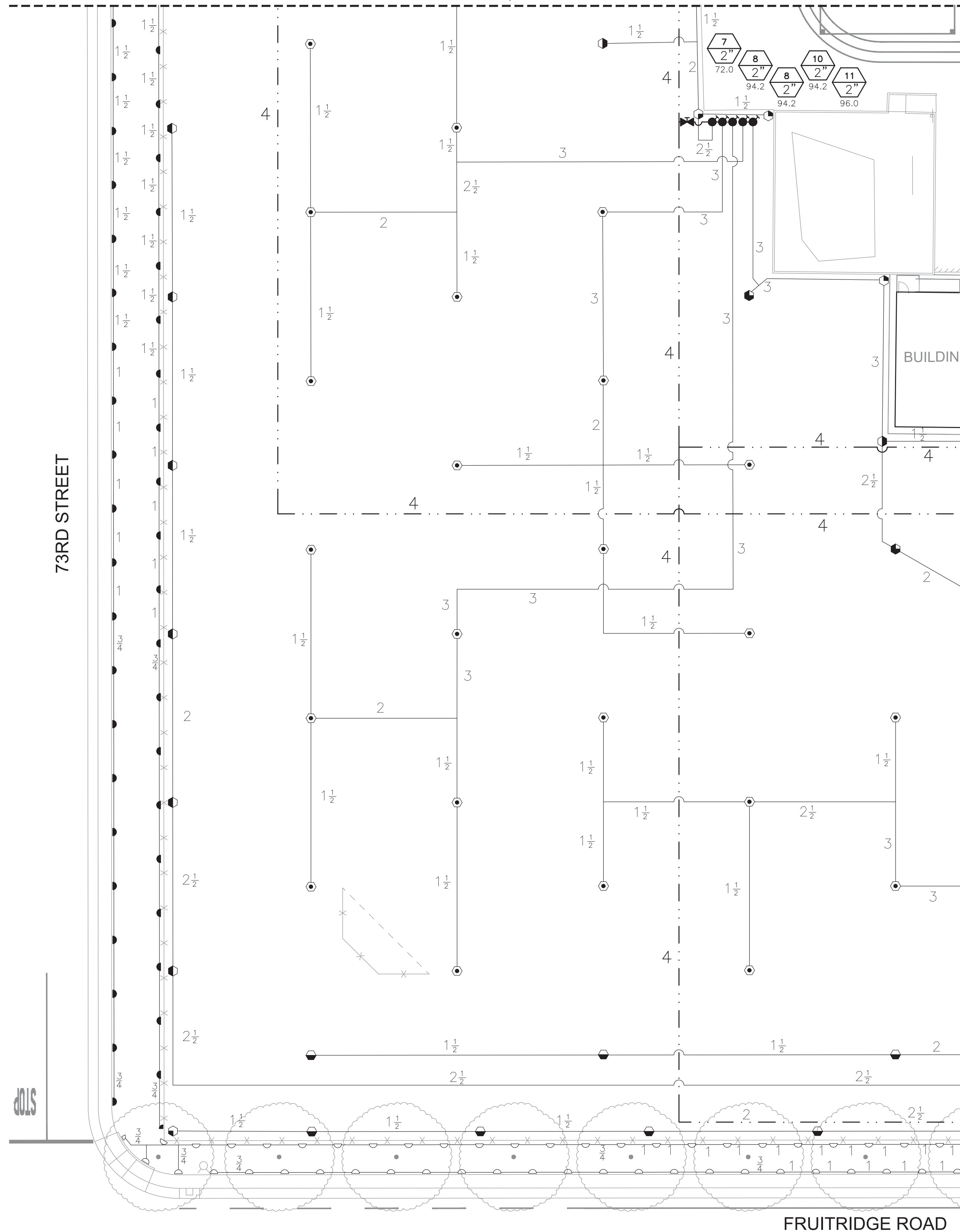
INDICATES CONTROL VALVE AND STATION NUMBER
INDICATES CONTROL VALVE SIZE
INDICATES GALLONS PER MINUTE

BROOM FINISH CONCRETE

6' TALL CHAIN LINK FENCE

SEE L2.1 FOR LANDSCAPE IRRIGATION NOTES

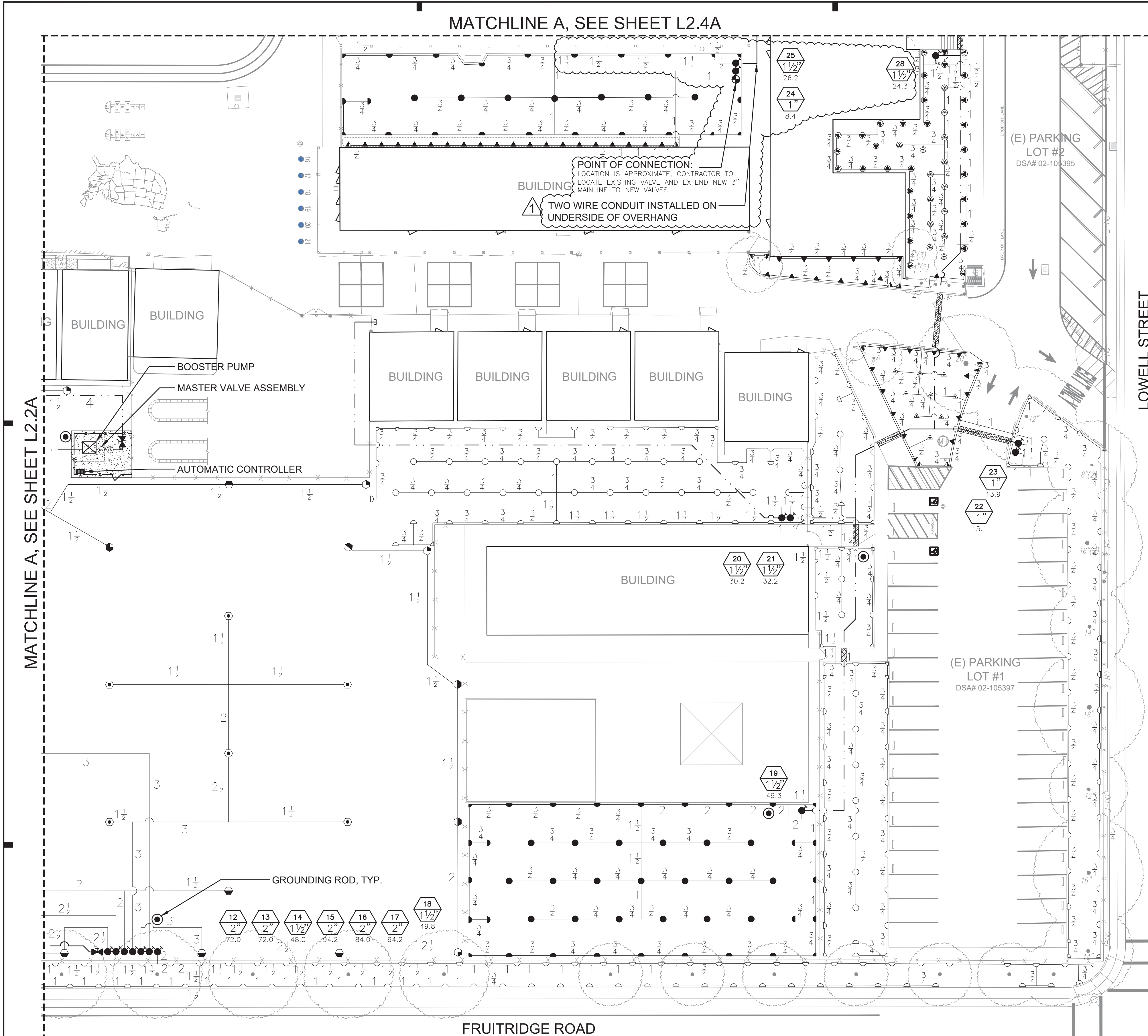
MATCHLINE A, SEE SHEET L2.1A



MATCHLINE A, SEE SHEET L2.3A

PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

- PRIOR TO START OF CONSTRUCTION CONTRACTOR REQUIRED TO CONTACT NAME, TITLE: JEFF BOZEMAN PHONE NUMBER: TO SET UP A MEETING ON SITE TO OPERATE THE EXISTING SPRINKLER IRRIGATION SYSTEM AND DISCUSS THE MODIFICATIONS THAT ARE TO BE MADE TO THE EXISTING SYSTEM TO ACCOMMODATE FOR THE NEW CONSTRUCTION.
- CONTRACTOR TO OPERATE AND PROGRAM EXISTING SPRINKLER IRRIGATION SYSTEM THAT IS TO REMAIN IN ORDER TO PROVIDE WATER TO THE EXISTING LANDSCAPE TO REMAIN.
- CONTRACTOR TO REMOVE ALL EXISTING PIPE AND SPRINKLER HEADS WHEN THEY ARE IN NEW PLANTING AREAS.
- CONTRACTOR TO RESTORE AND REPAIR ANY EXISTING SPRINKLER IRRIGATION SYSTEM OR EXISTING LANDSCAPE WHICH IS IN AREAS TO REMAIN THAT IS DAMAGED BY NEW WORK.
- ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.



LANDSCAPE IRRIGATION LEGEND

AUTOMATIC CONTROLLER:
HUNTER CONTROL SYSTEM: - 99 STATION TWO-WIRE DECODER CONTROLLER
#CA6-HU5-99D/LPP/ACC-COM-LAN/WSS/ROOM-WH/FAN-16
HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM, WIRELESS SOLAR SYNC KIT, AND ROOM SMART PORT.

SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE TO BE INSTALLED AS PER THE GROUNDING DETAIL.
CONTACT JIM WELLER, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING
COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION WITH ELECTRICAL SUB-CONTRACTOR.

EXISTING BACKFLOW PREVENTION

BOOSTER PUMP:
BOOSTER PUMP SHALL BE BY CUSTOM PUMP, INC. MODEL # 190MTW 01312018-1/ 10 VFD
CONTACT MIKE PIRILO AT 916-429-9729

INLET PRESSURE: 30 PSI
OUTLET PRESSURE: 75 PSI
MIN/MAX WATER DEMAND: 60GPM/190GPM
POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:
COMPONENTS:
⑥ MASTER VALVE = 4" NORMALLY CLOSED GRISWOLD #2000P
⑥ FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 4" STEEL PIPE.

FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:
THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT 80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 190 GPM.

GATE VALVE:
TYPE:
LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
GATE VALVE TO BE LINE SIZE
GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
GATE VALVE TO BE LINE SIZE

PRESSURE MAIN LINE:
TYPE:
ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.
TRENCH DEPTH:
IN PLANTED AREAS: 24" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

LATERAL LINE:
TYPE:
PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.
TRENCH DEPTH:
IN PLANTED AREAS:
POP-UP SPRAY HEADS - 12" MINIMUM COVER.
ROTOR HEADS - 18" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

AUTOMATIC CONTROL VALVE:
HUNTER ICV-AS-ADJ SERIES WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:
FULL CIRCLE HALF CIRCLE
HUNTER: 1-40-04-SS-15 HUNTER: 1-40-04-SS-13

THREE QUARTER QUARTER CIRCLE
HUNTER: 1-40-04-SS-13 HUNTER: 1-40-04-SS-13

LAWN POP-UP SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 1000 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:
HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

SHRUB POP-UP SPRAY HEADS:
HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

SHRUB POP-UP STRIP SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP STRIP SERIES
LEFT CORNER, RIGHT CORNER, AND SIDE STRIPS SPRAY PATTERNS.

SHRUB POP-UP CORNER SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP CORNER SERIES

1" STEEL CONDUIT FOR TWO-WIRE CABLE
CONDUIT PATHWAY TO BE REVIEWED AND APPROVED BY SCHOOL DISTRICT PRIOR TO INSTALLATION

GROUNDING ROD ASSEMBLY:
TO BE INSTALLED ALONG THE TWO-WIRE PATH EVERY 500' AND AT TERMINATION OF LINE.

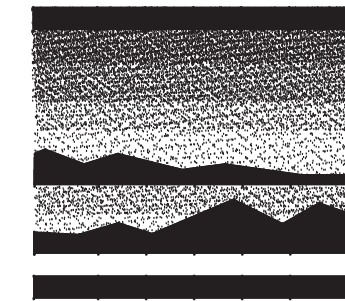
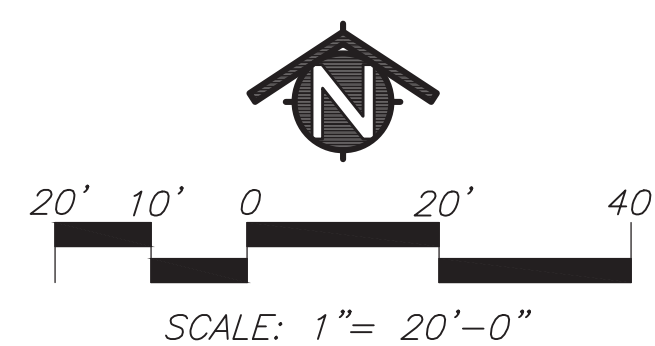
INDICATES CONTROL VALVE AND STATION NUMBER
INDICATES CONTROL VALVE SIZE
INDICATES GALLONS PER MINUTE

BROOM FINISH CONCRETE
6" TALL CHAIN LINK FENCE

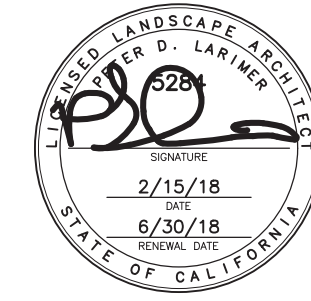
PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR REQUIRED TO CONTACT NAME, TITLE: JEFF BOZEMAN PHONE NUMBER: TO SET UP A MEETING ON SITE TO OPERATE THE EXISTING SPRINKLER IRRIGATION SYSTEM AND DISCUSS THE MODIFICATIONS THAT ARE TO BE MADE TO THE EXISTING SYSTEM TO ACCOMMODATE FOR THE NEW CONSTRUCTION.
2. CONTRACTOR TO OPERATE AND PROGRAM EXISTING SPRINKLER IRRIGATION SYSTEM THAT IS TO REMAIN IN ORDER TO PROVIDE WATER TO THE EXISTING LANDSCAPE TO REMAIN.
3. CONTRACTOR TO REMOVE ALL EXISTING PIPE AND SPRINKLER HEADS WHEN THEY ARE IN NEW PLANTING AREAS.
4. CONTRACTOR TO RESTORE AND REPAIR ANY EXISTING SPRINKLER IRRIGATION SYSTEM OR EXISTING LANDSCAPE WHICH IS IN AREAS TO REMAIN THAT IS DAMAGED BY NEW WORK.
5. ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.

SEE L2.1A FOR LANDSCAPE IRRIGATION NOTES



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REVISIONS

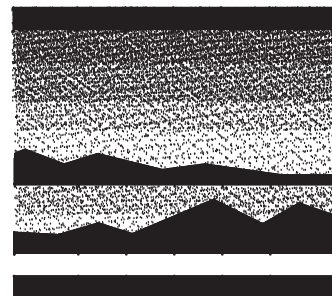
NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS

SACRAMENTO, CA 95820

DATE 2/15/18
JOB NO. 17-68
SHEET TITLE
EARL WARREN ES
LANDSCAPE
IRRIGATION
PLAN

SHEET NO.
L2.3A
SHEET 8 OF 35



MTW *group*
LANDSCAPE ARCHITECTURE
AND PLANNING
10411 Old Placerville Road
Suite 205
Sacramento, CA 95827
916 369-3990



Peter D. Larimer C-5284

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ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS

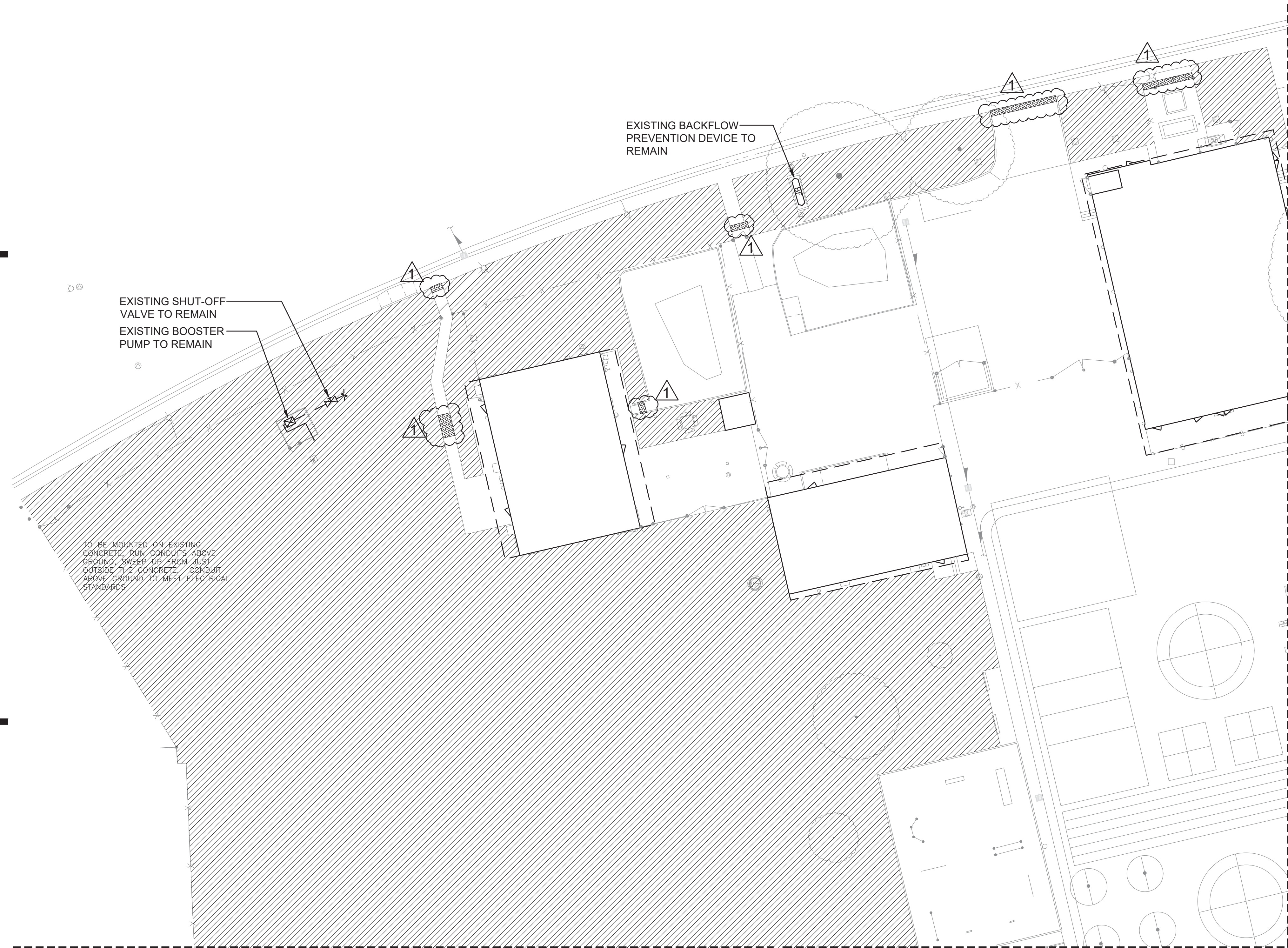
SACRAMENTO, CA 95820

DATE	2/15/18
JOB NO.	17-69
SHEET TITLE	JOHN BIDWELL ES DEMOLITION PLAN

SHEET NO.

L1.1B

SHEET 10 OF 35



KEY

EXISTING LANDSCAPE IRRIGATION TO BE REMOVED

ASPHALT/CONCRETE TO BE SAWCUT
ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE) UNLESS OTHERWISE SPECIFIED.

EXISTING AUTOMATIC CONTROLLER TO BE DISCONNECTED AND REMOVED

EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN

EXISTING PRESSURE MAIN LINE

EXISTING SHUT-OFF VALVE TO REMAIN

IRRIGATION DEMOLITION LEGEND

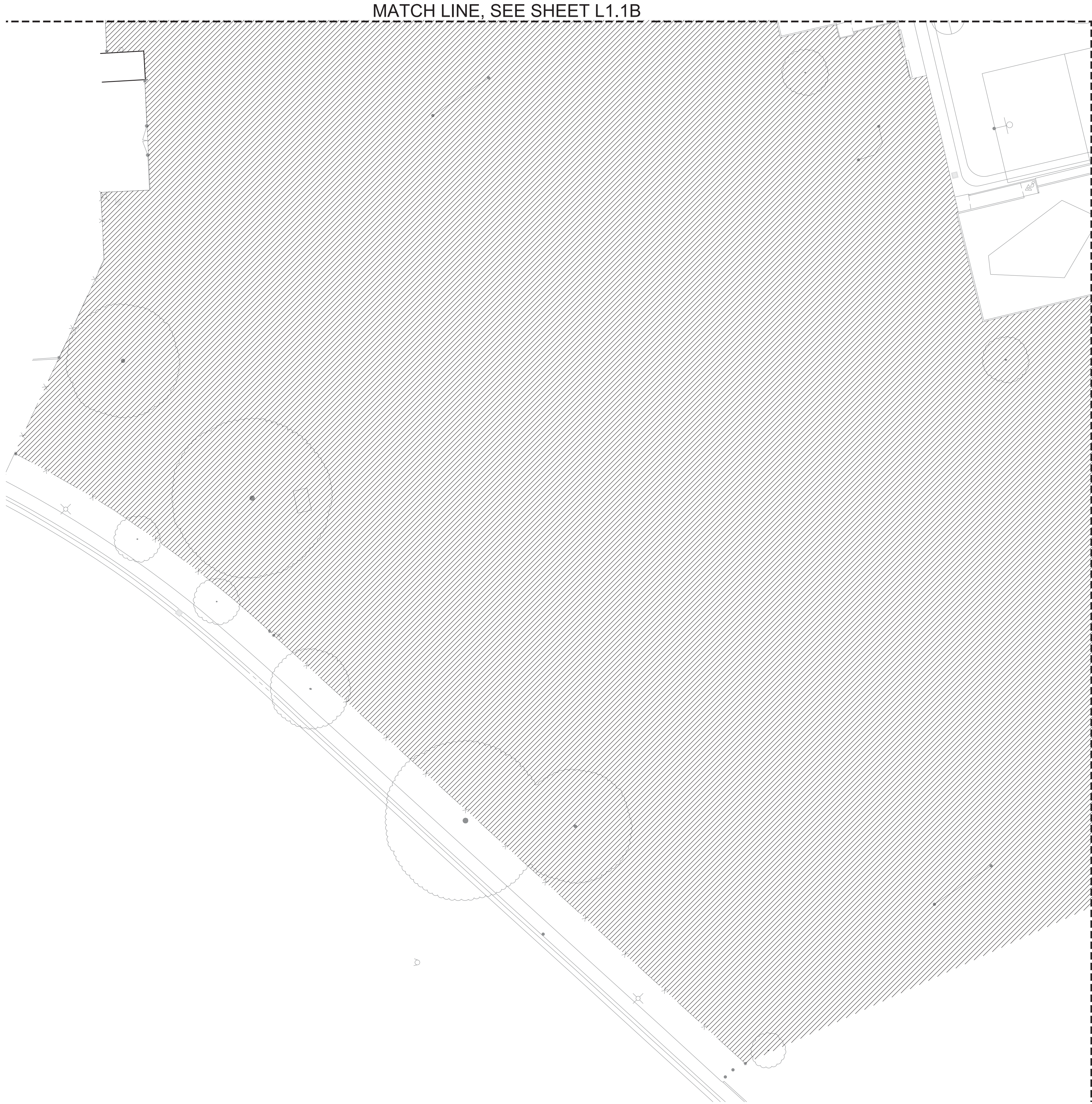
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ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE) UNLESS OTHERWISE SPECIFIED.

NOTE:

CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS

20' 10' 0 20' 40'

SCALE: 1"= 20'-0"



KEY

EXISTING LANDSCAPE IRRIGATION TO BE REMOVED

ASPHALT/CONCRETE TO BE SAWCUT
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EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN

EXISTING PRESSURE MAIN LINE

EXISTING SHUT-OFF VALVE TO REMAIN



MTW group
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AND PLANNING
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Peter D. Larimer
C-5284

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SACRAMENTO, CA 95820


DATE	2/15/18
JOB NO.	17-69
SHEET TITLE	JOHN BIDWELL ES DEMOLITION PLAN

SHEET NO.

L1.2B

SHEET 11 OF 35

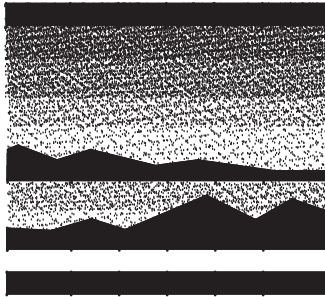
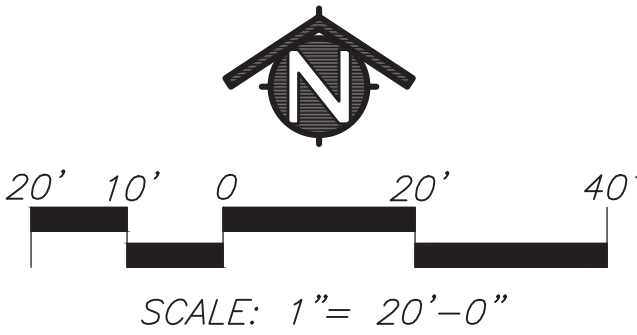
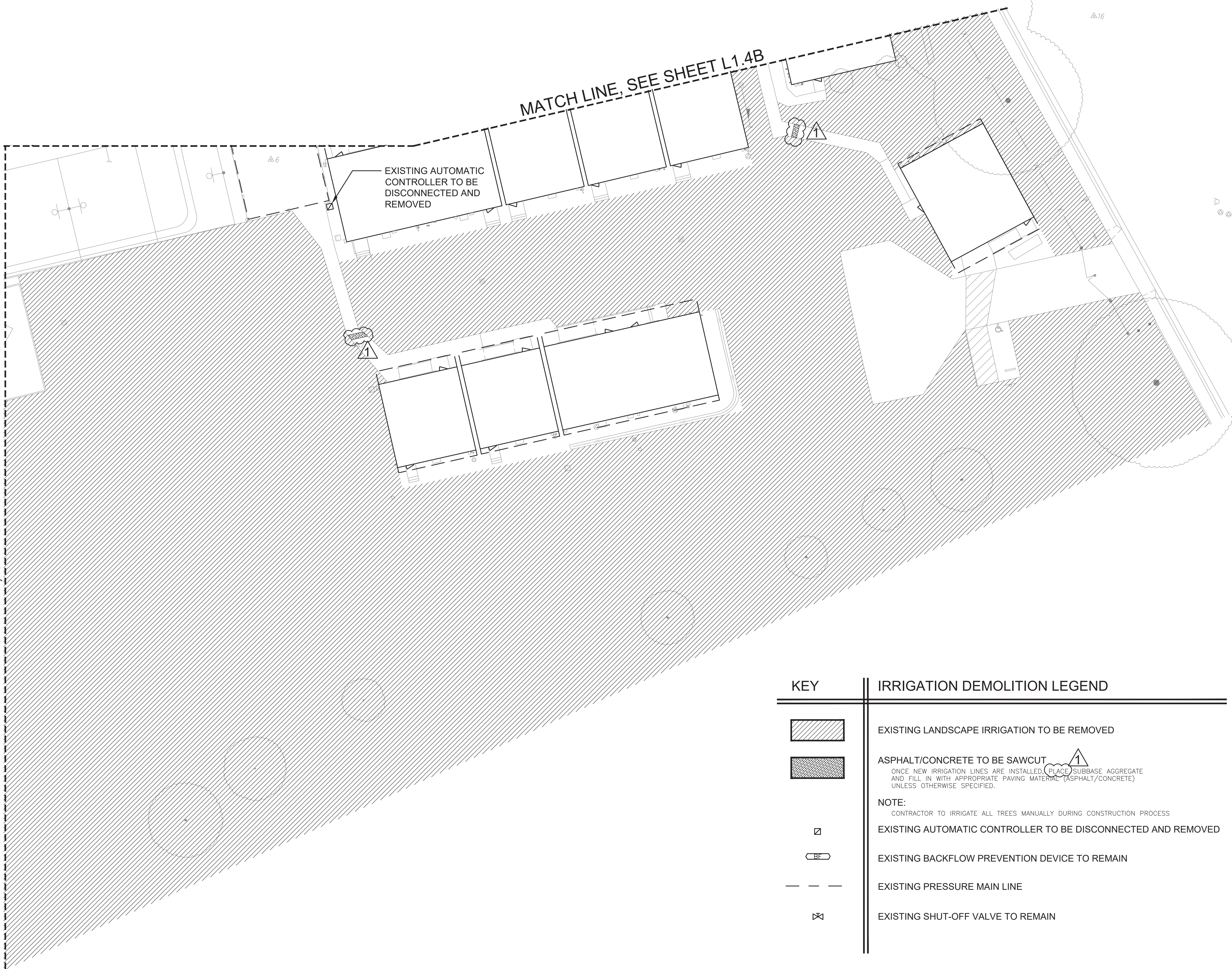




20' 10' 0 20' 40'

SCALE: 1"= 20'-0"

MATCH LINE, SEE SHEET L1.2B



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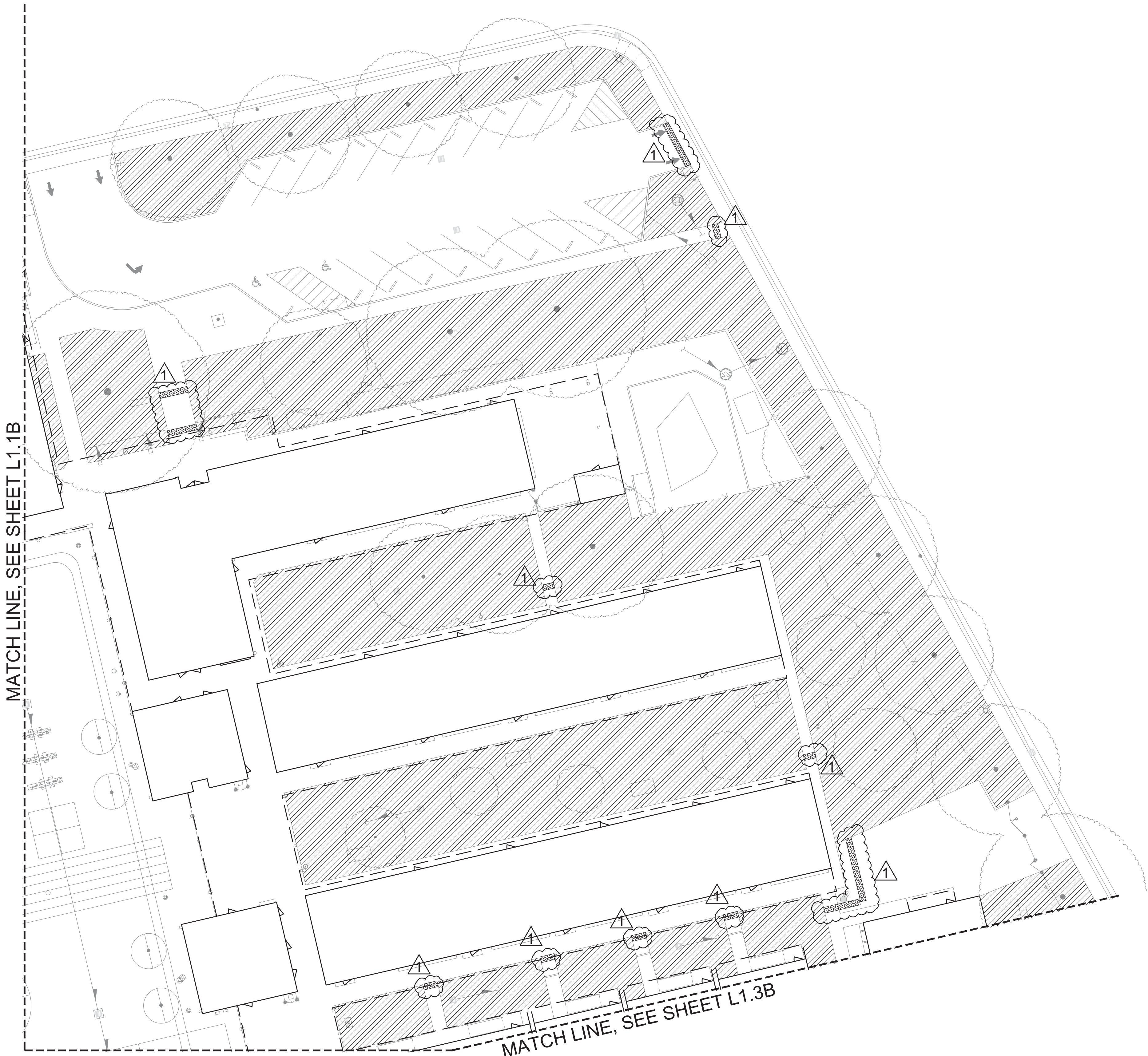
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SACRAMENTO, CA 95820

DATE	2/15/18
JOB NO.	17-69
SHEET TITLE JOHN BIDWELL ES DEMOLITION PLAN	

SHEET NO.	L1.3B
SHEET 12 OF 35	1



KEY

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EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN

EXISTING PRESSURE MAIN LINE

EXISTING SHUT-OFF VALVE TO REMAIN

IRRIGATION DEMOLITION LEGEND

NOTE:
CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS.

MATCH LINE, SEE SHEET L1.1B

MATCH LINE, SEE SHEET L1.3B

SCALE: 1"= 20'-0"

LANDSCAPE ARCHITECTURE AND PLANNING
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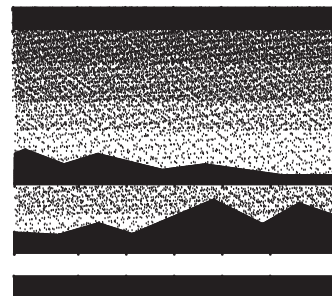
SACRAMENTO, CA 95820

DATE	2/15/18
JOB NO.	17-69
SHEET TITLE	JOHN BIDWELL ES DEMOLITION PLAN

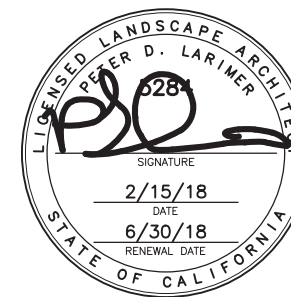
SHEET NO.

L1.4B

SHEET 13 OF 35



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AND PLANNING
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SACRAMENTO, CA 95820

DATE 2/15/18
JOB NO. 17-69
SHEET TITLE
JOHN BIDWELL ES
LANDSCAPE
IRRIGATION
PLAN

SHEET NO.

L2.1B

SHEET 14 OF 35

1

KEY

LANDSCAPE IRRIGATION LEGEND

AUTOMATIC CONTROLLER:

HUNTER CONTROL SYSTEM: - 99 STATION TWO-WIRE DECODER CONTROLLER #CAG-HU5-99D/LPP/ACC-COM-LAN/WSS/ROAM-WH/FAN-16
HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM, WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.

SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE TO BE INSTALLED AS PER THE GROUNDING DETAIL.
CONTACT JIM WELLER, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION WITH ELECTRICAL SUB-CONTRACTOR.

EXISTING BOOSTER PUMP

MASTER VALVE ASSEMBLY:

COMPONENTS:

⊙ MASTER VALVE = 4" NORMALLY CLOSED GRISWOLD #2000P.
⊙ FLOW SENSOR = DATA INDUSTRIAL 220PVC5, 2" SIZE SADDLE INSERT IN 4" PVC TEE

FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:

THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT 75 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 190 GPM.

GATE VALVE:

TYPE:

LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
GATE VALVE TO BE LINE SIZE.

GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
GATE VALVE TO BE LINE SIZE.

KEY

LANDSCAPE IRRIGATION LEGEND

PRESSURE MAIN LINE:

TYPE:
ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.

TRENCH DEPTH:

IN PLANTED AREAS: 24" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

EXISTING PRESSURE MAIN LINE

LATERAL LINE:

TYPE:

PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.

TRENCH DEPTH:

IN PLANTED AREAS:
POP-UP SPRAY HEADS - 12" MINIMUM COVER.
ROTOR HEADS: - 18" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

AUTOMATIC CONTROL VALVE:

HUNTER ICV-101G-AS-ADJ WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:

FULL CIRCLE HUNTER: 1-40-04-SS-15 HALF CIRCLE HUNTER: 1-40-04-SS-13

THREE QUARTER HUNTER: 1-40-04-SS-13 QUARTER CIRCLE HUNTER: 1-40-04-SS-13

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 3000 SERIES FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

KEY

LANDSCAPE IRRIGATION LEGEND

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 1000 SERIES FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

SHRUB POP-UP SPRAY HEADS:

HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES

PVC SCHEDULE 40 SLEEVE

GROUNDING ROD ASSEMBLY:

RAINMASTER LIGHTNING ARRESTOR: TW-LA-1 WITH GR-K GROUND KIT. TO BE INSTALLED ALONG THE TWO-WIRE PATH EVERY 500' AND AT TERMINATION OF LINE.

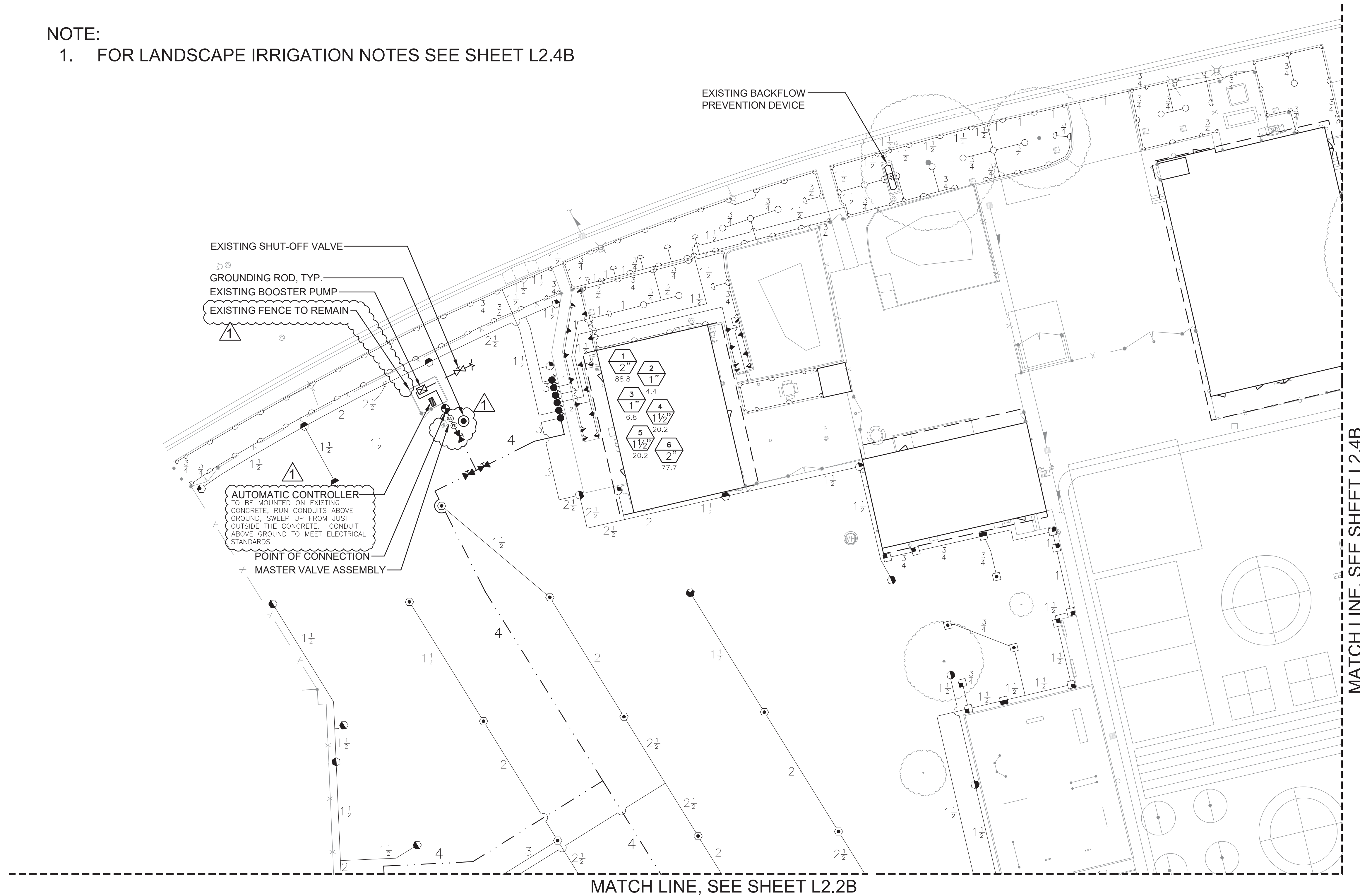
INDICATES CONTROL VALVE AND STATION NUMBER

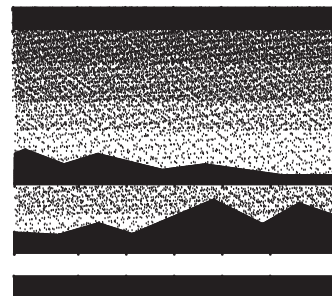
INDICATES CONTROL VALVE SIZE

INDICATES GALLONS PER MINUTE

NOTE:

- FOR LANDSCAPE IRRIGATION NOTES SEE SHEET L2.4B





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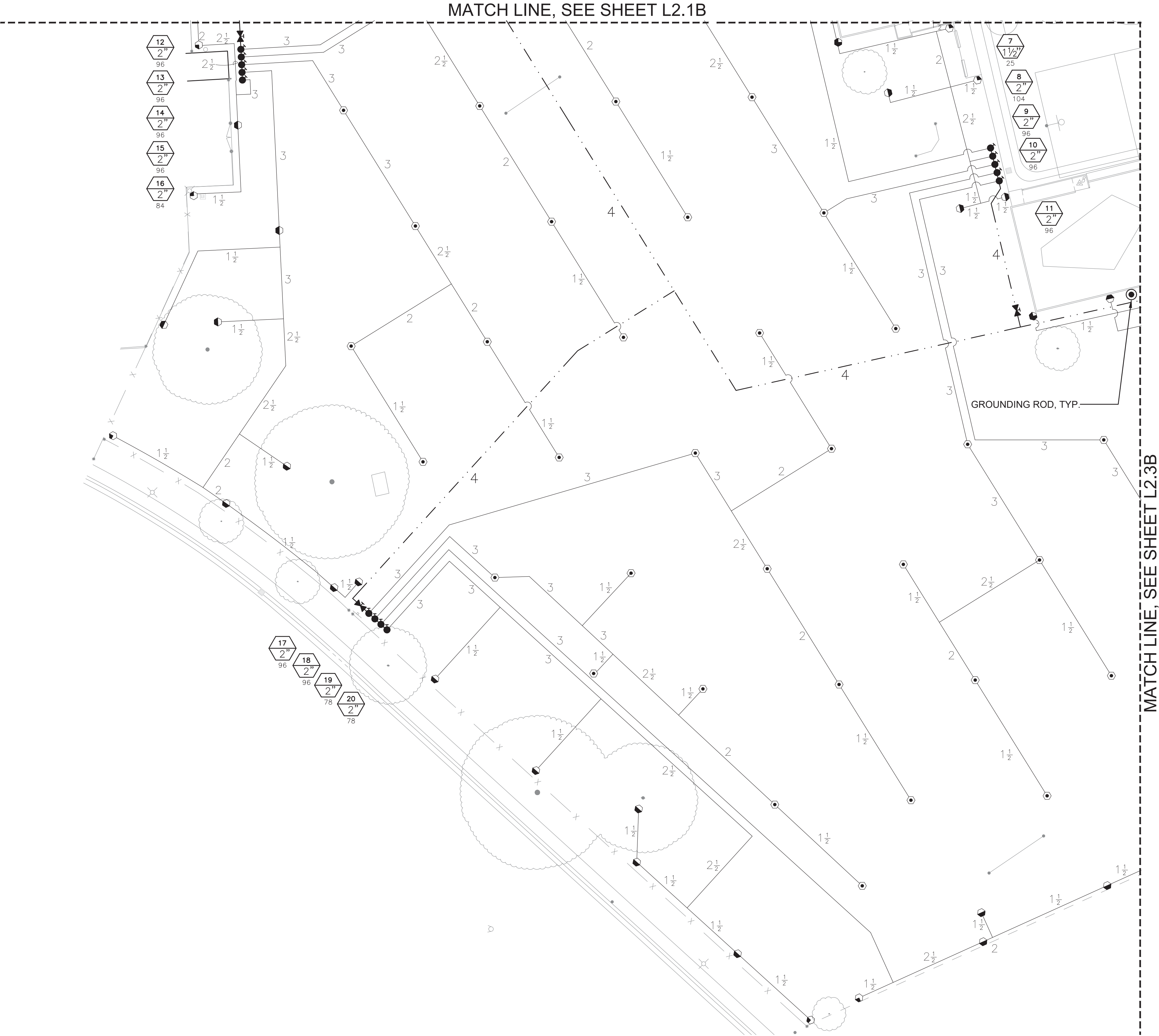
REVISIONS		
NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS

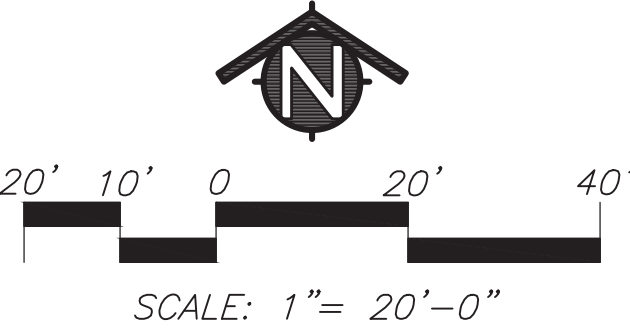
SACRAMENTO, CA 95820

DATE	2/15/18
JOB NO.	17-69
SHEET TITLE	JOHN BIDWELL ES LANDSCAPE IRRIGATION PLAN

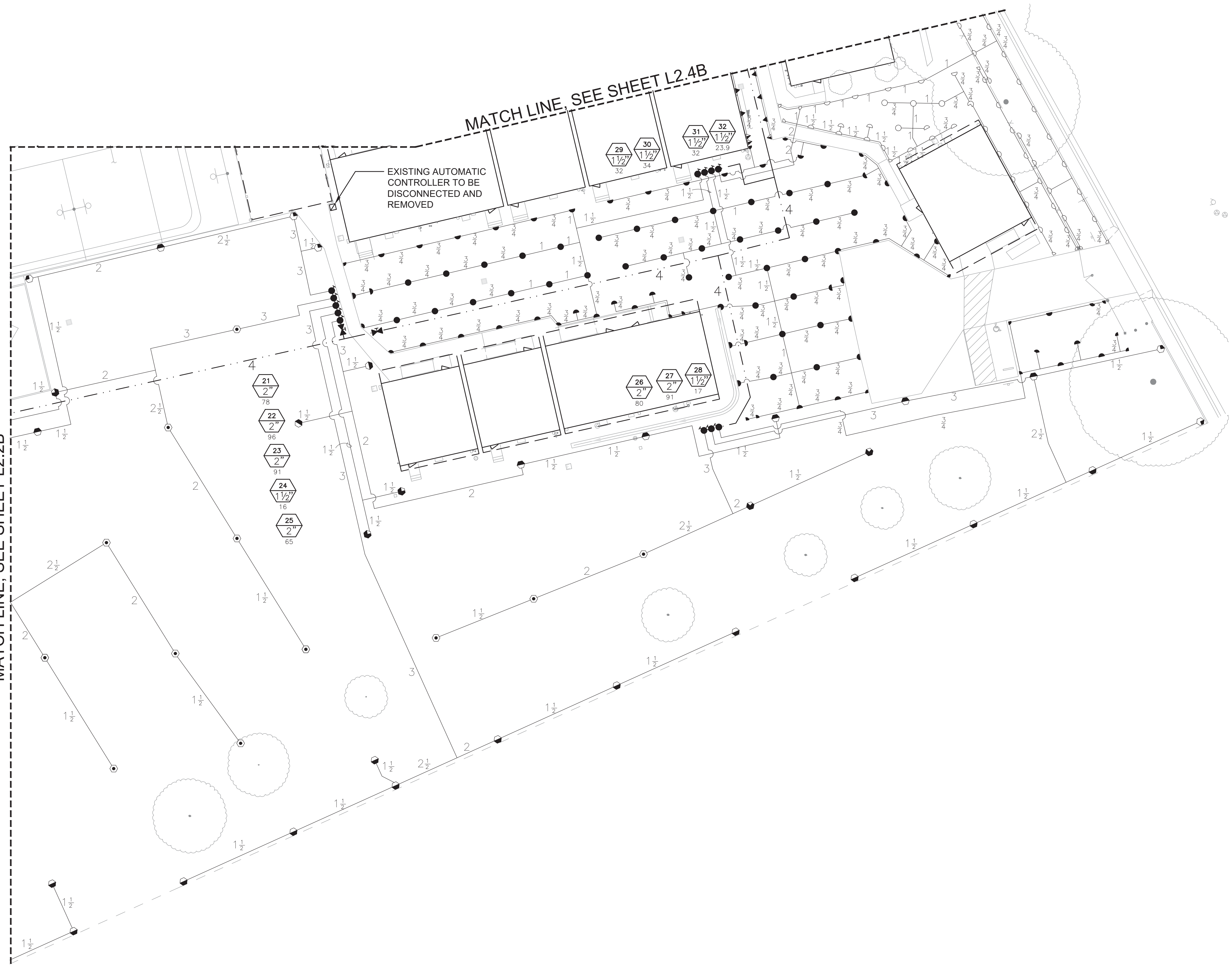
SHEET NO.	L2.2B
SHEET 15 OF 35	1



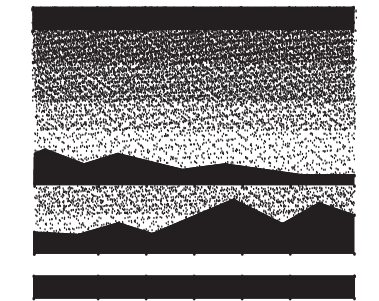
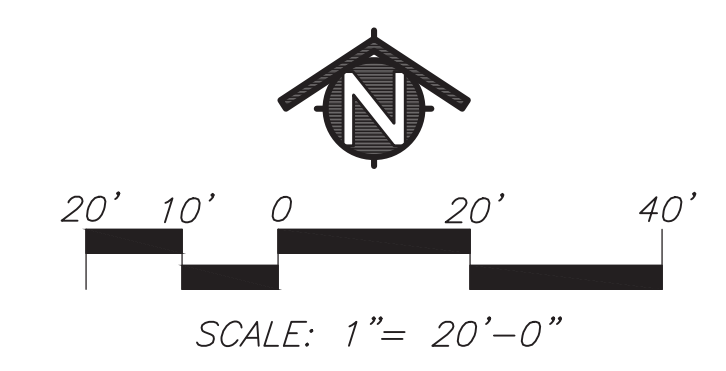
- NOTE:
1. FOR LANDSCAPE IRRIGATION LEGEND SEE SHEET L2.1B
 2. FOR LANDSCAPE IRRIGATION NOTES SEE SHEET L2.4B



MATCH LINE, SEE SHEET L2.2B



- NOTE:
1. FOR LANDSCAPE IRRIGATION LEGEND SEE SHEET L2.1B
 2. FOR LANDSCAPE IRRIGATION NOTES SEE SHEET L2.4B



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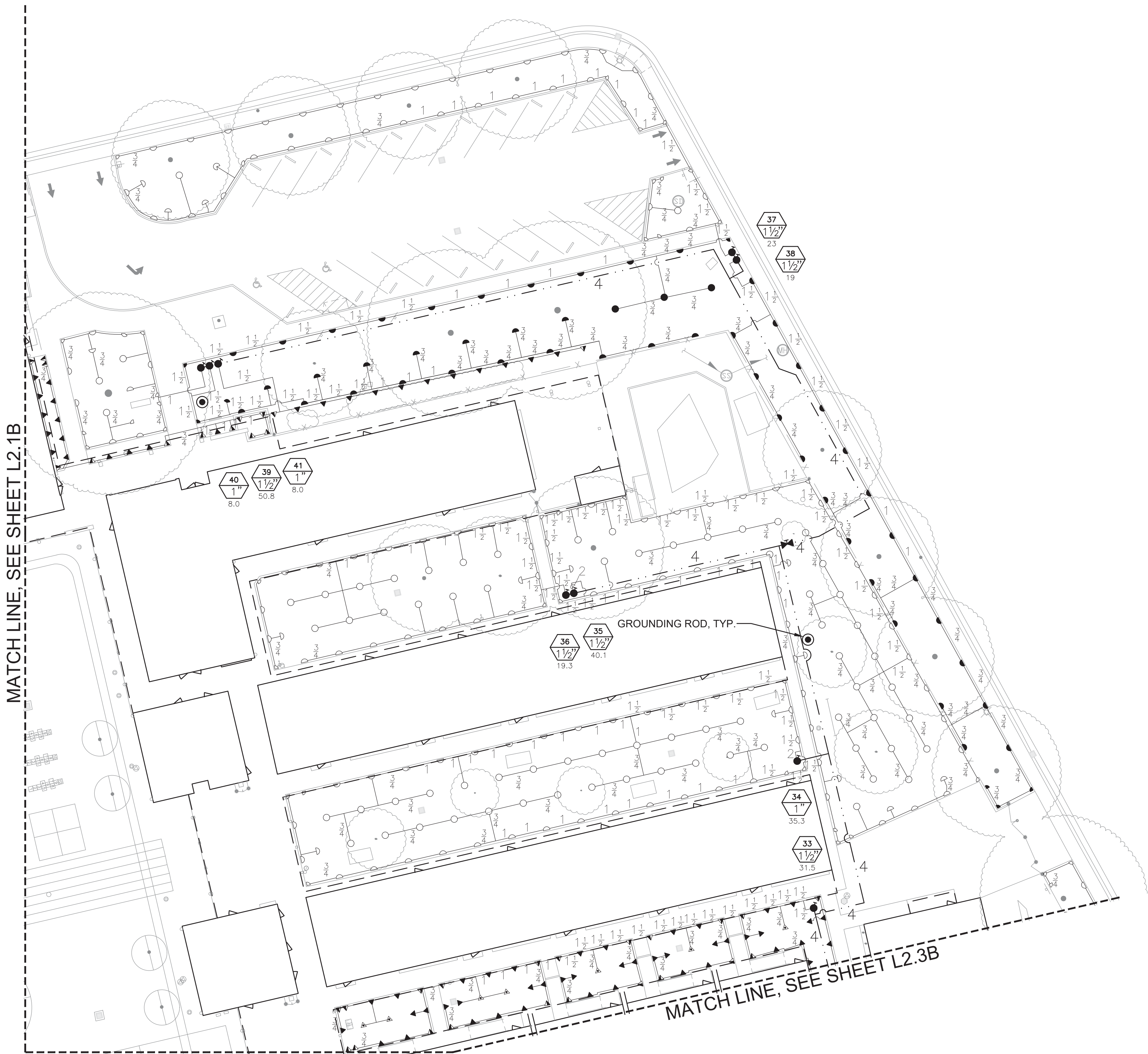
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SHEET TITLE
JOHN BIDWELL ES
LANDSCAPE
IRRIGATION
PLAN

SHEET NO.
L2.3B
SHEET 16 OF 35



MATCH LINE, SEE SHEET L2.1B

MATCH LINE, SEE SHEET L2.3B

LANDSCAPE IRRIGATION NOTES

- 1. COMPOSITE BASE SHEET: PROPOSED IMPROVEMENTS SHOWN ON DRAWINGS ARE SUPERIMPOSED ON A COMPOSITE BASE SHEET. THE COMPOSITE BASE SHEET IS A COMPILATION OF ARCHITECTURAL, ENGINEERING, AND OTHER DATA THAT IS PROVIDED. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR ERRORS PERTAINING TO THE COMPOSITE BASE SHEET. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS. ANY DISCREPANCIES NEED TO BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND RESOLVED PRIOR TO CONTINUATION OF WORK.
- 2. DESIGN PRESSURE SHOWN ON PLANS HAS BEEN FURNISHED BY WATER COMPANY OR WATER DISTRICT SERVING SITE. VERIFY PRESSURE ON-SITE PRIOR TO THE INSTALLATION OF ANY SPRINKLER IRRIGATION EQUIPMENT. IF THERE IS A DISCREPANCY, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IN WRITING SO ADJUSTMENTS CAN BE MADE BY LANDSCAPE ARCHITECT. FAILURE TO REPORT DISCREPANCIES AND CONTINUANCE OF WORK WILL RESULT IN ALL RE-DESIGN COSTS BEING CHARGED TO CONTRACTOR.
- 3. DETERMINE LOCATION OF UNDERGROUND UTILITIES. DAMAGE CAUSED BY INSTALLATION OF THIS WORK SHALL BE REPAIRED TO SATISFACTION OF GOVERNING AGENCY OR OWNER AT NO ADDITIONAL COST TO THE CONTRACT.
- 4. SPRINKLER OVER SPRAY SHALL NOT BE ALLOWED ON PUBLIC SIDEWALKS, BUILDING WALLS OR FENCES. MINIMUM OVERSPRAY MAY OCCUR IN PARKING AREAS. USE ADJUSTABLE NOZZLES WHENEVER POSSIBLE TO CONTROL SPRINKLER OVERSPRAY.
- 5. ALL LOCAL CODES AND ORDINANCES SHALL BE COMPLIED WITH. IF THERE IS A CONFLICT, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
- 6. TESTING:
 - A. PRESSURE TEST ALL UNDERGROUND PIPING AS FOLLOWS:
 - MAIN LINE - AT 100 PSI FOR 4 HOURS.
 - LATERAL LINES - AT 100 PSI FOR 2 HOURS.
 - B. COVERAGE TEST:
 - NOTE: PRIOR TO REQUESTING COVERAGE TEST, INSURE ALL HEADS ARE SET PLUMB, NOZZLES ARE ADJUSTED PROPERLY AND SYSTEM HAS BEEN CHECKED FOR AUTOMATION.
 - REQUEST OWNER'S REPRESENTATIVES PRESENCE ON-SITE WHEN SPRINKLER SYSTEM IS COMPLETELY INSTALLED AND FULLY AUTOMATIC. PROVIDE ADEQUATE PERSONNEL AT THIS MEETING TO ADJUST AND FINE TUNE SYSTEM TO SATISFACTION OF OWNER'S REPRESENTATIVE.
- 7. LAYOUT ALL WORK PRIOR TO TRENCHING OPERATIONS TO DETERMINE IF MINOR MODIFICATIONS OR ADJUSTMENTS WILL BE REQUIRED.
- 8. INSTALL ALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
- 9. CONTROL WIRE SHALL BE HUNTER TWO-WIRE DECODER CABLE. SPICES SHALL BE PERMITTED AT VALVE BOX LOCATIONS ONLY.
- 10. PROVIDE AND INSTALL AUTOMATIC CONTROLLER AND TWO-WIRE CABLE. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE 110V SERVICE AND SERVICE HOOKUP FROM POWER SOURCE TO AUTOMATIC CONTROLLER.
- 11. COORDINATE ALL WORK WITH OTHER TRADES SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
- 12. NO PLANTING SHALL BE STARTED UNTIL ALL SPRINKLER WORK HAS BEEN TESTED AND APPROVED IN PRESENCE OF OWNER'S REPRESENTATIVE.
- 13. FOR SPRINKLER IRRIGATION INSTALLATION DETAILS, SEE SHEET NO. L3.1, L3.2 AND L3.3.

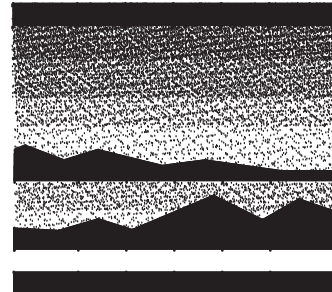
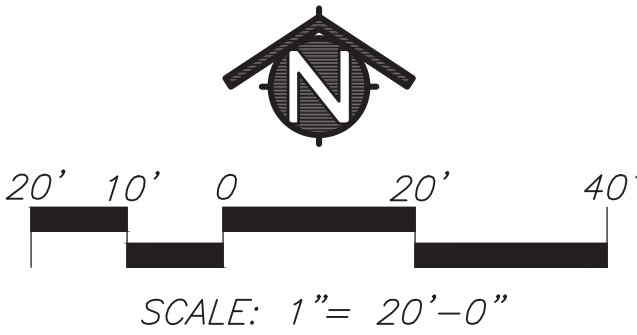
AFTER IRRIGATION INSTALLATION IS COMPLETE:
ALL SHRUB BEDS TO BE GRADED SMOOTH, AND
LAWN AREAS TO BE GRADED SMOOTH AND SLIT
SEEDED PER LANDSCAPE SPECIFICATIONS.

PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

- 1. PRIOR TO START OF CONSTRUCTION CONTRACTOR REQUIRED TO CONTACT NAME, TITLE: JEFF BOZEMAN PHONE NUMBER: 916-715-1044 TO SET UP A MEETING ON SITE TO OPERATE THE EXISTING SPRINKLER IRRIGATION SYSTEM AND DISCUSS THE MODIFICATIONS THAT ARE TO BE MADE TO THE EXISTING SYSTEM TO ACCOMMODATE FOR THE NEW CONSTRUCTION.
- 2. CONTRACTOR TO OPERATE AND PROGRAM EXISTING SPRINKLER IRRIGATION SYSTEM THAT IS TO REMAIN IN ORDER TO PROVIDE WATER TO THE EXISTING LANDSCAPE TO REMAIN.
- 3. CONTRACTOR TO REMOVE ALL EXISTING PIPE AND SPRINKLER HEADS WHEN THEY ARE IN NEW PLANTING AREAS.
- 4. CONTRACTOR TO RESTORE AND REPAIR ANY EXISTING SPRINKLER IRRIGATION SYSTEM OR EXISTING LANDSCAPE WHICH IS IN AREAS TO REMAIN THAT IS DAMAGED BY NEW WORK.
- 5. ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.

NOTE:

- 1. FOR LANDSCAPE IRRIGATION LEGEND SEE SHEET L2.1B



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LANDSCAPE
IRRIGATION
PLAN

SHEET NO.

L2.4B

SHEET 17 OF 35

1



BROADWAY

EXISTING CHAIN LINK —
FENCE AND CONCRETE
PAD TO BE REMOVED

IRRIGATION DEMOLITION LEGEND

- ☒ EXISTING AUTOMATIC CONTROLLER TO BE REMOVED
 - ☐ EXISTING BACKFLOW PREVENTION DEVICE TO BE SERVICED
 - ☐ EXISTING VALVE BOXES TO BE REMOVED
 - EXISTING AUTOMATIC CONTROL VALVES TO BE DISCONNECTED AND REMOVED.
 - EXISTING SPICE WIRES TO BE BURIED
 - ☐ EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED
 - SPRINKLER HEADS TO BE REMOVED, VALVE BOXES TO BE REMOVED,
 - AND MAINLINE TO BE CAPPED, LATERAL LINES, MAINLINE AND WIRES TO BE ABANDONED.
 - ☐ ASPHALT/CONCRETE TO BE SAWCUT
 - ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE) UNLESS OTHERWISE SPECIFIED.

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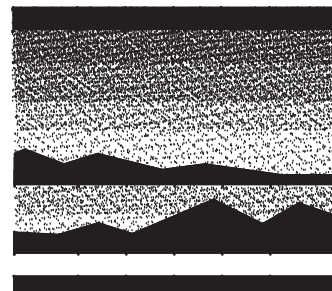
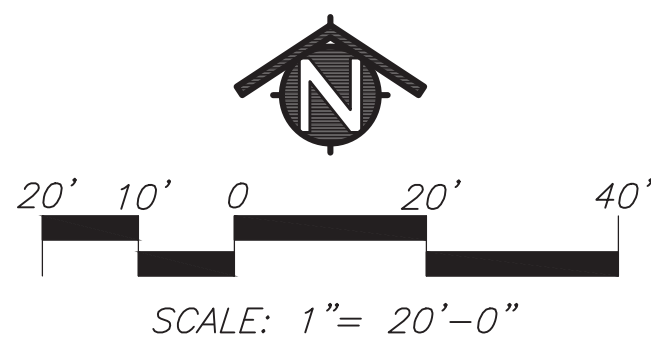
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EARL WARREN, JOHN BIDWELL AND TAHOE
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IRRIGATION IMPROVEMENTS

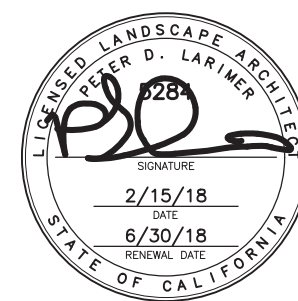
SHEET TITLE
TAHOE ES
DEMOLITION
PLAN

L1.1C

SHEET 18 OF 35

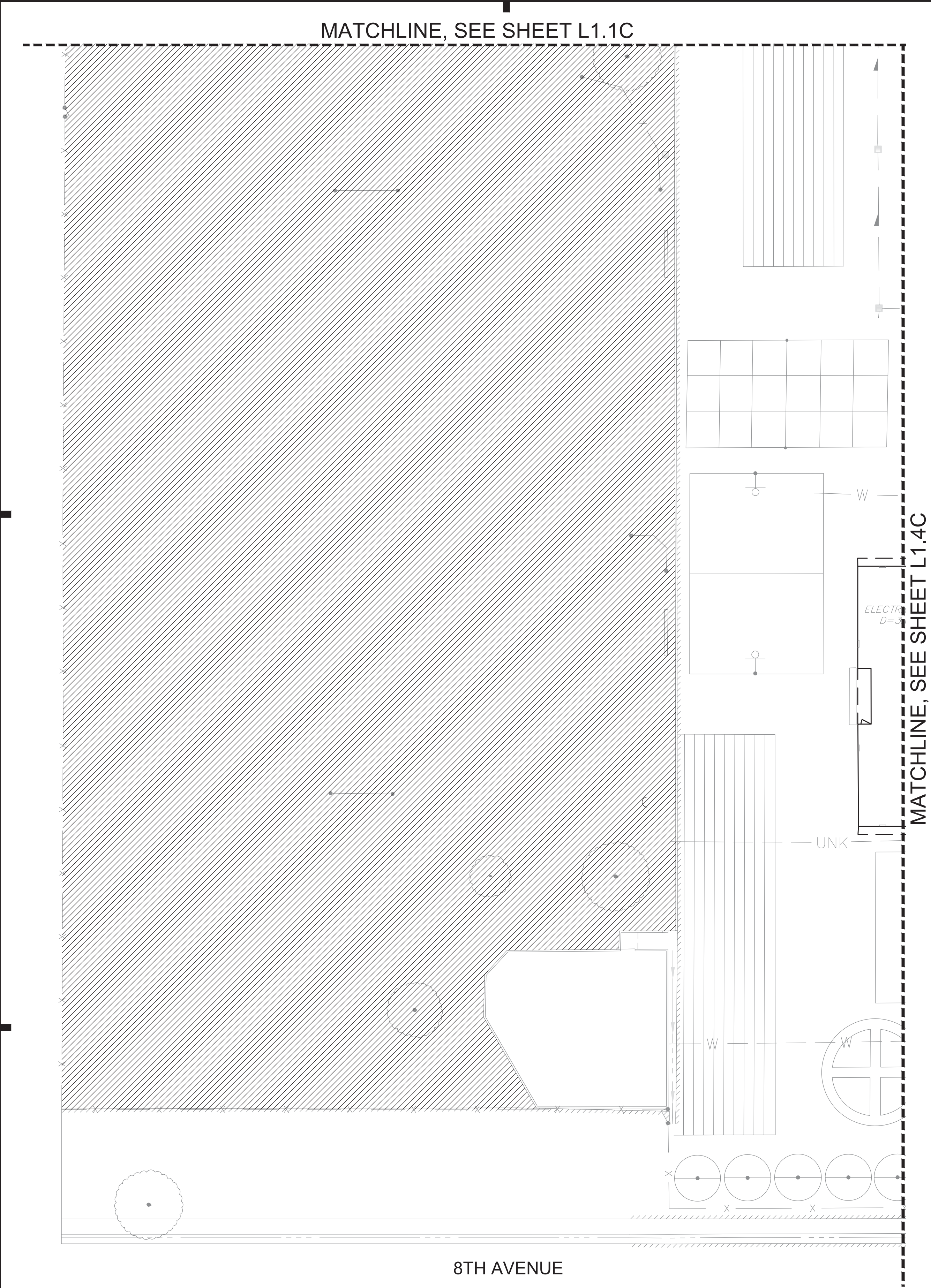


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10411 Old Placerville Road
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Sacramento, CA 95827
916 369-3990

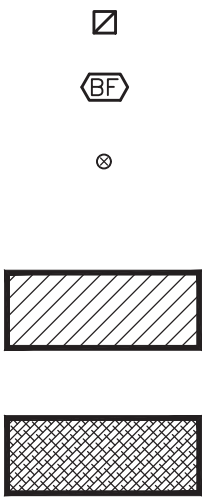


Peter D. Larimer C-5284

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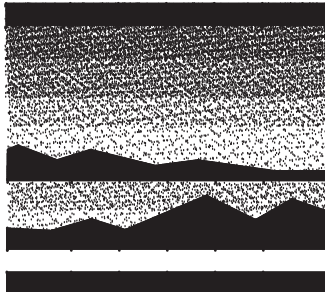
KEY



IRRIGATION DEMOLITION LEGEND

- EXISTING AUTOMATIC CONTROLLER TO BE REMOVED
- EXISTING BACKFLOW PREVENTION DEVICE TO BE SERVICED
- EXISTING VALVE BOXES TO BE REMOVED
- EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED
- ASPHALT/CONCRETE TO BE SAWCUT

NOTE: CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS



MTW group
LANDSCAPE ARCHITECTURE
AND PLANNING
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Sacramento, CA 95827
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REVISIONS

NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS

SACRAMENTO, CA 95820

DATE 2/15/18

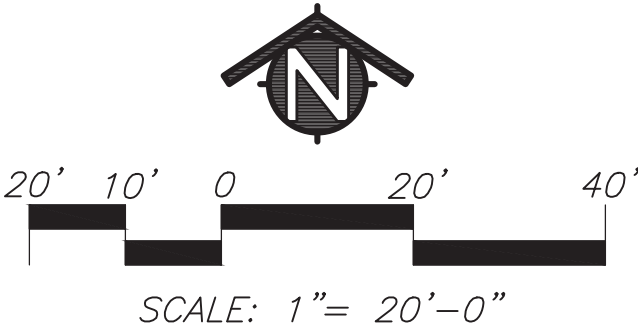
JOB NO. 17-70

SHEET TITLE
TAHOE ES
DEMOLITION
PLAN

SHEET NO.

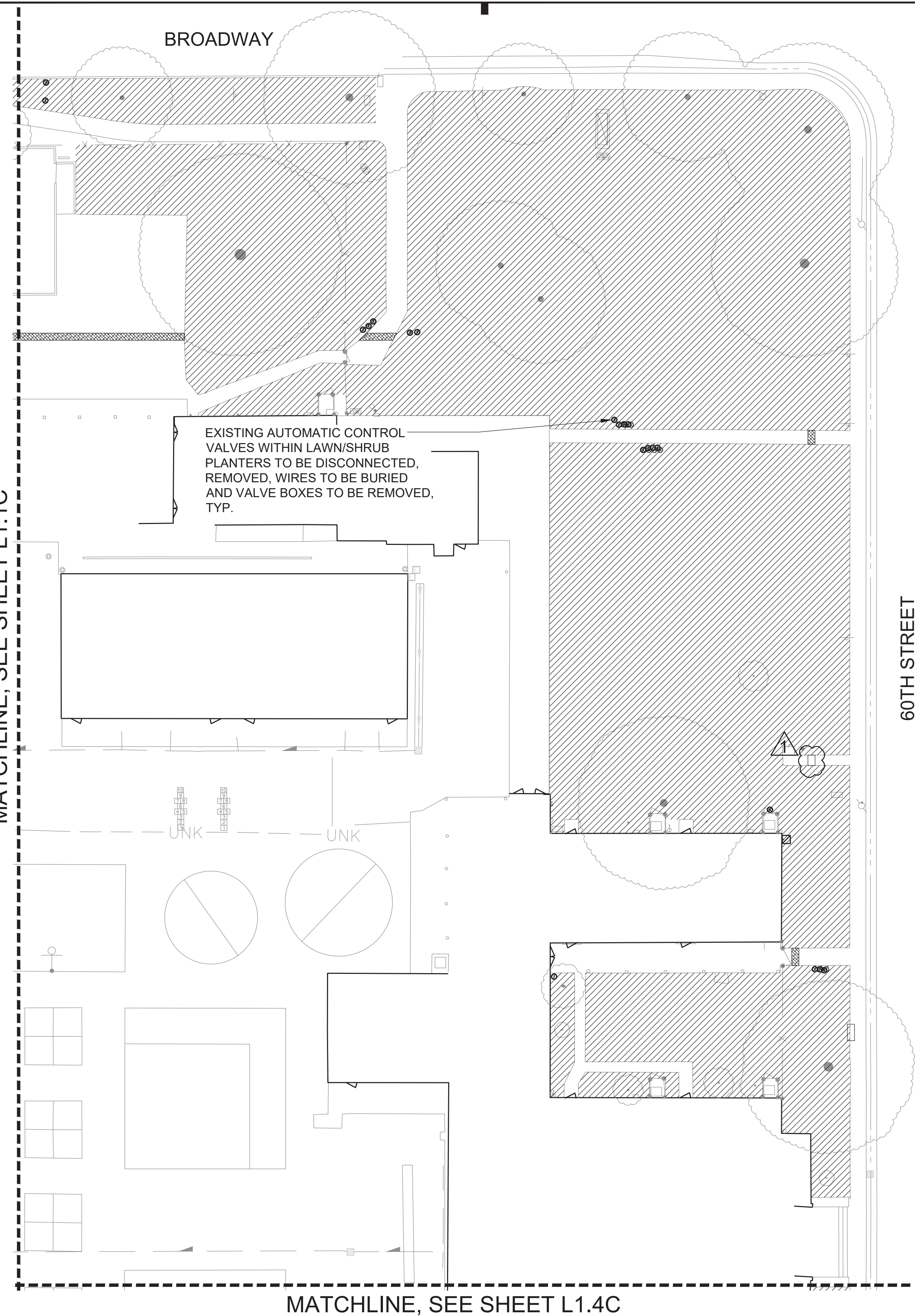
L1.2C

SHEET 19 OF 35



SCALE: 1"= 20'-0"





EXISTING AUTOMATIC CONTROL VALVES WITHIN LAWN/SHRUB PLANTERS TO BE DISCONNECTED, REMOVED, WIRES TO BE BURIED AND VALVE BOXES TO BE REMOVED, TYP.

60TH STREET

MATCHLINE, SEE SHEET L1.4C

KEY



IRRIGATION DEMOLITION LEGEND

EXISTING AUTOMATIC CONTROLLER TO BE REMOVED

EXISTING BACKFLOW PREVENTION DEVICE TO BE SERVICED

EXISTING VALVE BOXES TO BE REMOVED

EXISTING AUTOMATIC CONTROL VALVES TO BE DISCONNECTED AND REMOVED.
EXISTING SPLICE WIRES TO BE BURIED

EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED

SPRINKLER HEADS TO BE REMOVED, VALVE BOXES TO BE REMOVED, AND MAINLINE TO BE CAPPED. LATERAL LINES, MAINLINE AND WIRES TO BE ABANDONED.

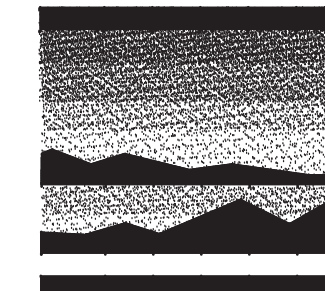
ASPHALT/CONCRETE TO BE SAWCUT



ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE) UNLESS OTHERWISE SPECIFIED.

NOTE:

CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS



MTW *group*

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AND PLANNING

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C-5284

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REVISIONS

[illegible]

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS

SACRAMENTO, CA 95820

DATE 2/15/18

JOB NO. 17-70

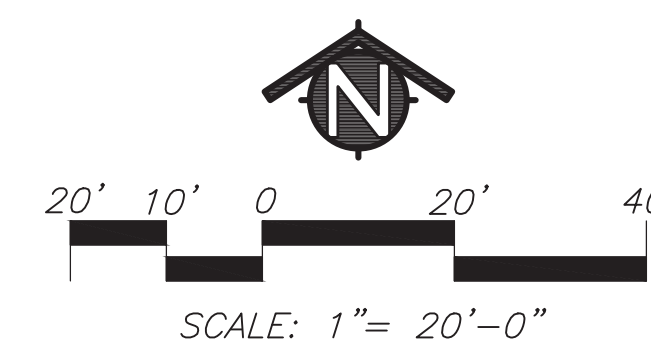
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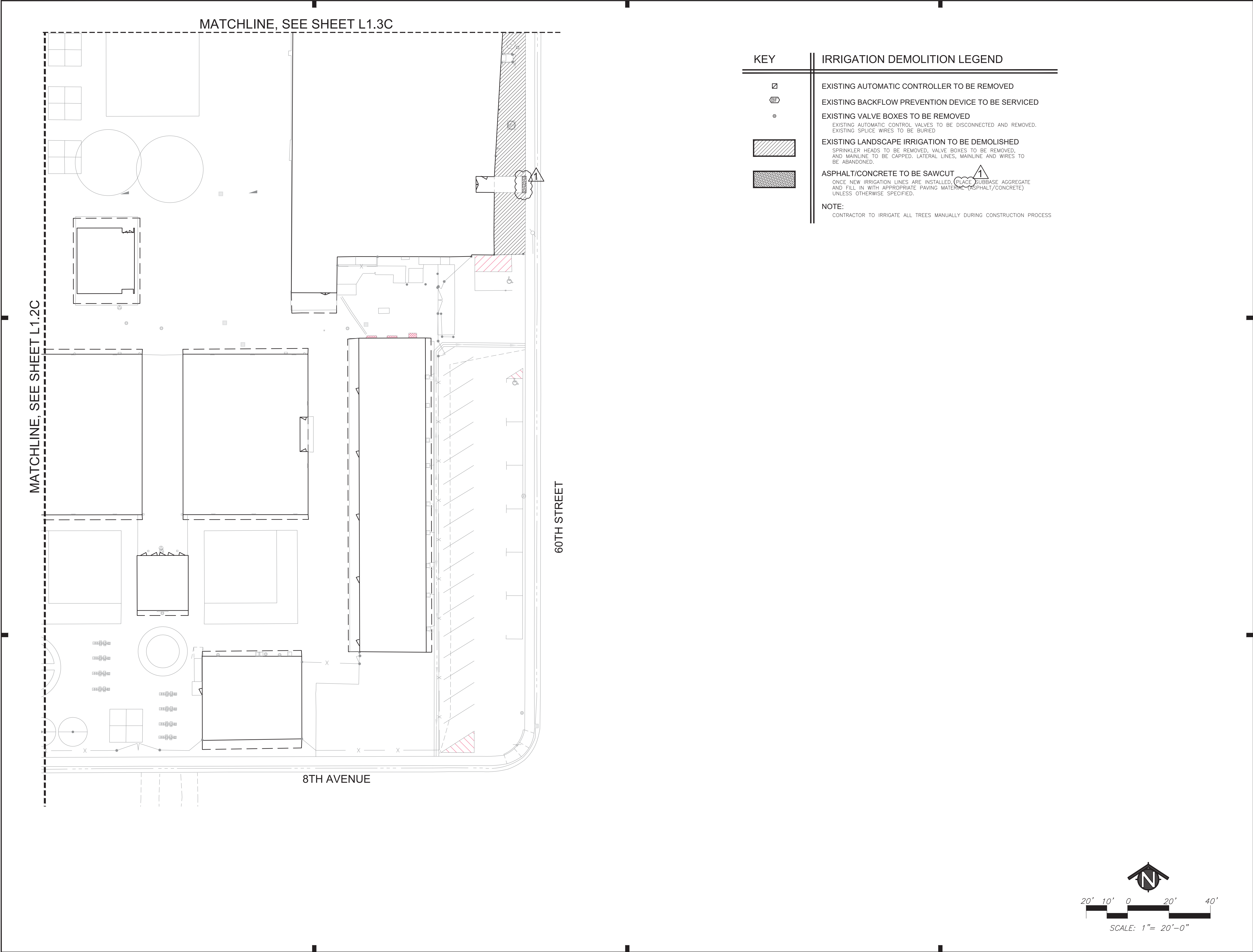
TAHOE ES DEMOLITION PLAN

SHEET NO.

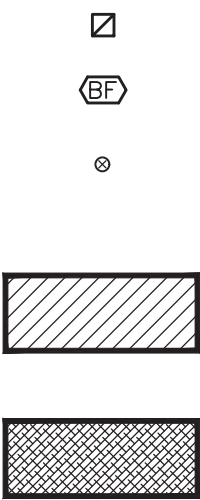
L1.3C

SHEET 20 OF 35





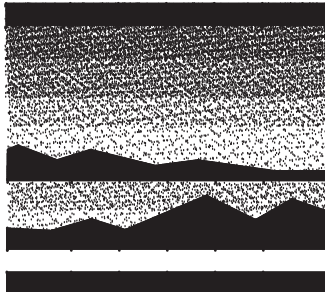
KEY



IRRIGATION DEMOLITION LEGEND

- EXISTING AUTOMATIC CONTROLLER TO BE REMOVED
- EXISTING BACKFLOW PREVENTION DEVICE TO BE SERVICED
- EXISTING VALVE BOXES TO BE REMOVED
EXISTING AUTOMATIC CONTROL VALVES TO BE DISCONNECTED AND REMOVED.
EXISTING SPLICE WIRES TO BE BURIED
- EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED
SPRINKLER HEADS TO BE REMOVED, VALVE BOXES TO BE REMOVED,
AND MAINLINE TO BE CAPPED. LATERAL LINES, MAINLINE AND WIRES TO
BE ABANDONED.
- ASPHALT/CONCRETE TO BE SAWCUT
ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE
AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE)
UNLESS OTHERWISE SPECIFIED.

NOTE:
CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS



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1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
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IRRIGATION IMPROVEMENTS

SACRAMENTO, CA 95820

DATE 2/15/18

JOB NO. 17-70

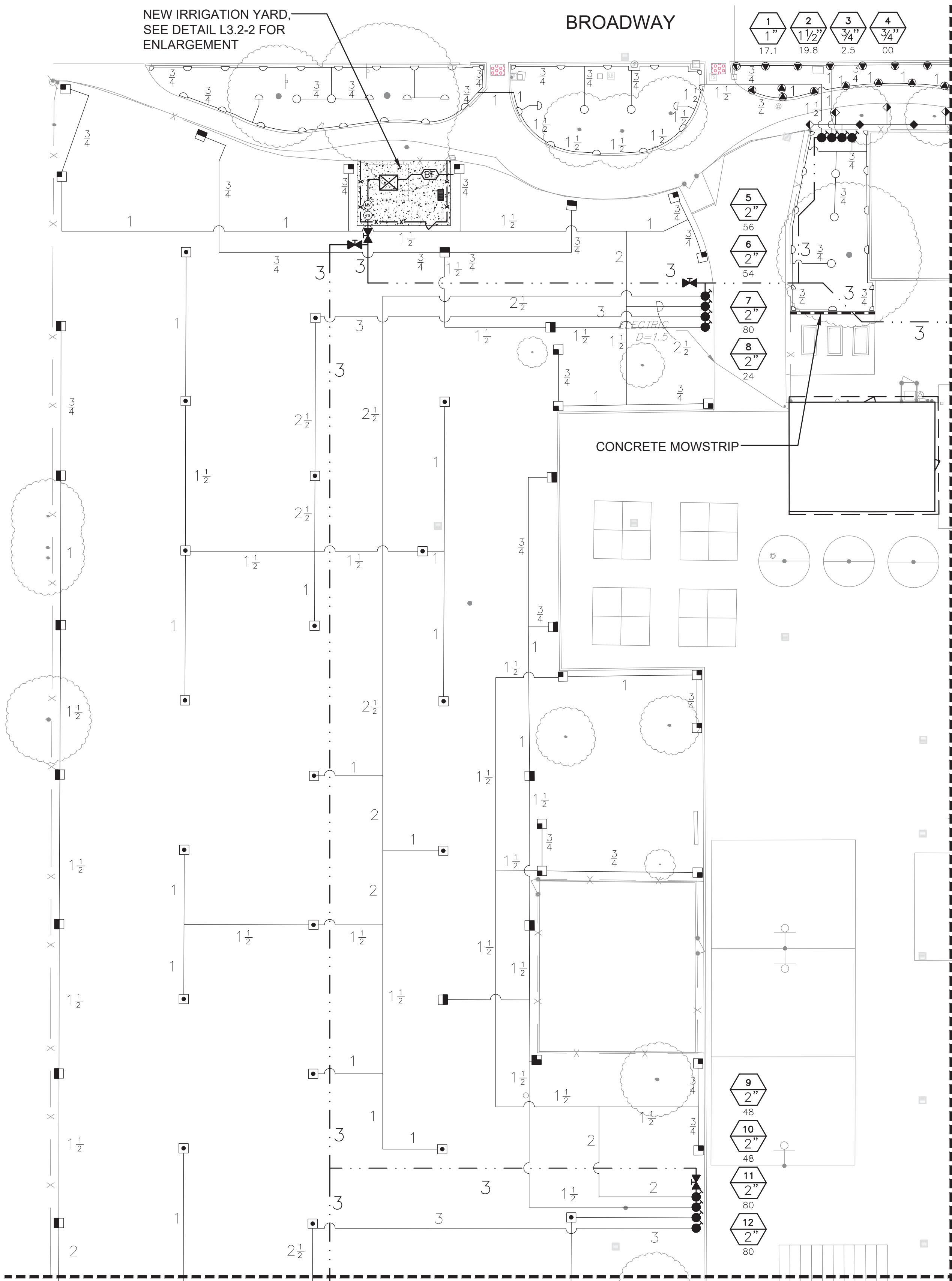
SHEET TITLE
TAHOE ES
DEMOLITION
PLAN

SHEET NO.

L1.4C

SHEET 21 OF 35





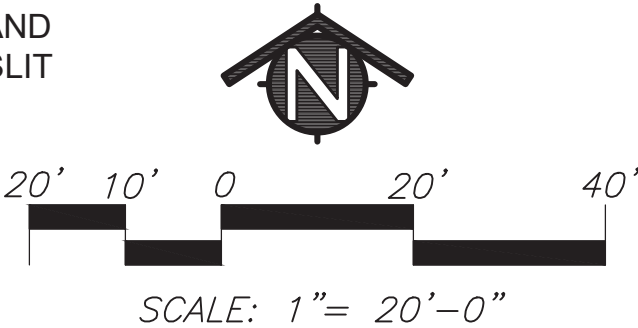
MATCHLINE, SEE SHEET L2.2C

PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR REQUIRED TO CONTACT NAME, TITLE: JEFF BOZEMAN PHONE NUMBER: 916-715-1044 TO SET UP A MEETING ON SITE TO OPERATE THE EXISTING SPRINKLER IRRIGATION SYSTEM AND DISCUSS THE MODIFICATIONS THAT ARE TO BE MADE TO THE EXISTING SYSTEM TO ACCOMMODATE FOR THE NEW CONSTRUCTION.
2. CONTRACTOR TO OPERATE AND PROGRAM EXISTING SPRINKLER IRRIGATION SYSTEM THAT IS TO REMAIN IN ORDER TO PROVIDE WATER TO THE EXISTING LANDSCAPE TO REMAIN.
3. CONTRACTOR TO REMOVE ALL EXISTING PIPE AND SPRINKLER HEADS WHEN THEY ARE IN NEW PLANTING AREAS.
4. CONTRACTOR TO RESTORE AND REPAIR ANY EXISTING SPRINKLER IRRIGATION SYSTEM OR EXISTING LANDSCAPE WHICH IS IN AREAS TO REMAIN THAT IS DAMAGED BY NEW WORK.
5. ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.

LANDSCAPE IRRIGATION NOTES

1. COMPOSITE BASE SHEET: PROPOSED IMPROVEMENTS SHOWN ON DRAWINGS ARE SUPERIMPOSED ON A COMPOSITE BASE SHEET. THE COMPOSITE BASE SHEET IS A COMPILATION OF ARCHITECTURAL, ENGINEERING, AND OTHER DATA THAT IS PROVIDED. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR ERRORS PERTAINING TO THE COMPOSITE BASE SHEET. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS. ANY DISCREPANCIES NEED TO BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND RESOLVED PRIOR TO CONTINUATION OF WORK.
 2. DESIGN PRESSURE SHOWN ON PLANS HAS BEEN FURNISHED BY WATER COMPANY OR WATER DISTRICT SERVING SITE. VERIFY PRESSURE ON-SITE PRIOR TO THE INSTALLATION OF ANY SPRINKLER IRRIGATION EQUIPMENT. IF THERE IS A DISCREPANCY, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IN WRITING SO ADJUSTMENTS CAN BE MADE BY LANDSCAPE ARCHITECT. FAILURE TO REPORT DISCREPANCIES AND CONTINUANCE OF WORK WILL RESULT IN ALL RE-DESIGN COSTS BEING CHARGED TO CONTRACTOR.
 3. DETERMINE LOCATION OF UNDERGROUND UTILITIES. DAMAGE CAUSED BY INSTALLATION OF THIS WORK SHALL BE REPAIRED TO SATISFACTION OF GOVERNING AGENCY OR OWNER AT NO ADDITIONAL COST TO THE CONTRACT.
 4. SPRINKLER OVER SPRAY SHALL NOT BE ALLOWED ON PUBLIC SIDEWALKS, BUILDING WALLS OR FENCES. MINIMUM OVERSPRAY MAY OCCUR IN PARKING AREAS. USE ADJUSTABLE NOZZLES WHENEVER POSSIBLE TO CONTROL SPRINKLER OVERSPRAY.
 5. ALL LOCAL CODES AND ORDINANCES SHALL BE COMPLIED WITH. IF THERE IS A CONFLICT, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
 6. TESTING:
A. PRESSURE TEST ALL UNDERGROUND PIPING AS FOLLOWS:
MAIN LINE - AT 100 PSI FOR 4 HOURS.
LATERAL LINES - AT 100 PSI FOR 2 HOURS.
B. COVERAGE TEST:
NOTE: PRIOR TO REQUESTING COVERAGE TEST, INSURE ALL HEADS ARE SET PLUMB, NOZZLES ARE ADJUSTED PROPERLY AND SYSTEM HAS BEEN CHECKED FOR AUTOMATION.
REQUEST OWNER'S REPRESENTATIVES PRESENCE ON-SITE WHEN SPRINKLER SYSTEM IS COMPLETELY INSTALLED AND FULLY AUTOMATIC. PROVIDE ADEQUATE PERSONNEL AT THIS MEETING TO ADJUST AND FINE TUNE SYSTEM TO SATISFACTION OF OWNER'S REPRESENTATIVE.
 7. LAYOUT ALL WORK PRIOR TO TRENCHING OPERATIONS TO DETERMINE IF MINOR MODIFICATIONS OR ADJUSTMENTS WILL BE REQUIRED.
 8. INSTALL ALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
 9. CONTROL WIRE SHALL BE HUNTER TWO-WIRE DECODER CABLE. SPLICES SHALL BE PERMITTED AT VALVE BOX LOCATIONS ONLY.
 10. PROVIDE AND INSTALL AUTOMATIC CONTROLLER AND DECODER CABLE. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE 110V SERVICE AND SERVICE HOOKUP FROM POWER SOURCE TO AUTOMATIC CONTROLLER.
 11. COORDINATE ALL WORK WITH OTHER TRADES SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
 12. NO PLANTING SHALL BE STARTED UNTIL ALL SPRINKLER WORK HAS BEEN TESTED AND APPROVED IN PRESENCE OF OWNER'S REPRESENTATIVE.
 13. FOR SPRINKLER IRRIGATION INSTALLATION DETAILS, SEE SHEET NO. L3.1, L3.2 AND L3.3.
- AFTER IRRIGATION INSTALLATION IS COMPLETE:
ALL SHRUB BEDS TO BE GRADED SMOOTH, AND
LAWN AREAS TO BE GRADED SMOOTH AND SLIT
SEEDED PER LANDSCAPE SPECIFICATIONS.



KEY

LANDSCAPE IRRIGATION LEGEND

AUTOMATIC CONTROLLER:

HUNTER CONTROL SYSTEM: - 99 STATION TWO-WIRE DECODER CONTROLLER
#CA6-HU5-99D/LPP/ACC-COM-LAN/WSS/ROAM-WH/FAN-16
HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM,
WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.
SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE
TO BE INSTALLED AS PER THE GROUNDING DETAIL.
CONTACT JIM WELLER, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING
COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION
WITH ELECTRICAL SUB-CONTRACTOR.

EXISTING BACKFLOW PREVENTION DEVICE

EXISTING BOOSTER PUMP

BOOSTER PUMP SHALL BE BY CUSTOM PUMP, MODEL # 110 MTW 02092018-1/5 VFD
CONTACT MIKE PIRILO AT 916-429-9729
INLET PRESSURE: 28 PSI
OUTLET PRESSURE: 75 PSI
MAX WATER DEMAND: 110GPM
POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:

COMPONENTS:
MASTER VALVE = 3" NORMALLY CLOSED GRISWOLD #2000N.
FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 3" STEEL PIPE.
FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER
WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:

THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT
80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 110 GPM.

GATE VALVE:

TYPE:
LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
GATE VALVE TO BE LINE SIZE.
GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
GATE VALVE TO BE LINE SIZE.

PRESSURE MAIN LINE:

TYPE:
3" SIZE, ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.
TRENCH DEPTH:
IN PLANTED AREAS: 24" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

LATERAL LINE:

TYPE:
PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.
TRENCH DEPTH:
IN PLANTED AREAS:
POP-UP SPRAY HEADS - 12" MINIMUM COVER.
ROTOR HEADS: - 18" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

AUTOMATIC CONTROL VALVE:

HUNTER ICV-1016-AS-ADJ WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:

FULL CIRCLE HUNTER: I-25-04-SS-7 HALF CIRCLE HUNTER: I-25-04-SS-5
THREE QUARTER HUNTER: I-25-04-SS-5 QUARTER CIRCLE HUNTER: I-25-04-SS-5

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 3000 SERIES
FULL, HALF, AND QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES
FULL, HALF, AND QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 1000 SERIES
FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB AND LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FOR LAWN
FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB AND LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FOR LAWN
FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB POP-UP STRIP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP STRIP SERIES
LEFT CORNER, RIGHT CORNER, AND SIDE STRIPS SPRAY PATTERNS.

GROUNDING ROD ASSEMBLY:

TO BE INSTALLED ALONG THE TWO-WIRE PATH
EVERY 500' AND AT TERMINATION OF LINE.

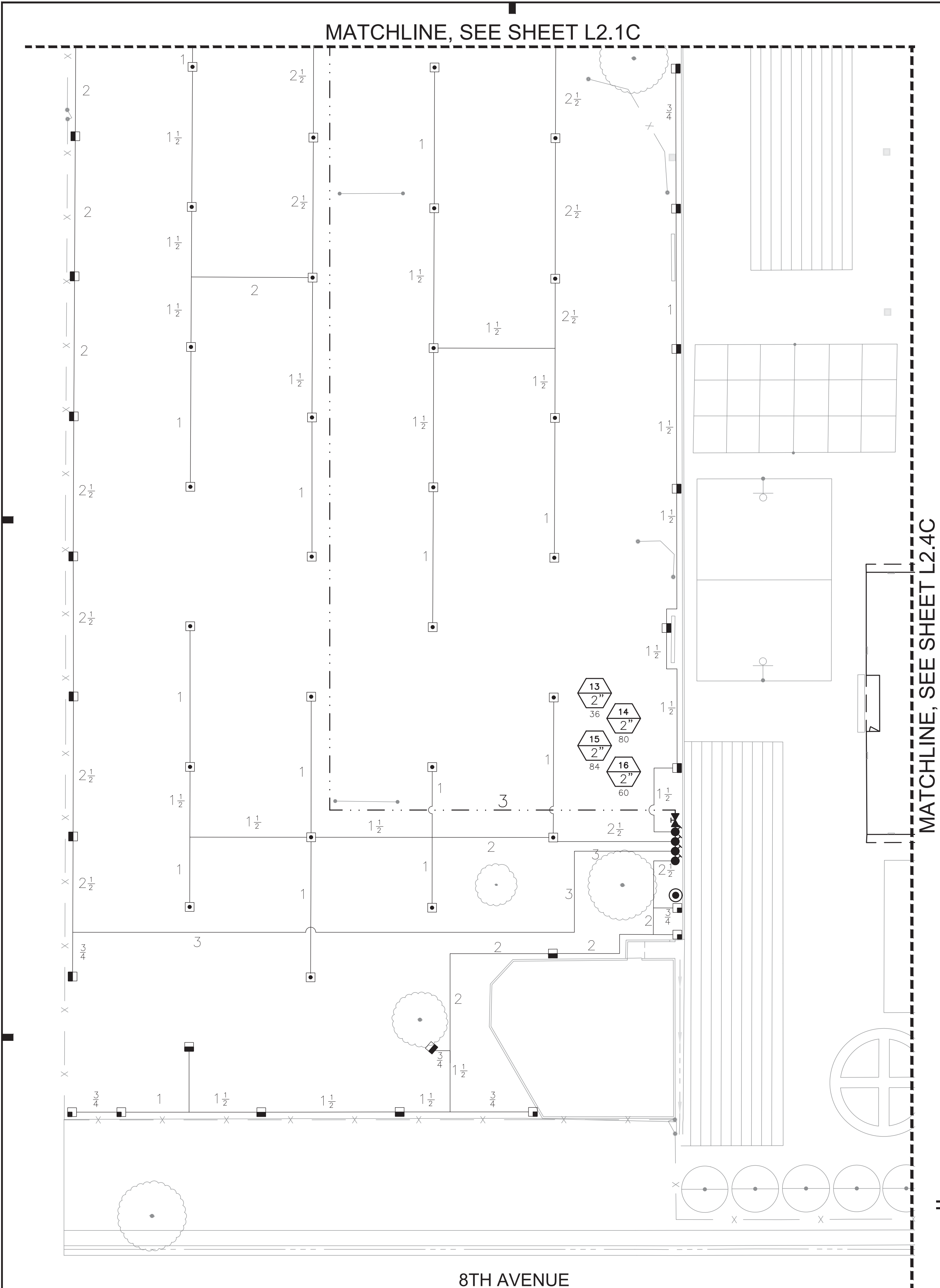
INDICATES CONTROL VALVE AND STATION NUMBER

INDICATES CONTROL VALVE SIZE

INDICATES GALLONS PER MINUTE

6' TALL CHAIN LINK FENCE

BROOM FINISH CONCRETE



8TH AVENUE

PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

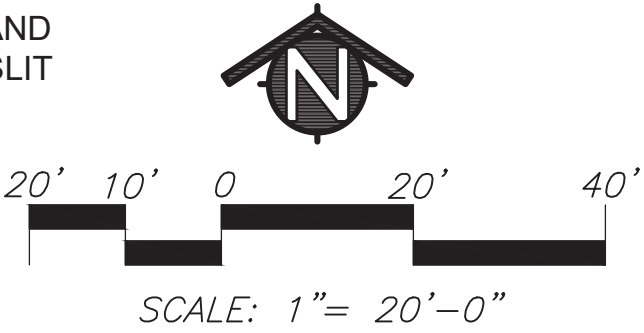
1. PRIOR TO START OF CONSTRUCTION CONTRACTOR REQUIRED TO CONTACT NAME, TITLE: JEFF BOZEMAN PHONE NUMBER: 916-715-1044 TO SET UP A MEETING ON SITE TO OPERATE THE EXISTING SPRINKLER IRRIGATION SYSTEM AND DISCUSS THE MODIFICATIONS THAT ARE TO BE MADE TO THE EXISTING SYSTEM TO ACCOMMODATE FOR THE NEW CONSTRUCTION.
2. CONTRACTOR TO OPERATE AND PROGRAM EXISTING SPRINKLER IRRIGATION SYSTEM THAT IS TO REMAIN IN ORDER TO PROVIDE WATER TO THE EXISTING LANDSCAPE TO REMAIN.
3. CONTRACTOR TO REMOVE ALL EXISTING PIPE AND SPRINKLER HEADS WHEN THEY ARE IN NEW PLANTING AREAS.
4. CONTRACTOR TO RESTORE AND REPAIR ANY EXISTING SPRINKLER IRRIGATION SYSTEM OR EXISTING LANDSCAPE WHICH IS IN AREAS TO REMAIN THAT IS DAMAGED BY NEW WORK.
5. ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.

MATCHLINE, SEE SHEET L2.4C

LANDSCAPE IRRIGATION NOTES

1. COMPOSITE BASE SHEET: PROPOSED IMPROVEMENTS SHOWN ON DRAWINGS ARE SUPERIMPOSED ON A COMPOSITE BASE SHEET. THE COMPOSITE BASE SHEET IS A COMPILATION OF ARCHITECTURAL, ENGINEERING, AND OTHER DATA THAT IS PROVIDED. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR ERRORS PERTAINING TO THE COMPOSITE BASE SHEET. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS. ANY DISCREPANCIES NEED TO BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND RESOLVED PRIOR TO CONTINUATION OF WORK.
2. DESIGN PRESSURE SHOWN ON PLANS HAS BEEN FURNISHED BY WATER COMPANY OR WATER DISTRICT SERVING SITE. VERIFY PRESSURE ON-SITE PRIOR TO THE INSTALLATION OF ANY SPRINKLER IRRIGATION EQUIPMENT. IF THERE IS A DISCREPANCY, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IN WRITING SO ADJUSTMENTS CAN BE MADE BY LANDSCAPE ARCHITECT. FAILURE TO REPORT DISCREPANCIES AND CONTINUANCE OF WORK WILL RESULT IN ALL RE-DESIGN COSTS BEING CHARGED TO CONTRACTOR.
3. DETERMINE LOCATION OF UNDERGROUND UTILITIES. DAMAGE CAUSED BY INSTALLATION OF THIS WORK SHALL BE REPAIRED TO SATISFACTION OF GOVERNING AGENCY OR OWNER AT NO ADDITIONAL COST TO THE CONTRACT.
4. SPRINKLER OVER SPRAY SHALL NOT BE ALLOWED ON PUBLIC SIDEWALKS, BUILDING WALLS OR FENCES. MINIMUM OVERSPRAY MAY OCCUR IN PARKING AREAS. USE ADJUSTABLE NOZZLES WHENEVER POSSIBLE TO CONTROL SPRINKLER OVERSPRAY.
5. ALL LOCAL CODES AND ORDINANCES SHALL BE COMPLIED WITH. IF THERE IS A CONFLICT, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
6. TESTING:
 - A. PRESSURE TEST ALL UNDERGROUND PIPING AS FOLLOWS:
MAIN LINE - AT 100 PSI FOR 4 HOURS.
LATERAL LINES - AT 100 PSI FOR 2 HOURS.
 - B. COVERAGE TEST:
NOTE: PRIOR TO REQUESTING COVERAGE TEST, INSURE ALL HEADS ARE SET PLUMB, NOZZLES ARE ADJUSTED PROPERLY AND SYSTEM HAS BEEN CHECKED FOR AUTOMATION.
REQUEST OWNER'S REPRESENTATIVES PRESENCE ON-SITE WHEN SPRINKLER SYSTEM IS COMPLETELY INSTALLED AND FULLY AUTOMATIC. PROVIDE ADEQUATE PERSONNEL AT THIS MEETING TO ADJUST AND FINE TUNE SYSTEM TO SATISFACTION OF OWNER'S REPRESENTATIVE.
7. LAYOUT ALL WORK PRIOR TO TRENCHING OPERATIONS TO DETERMINE IF MINOR MODIFICATIONS OR ADJUSTMENTS WILL BE REQUIRED.
8. INSTALL ALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
9. CONTROL WIRE SHALL BE HUNTER TWO-WIRE DECODER CABLE. SPLICES SHALL BE PERMITTED AT VALVE BOX LOCATIONS ONLY.
10. PROVIDE AND INSTALL AUTOMATIC CONTROLLER AND DECODER CABLE. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE 110V SERVICE AND SERVICE HOOKUP FROM POWER SOURCE TO AUTOMATIC CONTROLLER.
11. COORDINATE ALL WORK WITH OTHER TRADES SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
12. NO PLANTING SHALL BE STARTED UNTIL ALL SPRINKLER WORK HAS BEEN TESTED AND APPROVED IN PRESENCE OF OWNER'S REPRESENTATIVE.
13. FOR SPRINKLER IRRIGATION INSTALLATION DETAILS, SEE SHEET NO. L3.1, L3.2 AND L3.3.

AFTER IRRIGATION INSTALLATION IS COMPLETE:
ALL SHRUB BEDS TO BE GRADED SMOOTH, AND
LAWN AREAS TO BE GRADED SMOOTH AND SLIT
SEEDED PER LANDSCAPE SPECIFICATIONS.



KEY

LANDSCAPE IRRIGATION LEGEND

AUTOMATIC CONTROLLER:

HUNTER CONTROL SYSTEM: - 99 STATION TWO-WIRE DECODER CONTROLLER
#CA6-HU5-99D/LPP/ACC-COM-LAN/WSS/ROAM-WH/FAN-16
HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM,
WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.

SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE
TO BE INSTALLED AS PER THE GROUNDING DETAIL.
CONTACT JIM WELLER, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING
COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION
WITH ELECTRICAL SUB-CONTRACTOR.

EXISTING BACKFLOW PREVENTION DEVICE

EXISTING BOOSTER PUMP

BOOSTER PUMP SHALL BE BY CUSTOM PUMP, MODEL # 110 MTW 02092018-1/5 VFD
CONTACT MIKE PIRILO AT 916-429-9729

INLET PRESSURE: 28 PSI
OUTLET PRESSURE: 75 PSI
MAX WATER DEMAND: 110GPM
POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:

COMPONENTS:

MASTER VALVE = 3" NORMALLY CLOSED GRISWOLD #2000N.
FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 3" STEEL PIPE.

FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER
WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:

THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT
80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 110 GPM.

GATE VALVE:

TYPE:
LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
GATE VALVE TO BE LINE SIZE.

GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
GATE VALVE TO BE LINE SIZE.

PRESSURE MAIN LINE:

TYPE:
3" SIZE, ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.

TRENCH DEPTH:
IN PLANTED AREAS: 24" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

LATERAL LINE:

TYPE:
PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.
TRENCH DEPTH:
IN PLANTED AREAS:
POP-UP SPRAY HEADS - 12" MINIMUM COVER.
ROTOR HEADS: - 18" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

AUTOMATIC CONTROL VALVE:

HUNTER ICY-101G-AS-ADJ WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:

FULL CIRCLE HUNTER: I-25-04-SS-7 HALF CIRCLE HUNTER: I-25-04-SS-5

THREE QUARTER HUNTER: I-25-04-SS-5 QUARTER CIRCLE HUNTER: I-25-04-SS-5

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 3000 SERIES
FULL, HALF, AND QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES
FULL, HALF, AND QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 1000 SERIES
FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB AND LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FOR LAWN
FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB AND LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FOR LAWN
FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB POP-UP STRIP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP STRIP SERIES
LEFT CORNER, RIGHT CORNER, AND SIDE STRIPS SPRAY PATTERNS.

GROUNDING ROD ASSEMBLY:

TO BE INSTALLED ALONG THE TWO-WIRE PATH
EVERY 500' AND AT TERMINATION OF LINE.

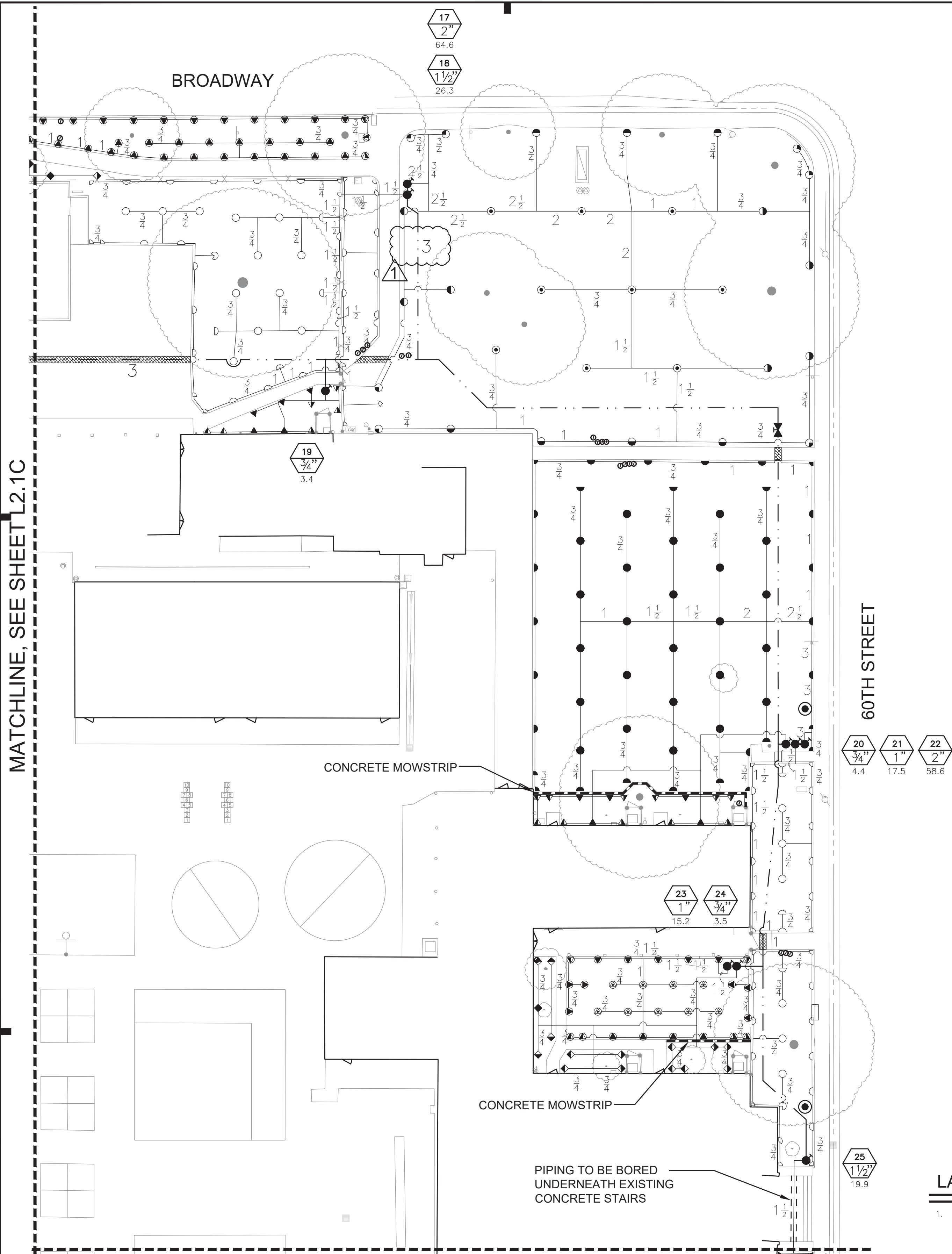
INDICATES CONTROL VALVE AND STATION NUMBER

INDICATES CONTROL VALVE SIZE

INDICATES GALLONS PER MINUTE

6' TALL CHAIN LINK FENCE

BROOM FINISH CONCRETE



MATCHLINE, SEE SHEET L2.1C

MATCHLINE, SEE SHEET L2.4C

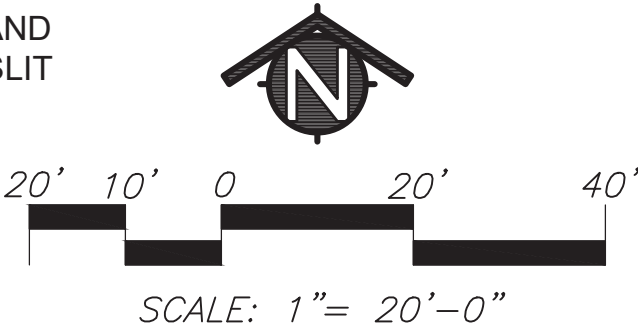
PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR REQUIRED TO CONTACT NAME, TITLE: JEFF BOZEMAN PHONE NUMBER: 916-715-1044 TO SET UP A MEETING ON SITE TO OPERATE THE EXISTING SPRINKLER IRRIGATION SYSTEM AND DISCUSS THE MODIFICATIONS THAT ARE TO BE MADE TO THE EXISTING SYSTEM TO ACCOMMODATE FOR THE NEW CONSTRUCTION.
2. CONTRACTOR TO OPERATE AND PROGRAM EXISTING SPRINKLER IRRIGATION SYSTEM THAT IS TO REMAIN IN ORDER TO PROVIDE WATER TO THE EXISTING LANDSCAPE TO REMAIN.
3. CONTRACTOR TO REMOVE ALL EXISTING PIPE AND SPRINKLER HEADS WHEN THEY ARE IN NEW PLANTING AREAS.
4. CONTRACTOR TO RESTORE AND REPAIR ANY EXISTING SPRINKLER IRRIGATION SYSTEM OR EXISTING LANDSCAPE WHICH IS IN AREAS TO REMAIN THAT IS DAMAGED BY NEW WORK.
5. ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.

LANDSCAPE IRRIGATION NOTES

1. COMPOSITE BASE SHEET, PROPOSED IMPROVEMENTS SHOWN ON DRAWINGS ARE SUPERIMPOSED ON A COMPOSITE BASE SHEET. THE COMPOSITE BASE SHEET IS A COMPILATION OF ARCHITECTURAL, ENGINEERING, AND OTHER DATA THAT IS PROVIDED. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR ERRORS PERTAINING TO THE COMPOSITE BASE SHEET. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS. ANY DISCREPANCIES NEED TO BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND RESOLVED PRIOR TO CONTINUATION OF WORK.
2. DESIGN PRESSURE SHOWN ON PLANS HAS BEEN FURNISHED BY WATER COMPANY OR WATER DISTRICT SERVING SITE. VERIFY PRESSURE ON-SITE PRIOR TO THE INSTALLATION OF ANY SPRINKLER IRRIGATION EQUIPMENT. IF THERE IS A DISCREPANCY, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IN WRITING SO ADJUSTMENTS CAN BE MADE BY LANDSCAPE ARCHITECT. FAILURE TO REPORT DISCREPANCIES AND CONTINUANCE OF WORK WILL RESULT IN ALL RE-DESIGN COSTS BEING CHARGED TO CONTRACTOR.
3. DETERMINE LOCATION OF UNDERGROUND UTILITIES. DAMAGE CAUSED BY INSTALLATION OF THIS WORK SHALL BE REPAIRED TO SATISFACTION OF GOVERNING AGENCY OR OWNER AT NO ADDITIONAL COST TO THE CONTRACT.
4. SPRINKLER OVER SPRAY SHALL NOT BE ALLOWED ON PUBLIC SIDEWALKS, BUILDING WALLS OR FENCES. MINIMUM OVERSPRAY MAY OCCUR IN PARKING AREAS. USE ADJUSTABLE NOZZLES WHENEVER POSSIBLE TO CONTROL SPRINKLER OVERSPRAY.
5. ALL LOCAL CODES AND ORDINANCES SHALL BE COMPLIED WITH. IF THERE IS A CONFLICT, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
6. TESTING:
A. PRESSURE TEST ALL UNDERGROUND PIPING AS FOLLOWS:
MAIN LINE - AT 100 PSI FOR 4 HOURS.
LATERAL LINES - AT 100 PSI FOR 2 HOURS.
B. COVERAGE TEST:
NOTE: PRIOR TO REQUESTING COVERAGE TEST, INSURE ALL HEADS ARE SET PLUMB, NOZZLES ARE ADJUSTED PROPERLY AND SYSTEM HAS BEEN CHECKED FOR AUTOMATION.
REQUEST OWNER'S REPRESENTATIVES PRESENCE ON-SITE WHEN SPRINKLER SYSTEM IS COMPLETELY INSTALLED AND FULLY AUTOMATIC. PROVIDE ADEQUATE PERSONNEL AT THIS MEETING TO ADJUST AND FINE TUNE SYSTEM TO SATISFACTION OF OWNER'S REPRESENTATIVE.
7. LAYOUT ALL WORK PRIOR TO TRENCHING OPERATIONS TO DETERMINE IF MINOR MODIFICATIONS OR ADJUSTMENTS WILL BE REQUIRED.
8. INSTALL ALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
9. CONTROL WIRE SHALL BE HUNTER TWO-WIRE DECODER CABLE. SPLICES SHALL BE PERMITTED AT VALVE BOX LOCATIONS ONLY.
10. PROVIDE AND INSTALL AUTOMATIC CONTROLLER AND DECODER CABLE. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE 110V SERVICE AND SERVICE HOOKUP FROM POWER SOURCE TO AUTOMATIC CONTROLLER.
11. COORDINATE ALL WORK WITH OTHER TRADES SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
12. NO PLANTING SHALL BE STARTED UNTIL ALL SPRINKLER WORK HAS BEEN TESTED AND APPROVED IN PRESENCE OF OWNER'S REPRESENTATIVE.
13. FOR SPRINKLER IRRIGATION INSTALLATION DETAILS, SEE SHEET NO. L3.1, L3.2 AND L3.3.

AFTER IRRIGATION INSTALLATION IS COMPLETE:
ALL SHRUB BEDS TO BE GRADED SMOOTH, AND
LAWN AREAS TO BE GRADED SMOOTH AND SLIT
SEEDED PER LANDSCAPE SPECIFICATIONS.



KEY

LANDSCAPE IRRIGATION LEGEND

AUTOMATIC CONTROLLER:

HUNTER CONTROL SYSTEM: - 99 STATION TWO-WIRE DECODER CONTROLLER
#CA6-HU5-99D/LPP/ACC-COM-LAN/WSS/ROOM-WH/FAN-16
HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM,
WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.

SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE
TO BE INSTALLED AS PER THE GROUNDING DETAIL.
CONTACT JIM WELLER, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING
COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION
WITH ELECTRICAL SUB-CONTRACTOR.

EXISTING BACKFLOW PREVENTION DEVICE

EXISTING BOOSTER PUMP

BOOSTER PUMP SHALL BE BY CUSTOM PUMP, MODEL # 110 MTW 02092018-1/5 VFD
CONTACT MIKE PIRILO AT 916-429-9729

INLET PRESSURE: 28 PSI
OUTLET PRESSURE: 75 PSI
MAX WATER DEMAND: 110GPM
POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:

COMPONENTS:
MASTER VALVE = 3" NORMALLY CLOSED GRISWOLD #2000N.
FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 3" STEEL PIPE.

FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER
WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:

THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT
80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 110 GPM.

GATE VALVE:

TYPE:
LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
GATE VALVE TO BE LINE SIZE.

GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
GATE VALVE TO BE LINE SIZE.

PRESSURE MAIN LINE:

TYPE:
3" SIZE, ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.

TRENCH DEPTH:

IN PLANTED AREAS: 24" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

LATERAL LINE:

TYPE:
PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.

TRENCH DEPTH:

IN PLANTED AREAS:
POP-UP SPRAY HEADS - 12" MINIMUM COVER.
ROTOR HEADS - 18" MINIMUM COVER.
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AUTOMATIC CONTROL VALVE:

HUNTER ICV-101G-AS-ADJ WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:

FULL CIRCLE HUNTER: I-25-04-SS-7 HALF CIRCLE HUNTER: I-25-04-SS-5

THREE QUARTER HUNTER: I-25-04-SS-5 QUARTER CIRCLE HUNTER: I-25-04-SS-5

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 3000 SERIES
FULL, HALF, AND QUARTER SPRAY PATTERNS.

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LAWN POP-UP SPRAY HEADS:

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SHRUB AND LAWN POP-UP SPRAY HEADS:

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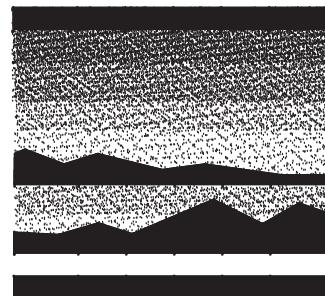
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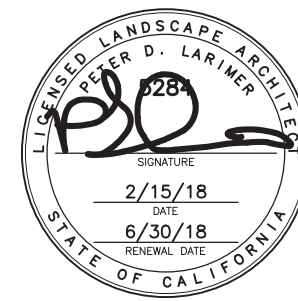


MTW group

LANDSCAPE ARCHITECTURE
AND PLANNING

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Suite 205

Sacramento, CA 95827
916 369-3990



Peter D. Larimer

C-5284

The Landscape Architects do not represent that these plans or the specifications in connection therewith are suitable, whether or not modified for any other site than the one for which they were specifically prepared. The Landscape Architects disclaim responsibility for these plans and specifications if they are used in whole or in part at any other site.

REVISIONS

NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS

SACRAMENTO, CA 95820

DATE 2/15/18

JOB NO. 17-70

SHEET TITLE

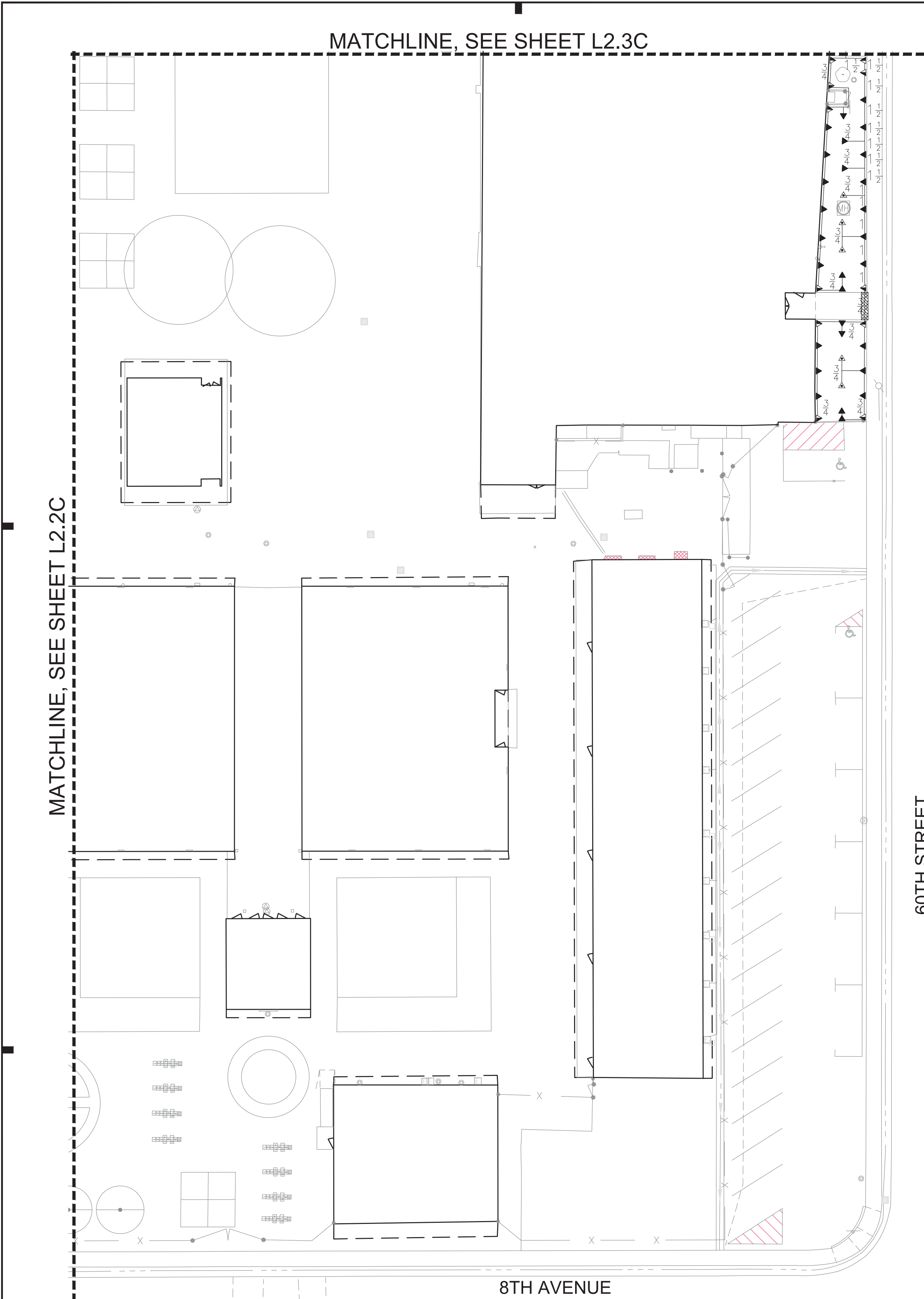
TAHOE ES
LANDSCAPE
IRRIGATION
PLAN

SHEET NO.

L2.3C

SHEET 24 OF 35

1



PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

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KEY

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HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM,
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BOOSTER PUMP SHALL BE BY CUSTOM PUMP, MODEL # 110 MTW 02092018-1/5 VFD
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INLET PRESSURE: 28 PSI
OUTLET PRESSURE: 75 PSI
MAX WATER DEMAND: 110GPM
POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:

COMPONENTS:

- MASTER VALVE = 3" NORMALLY CLOSED GRISWOLD #2000N.
- FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 3" STEEL PIPE.

FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER
WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:

THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT
80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 110 GPM.

GATE VALVE:

TYPE:
LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
GATE VALVE TO BE LINE SIZE.

GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
GATE VALVE TO BE LINE SIZE.

PRESSURE MAIN LINE:

TYPE:
3" SIZE, ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.

TRENCH DEPTH:
IN PLANTED AREAS: 24" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

LATERAL LINE:

TYPE:
PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.
TRENCH DEPTH:
IN PLANTED AREAS:
POP-UP SPRAY HEADS - 12" MINIMUM COVER.
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PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

AUTOMATIC CONTROL VALVE:

HUNTER ICV-101G-AS-ADJ WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:

FULL CIRCLE HALF CIRCLE
HUNTER: 1-25-04-SS-7 HUNTER: 1-25-04-SS-5

THREE QUARTER QUARTER CIRCLE
HUNTER: 1-25-04-SS-5 HUNTER: 1-25-04-SS-5

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 3000 SERIES
FULL, HALF, AND QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES
FULL, HALF, AND QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:

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FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB AND LAWN POP-UP SPRAY HEADS:

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FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB AND LAWN POP-UP SPRAY HEADS:

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HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP STRIP SERIES
LEFT CORNER, RIGHT CORNER, AND SIDE STRIPS SPRAY PATTERNS.

GROUNDING ROD ASSEMBLY:

TO BE INSTALLED ALONG THE TWO-WIRE PATH
EVERY 500' AND AT TERMINATION OF LINE.

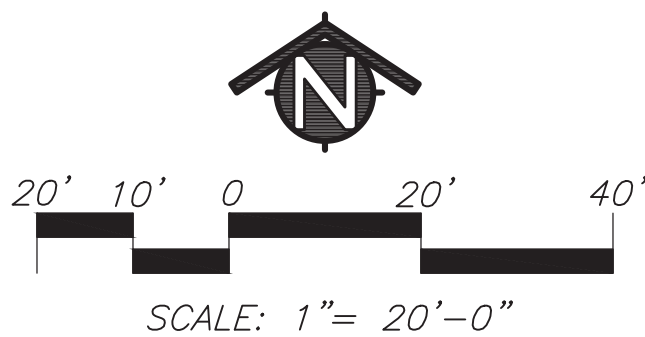
INDICATES CONTROL VALVE AND STATION NUMBER

INDICATES CONTROL VALVE SIZE

INDICATES GALLONS PER MINUTE

6' TALL CHAIN LINK FENCE

BROOM FINISH CONCRETE



2. ALL CABLES AND ELECTRICAL WIRES MUST BE RUN IN CONDUIT
3. GROUND ROD SHALL BE LOCATED NO CLOSER THAN 10 FEET AND NO FURTHER THAN 12 FEET FROM THE CONTROLLER UNLESS OTHERWISE SPECIFIED. A 10" ROUND VALVE BOX SHALL BE INSTALLED OVER THE GROUND ROD FOR LOCATION AND MAINTENANCE PURPOSES.



1. BOOSTER PUMP SHALL BE BY CUSTOM PUMP AND POWER.
2. ALL INSTALLATION SHALL BE AS PER MANUFACTURERS RECOMMENDATIONS.
3. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES SO WORK SCHEDULE IS MAINTAINED.
4. ALL PIPE ABOVE GROUND SHALL BE 3" GALVANIZED WITH PVC TO BE EXTENDED BY CONTRACTOR TO MAINLINE.
5. CONTRACTOR SHALL CONTACT MIKE PARLO AT 916-429-9729 FOR ORDERING INFORMATION.
6. FOLLOW INSTRUCTIONS INCLUDED WITH UNIT FOR STARTUP.
7. BOOSTER PUMP TO BE SET LEVEL AND WITH A HOUSEKEEPING CONCRETE PAD SET 1" ABOVE SURROUNDING GRADE.

1. SEE BOOSTER PUMP SECTION VIEW DETAIL.
2. PROVIDE LEVEL CONCRETE HOUSE KEEPING PAD SIZE 66"x56"x4" THICK, 1" ABOVE GRADE.
3. PROVIDE THREE PHASE ELECTRIC 208 VOLT SERVICE WITH 3-POLE, 60 AMP BREAKER WITH GROUND & CONTROL WIRES.
4. CUSTOMFLOW PUMP PACKAGE AS MFG. BY CUSTOM PUMP & POWER OF SACRAMENTO, 916 429-9729.
5. PROVIDE CRANE TO OFF LOAD AND SET PUMP ASSEMBLY.

1 4" BY-PASS BUTTERFLY VALVE	7 PUMP, RATED 100 GPM @ 45 PSI INCREASE w/ 10 HP, 3 PHASE MOTOR 200-230/480 VOLT	11 CUSTOM TEMPERATURE SWITCH
2 1" TEE		12 FUJI WFD 10 HP/208 Volt, 31 AMP 60 AMP BREAKER
3 3" ELBOW		13 ENCLOSURE SIZE 60"X50" 40"X42" WITH REMOVABLE PANELS FOR SERVICE ACCESS
4 4" X 3" COUPLING	8 3" ISOLATION BUTTERFLY VALVE	14 EFECTOR FLOW SWITCH
5 GAUGE	9 2" DISCHARGE	15 3" CHECK VALVE
6 (2) 1" FLEX CONDUITS & WIRES FOR POWER & CONTROL	10 TRANSDUCER	16 4" FLANGE



AUTOMATIC CONTROLLER DETAIL

1. BOOSTER PUMP SHALL BE BY CUSTOM PUMP AND POWER.
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1	3" BY-PASS BUTTERFLY VALVE	7	PUMP RATED 110 GPM @ 45 PSI INCREASE W/ 7.5 HP, 3 PHASE MOTOR 200-230/480 VOLT	11	CUSTOM TEMPERATURE SWITCH
2	3" TEE			12	FUJI VFD 5HP/208 VOLT 16.7AMP 5 AMP BREAKER
3	3" ELBOW	8	3" ISOLATION BUTTERFLY VALVE	13	ENCLOSURE SIZE 60" X 50" X 40" X 42" WITH REMOVABLE PANELS FOR SERVICE ACCESS
4	3" COUPLING	9	1-1/2" DISCHARGE	14	EFFECTOR FLOW SWITCH
5	GAUGE	10	TRANSDUCER	15	3" CHECK VALVE
6	(2) 1" FLEX CONDUITS & WIRES FOR POWER & CONTROL			16	4" FLANGE



EARL WARREN ES - BOOSTER PUMP DETAIL



TAHOE ES - BOOSTER PUMP DETAIL

1. UF 14 WIRE AND COMMUNICATION CABLE NOT SHOWN, SEE OVERALL SCHEMATIC LAYOUT DETAIL.
2. VALVE BOX AND LID TO BE CONCRETE H20 TRAFFIC RATED. TOP OF BOX TO BE LEVEL, FLUSH TO FINISH GRADE IF LOCATED IN PAVED AREA,, 1" ABOVE FINISH GRADE IF LOCATED IN NON PAVED AREA. USE VALVE BOX EXTENSIONS AS REQUIRED TO ENCASE VALVE AND PIPE WITHIN BOX WITH A 3" CLEARANCE BELOW. ALL PENETRATION SHALL BE SEALED FROM THE INSIDE.



1. FOR GROUNDING THE CONTROLLER THE CONTRACTOR MAY USE EITHER METHOD SHOWN, GROUNDING ROD OR GROUNDING PLATE.
2. GROUNDING RODS SHALL BE DRIVEN INTO THE EARTH WITH TOPS NOT LESS THAN 12" BELOW THE FINISH GRADE.
3. THE GROUNDING GRID SHALL BE TESTED FOR EARTH RESISTANCE, USING A VIBRA GROUND, MEGAR OR OTHER APPROVED TYPE OF TESTER. THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR THE RESULTS OF THESE TESTS UNLESS THE EARTH HAS HAD AN OPPORTUNITY TO "SETTLE" AROUND THE RODS. THE RESISTANCE OF THE GROUNDING ROD SHALL NOT BE GREATER THAN 15 OHMS. TO HAVE A GROUNDING NETWORK, THAT WILL BE AS EFFECTIVE AS POSSIBLE, THE RESISTANCE SHALL BE 5 OHMS OR LESS. THE NEED FOR A GROUNDING NETWORK IS NOT A REQUIREMENT OF THE SPECIFICATION. THE CONTRACTOR MAY WISH TO IMPROVE IT. REMEMBER THAT THE EFFECTIVENESS OF THE SURGE ARRESTOR IS DRASTICALLY REDUCED AS THE RESISTANCE GOES UP. RESISTANCE OVER 15 OHMS RENDERS THE SURGE ARRESTOR ALMOST OF NO VALUE IN PROTECTING THE EQUIPMENT.
4. IF DEEMED NECESSARY, THE CONTRACTOR SHALL INSTALL ANOTHER GROUNDING ROD OR PLATE SO THE ELECTRODE SPHERE OF INFLUENCE BOUNDARIES DO NOT OVERLAP.



AUTOMATIC CONTROLLER GROUNDING DETAIL

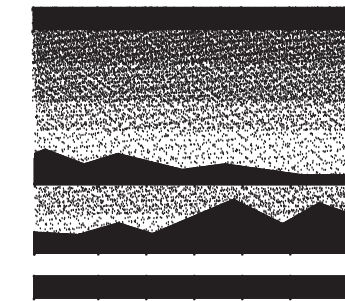
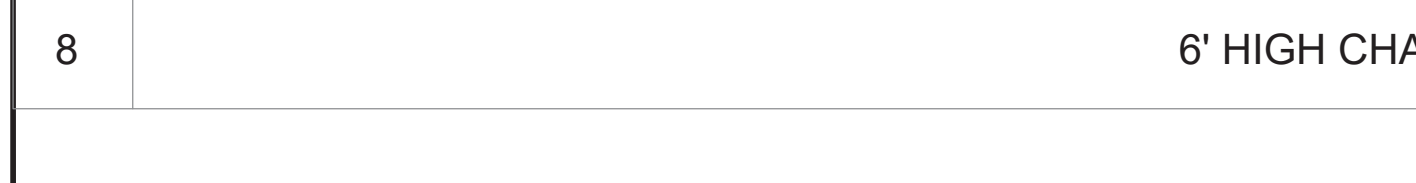
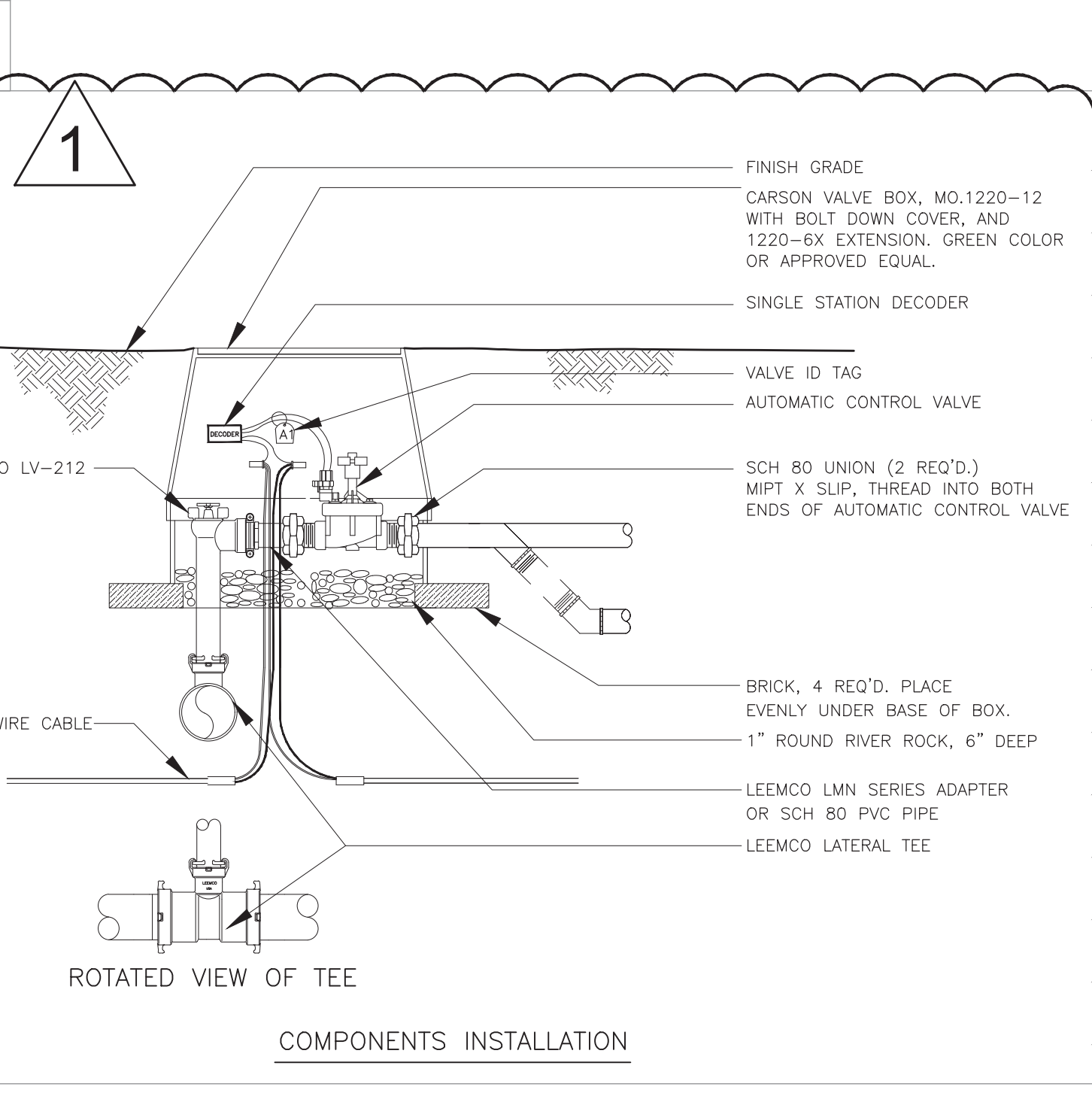
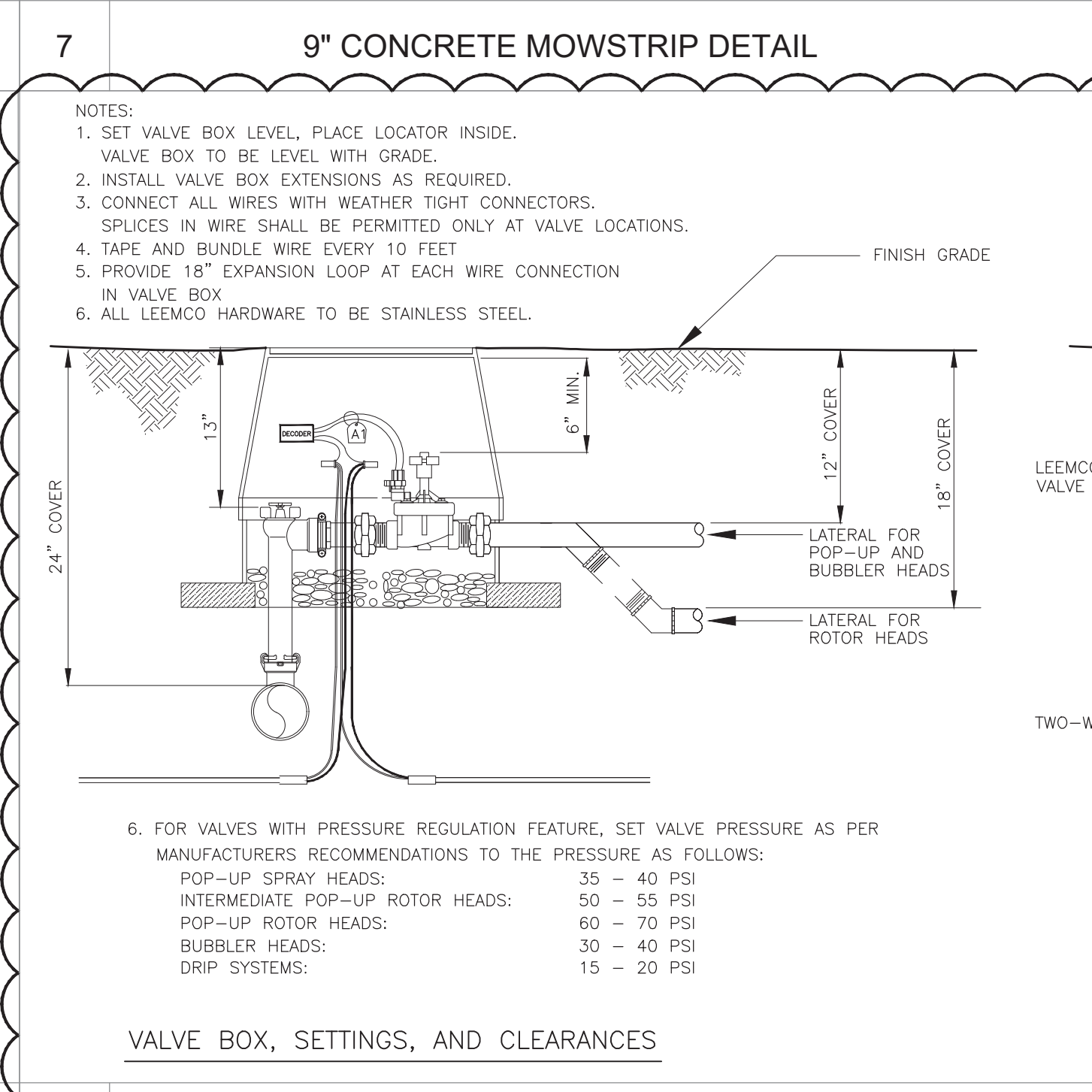
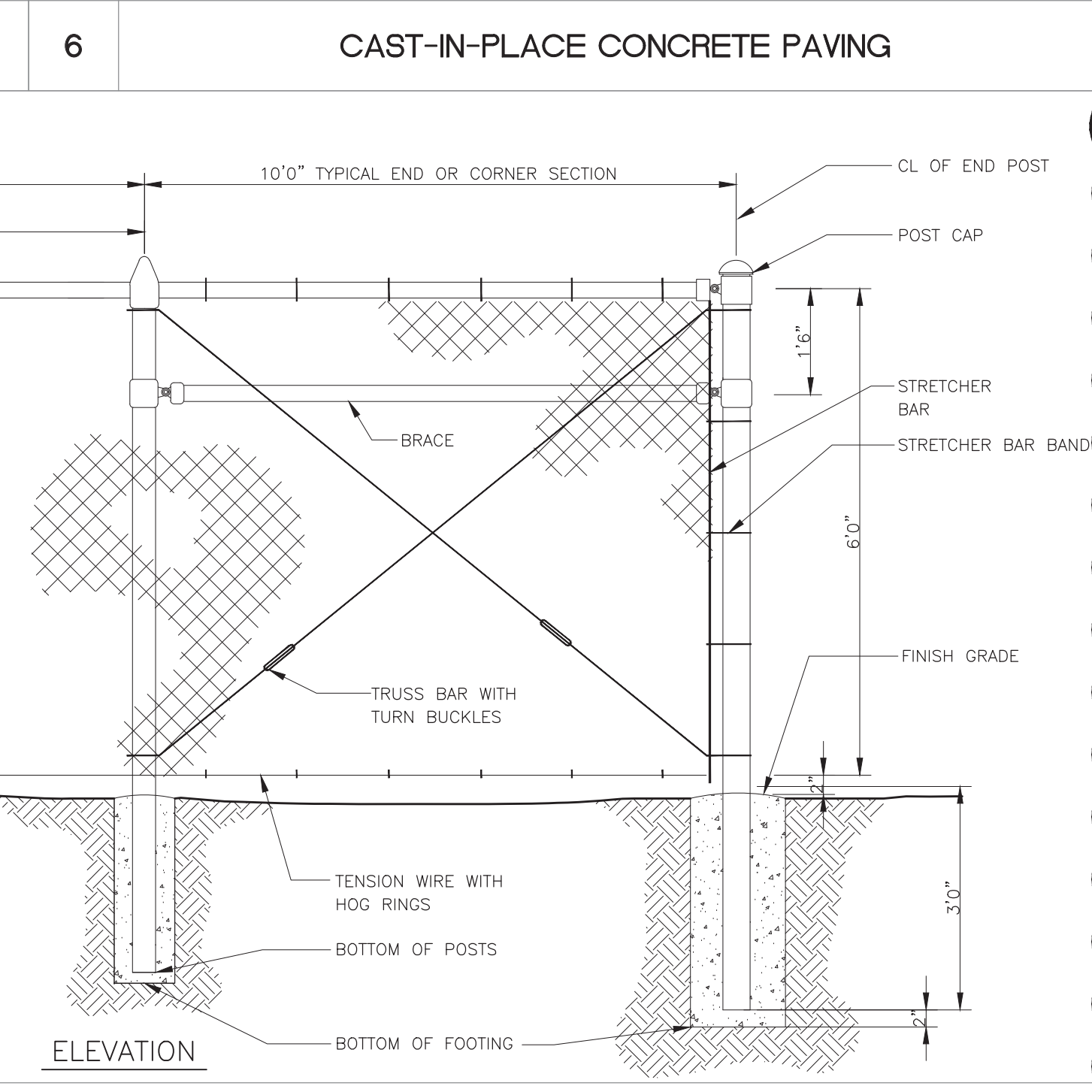
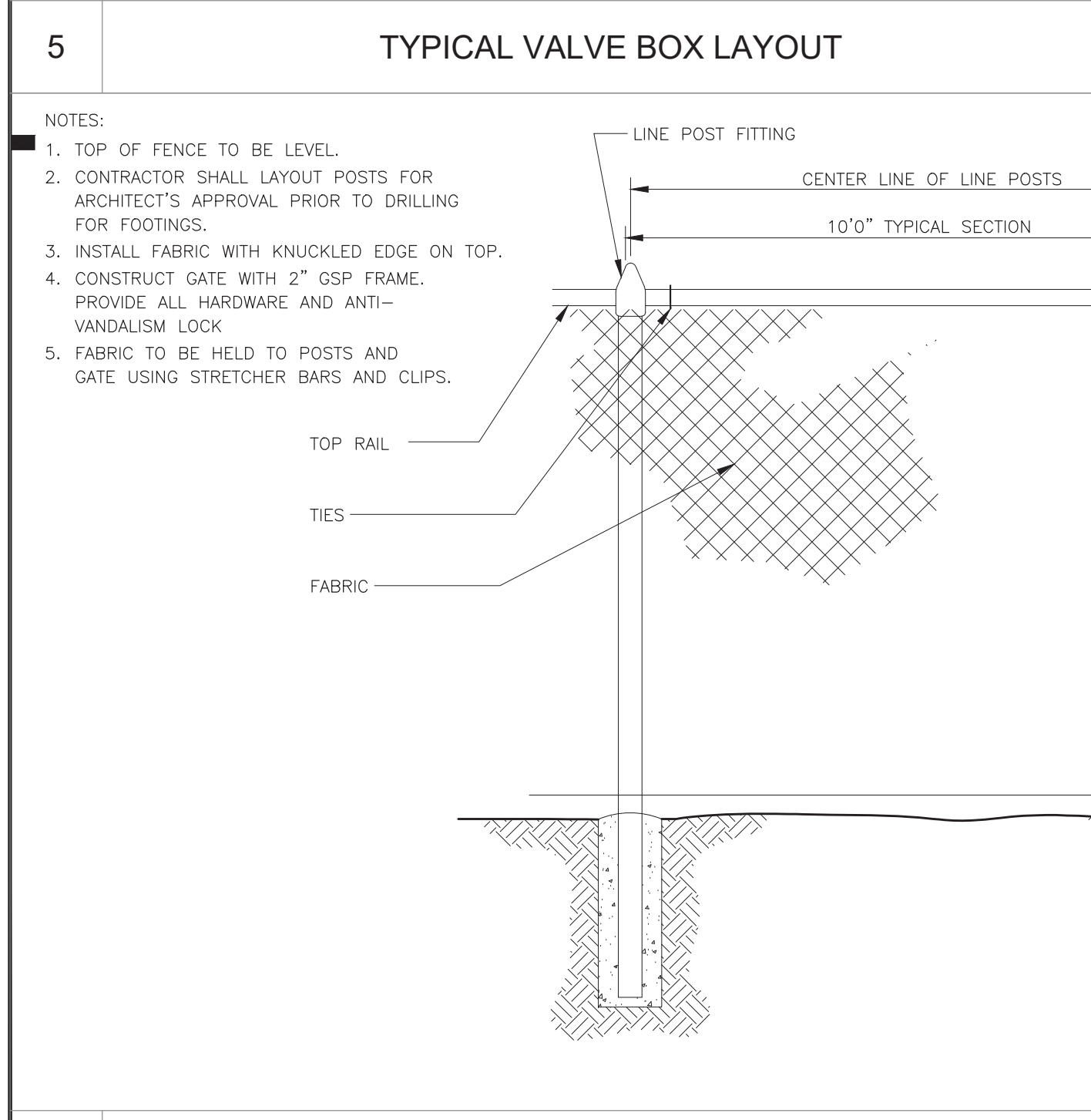
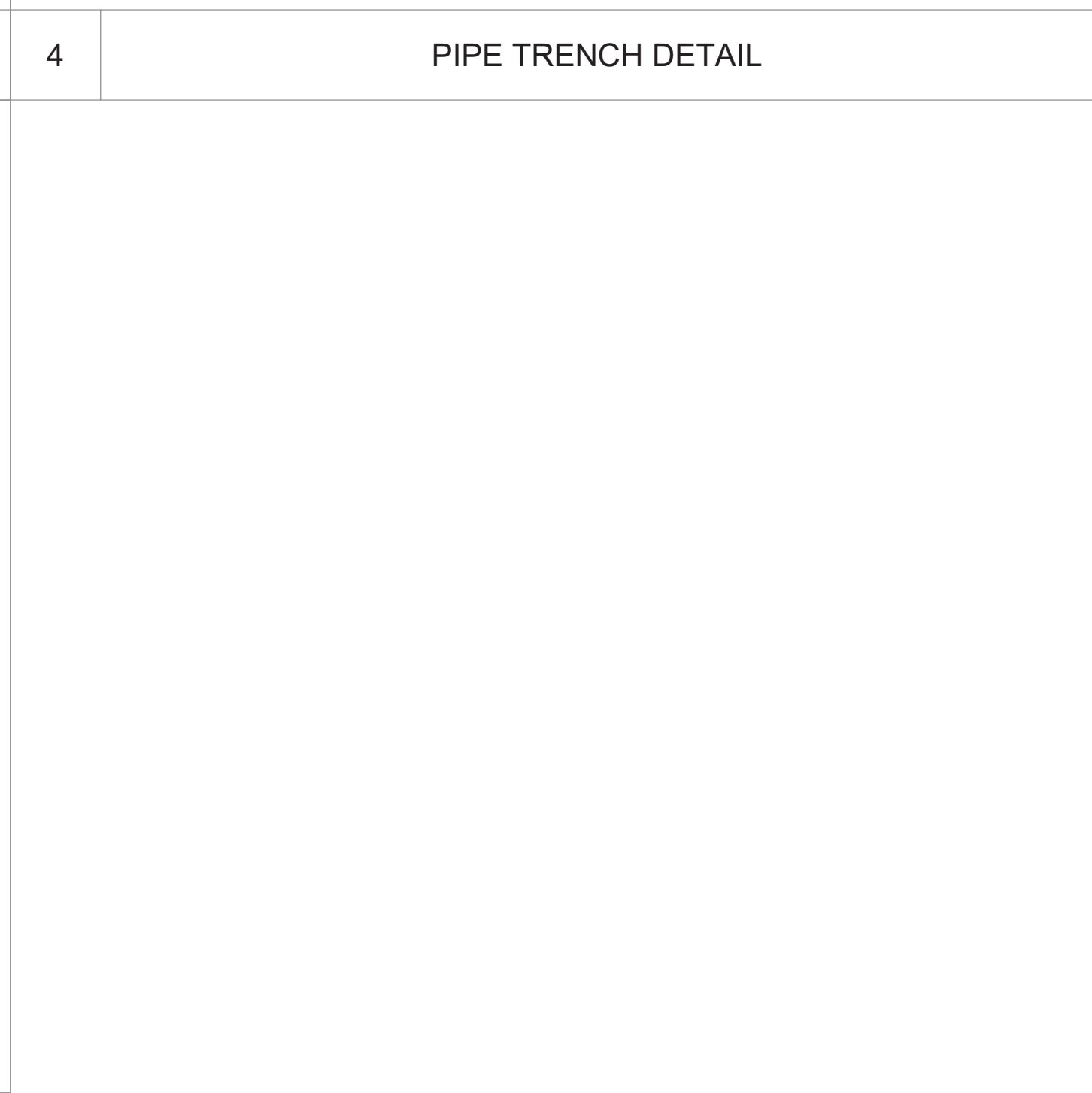
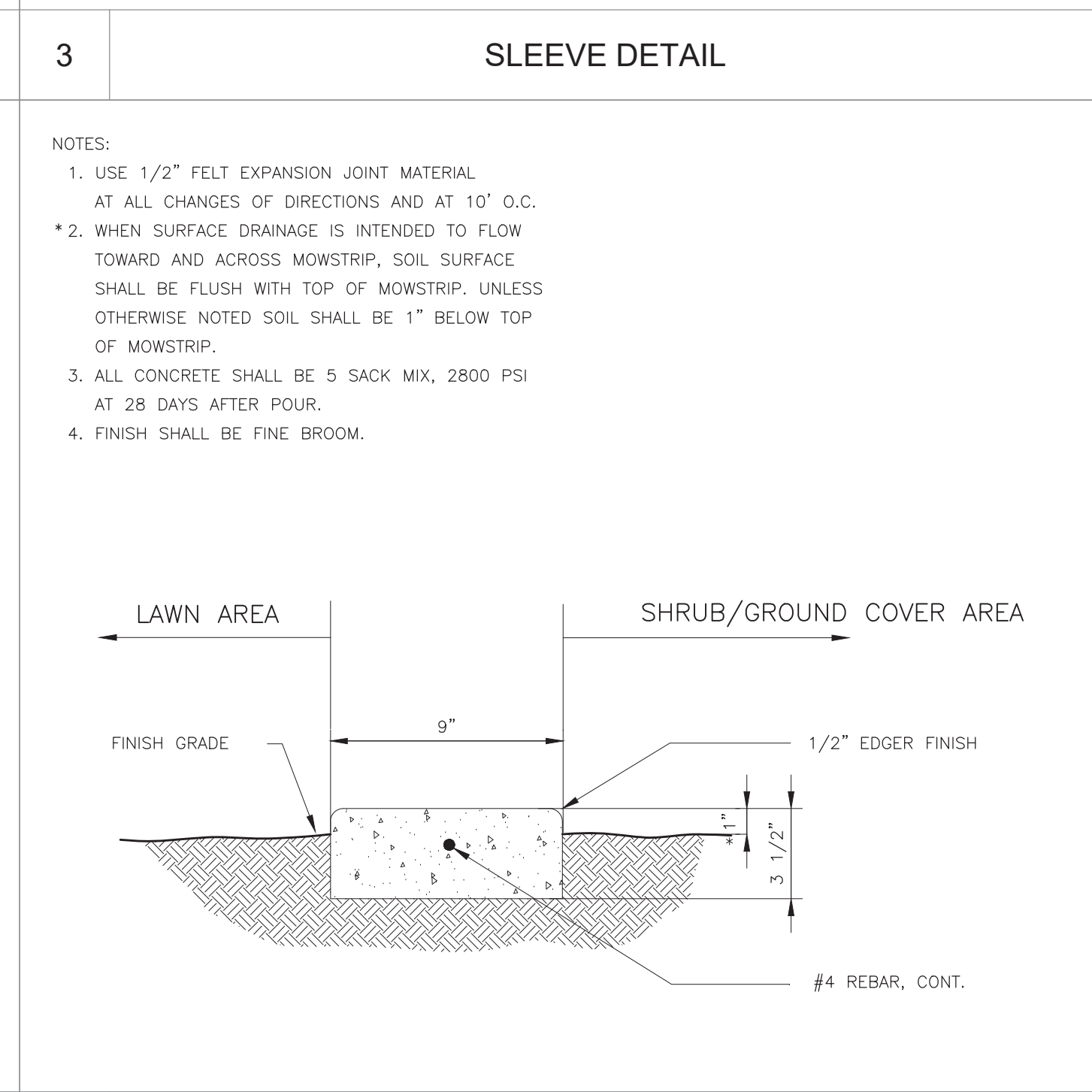
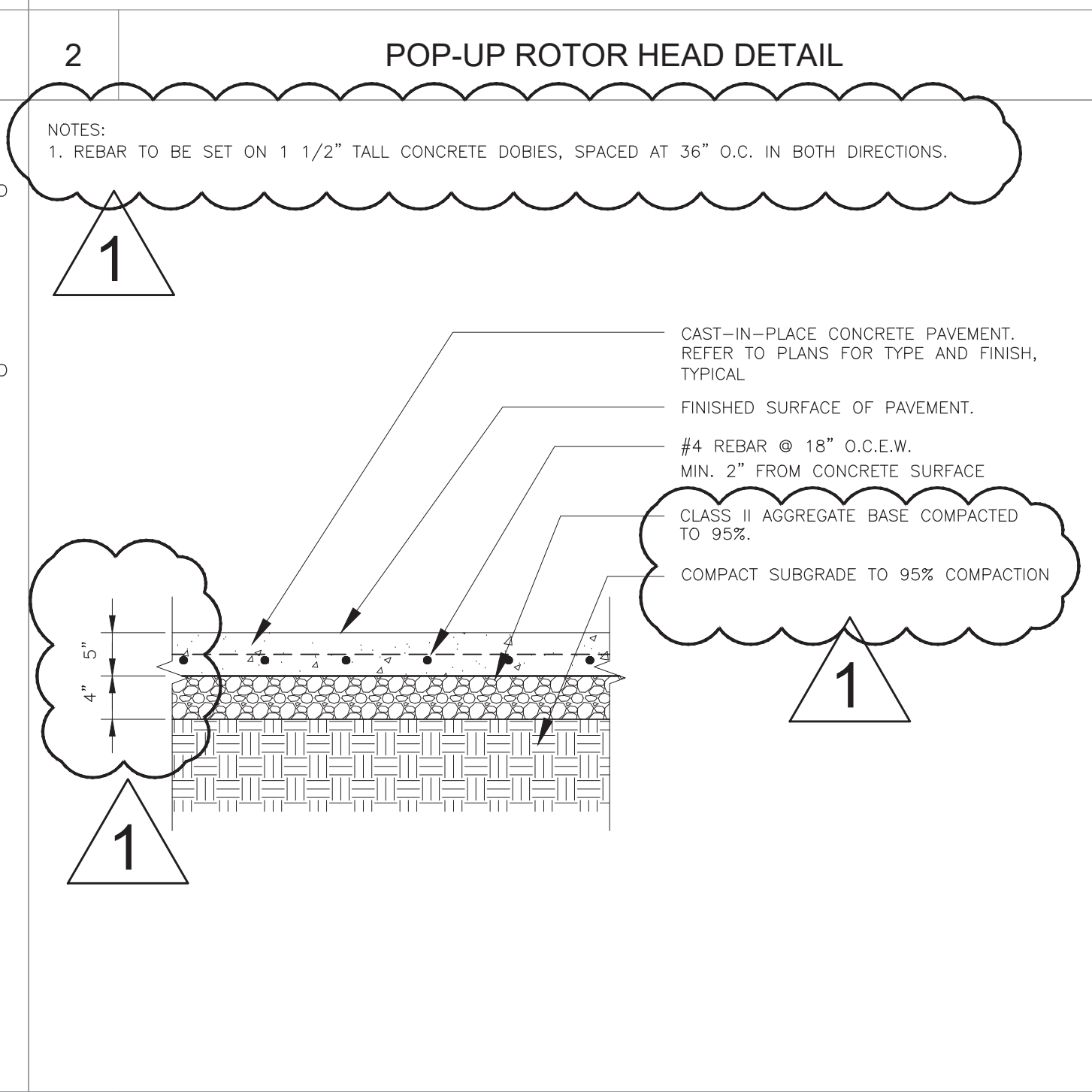
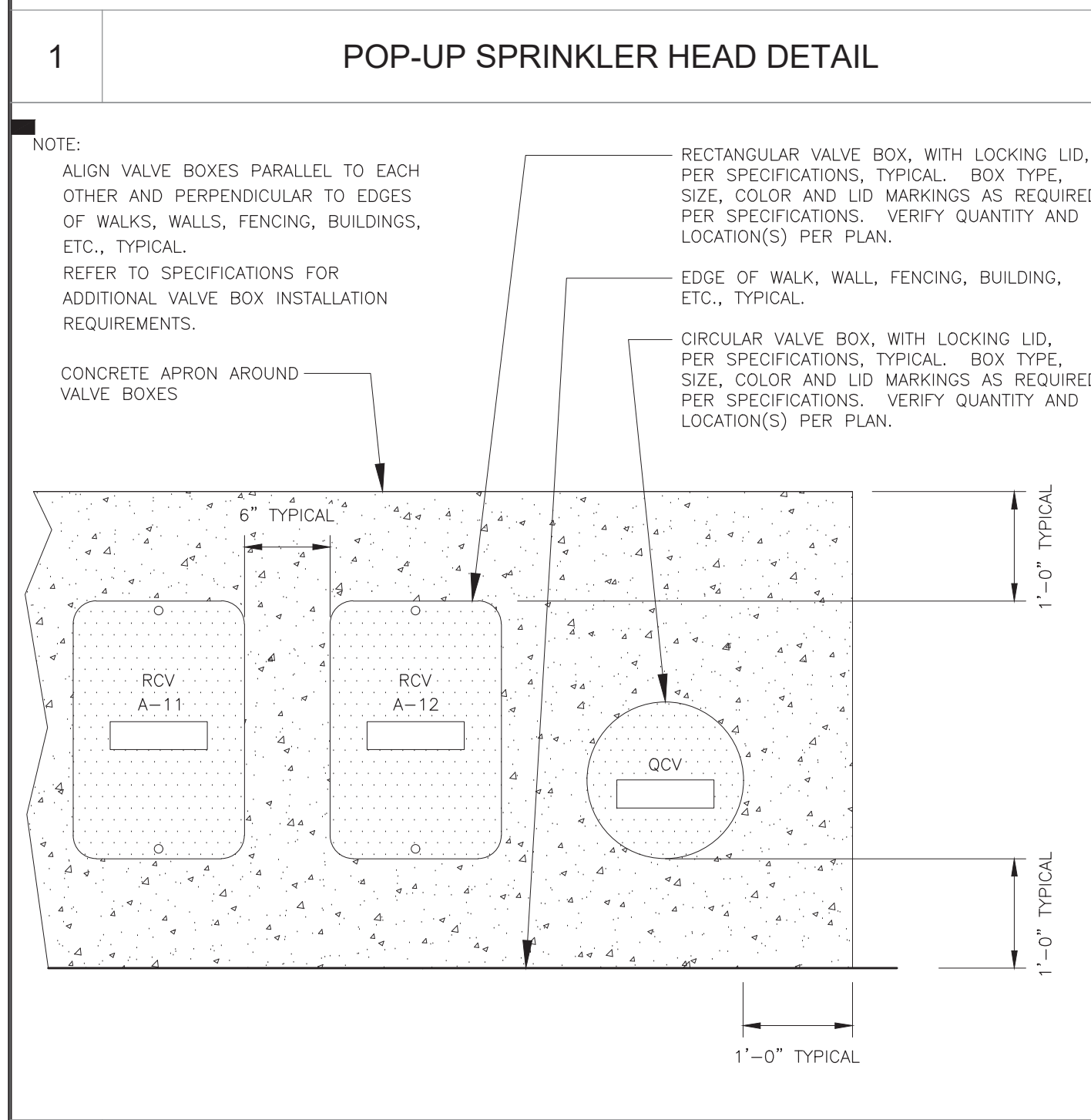
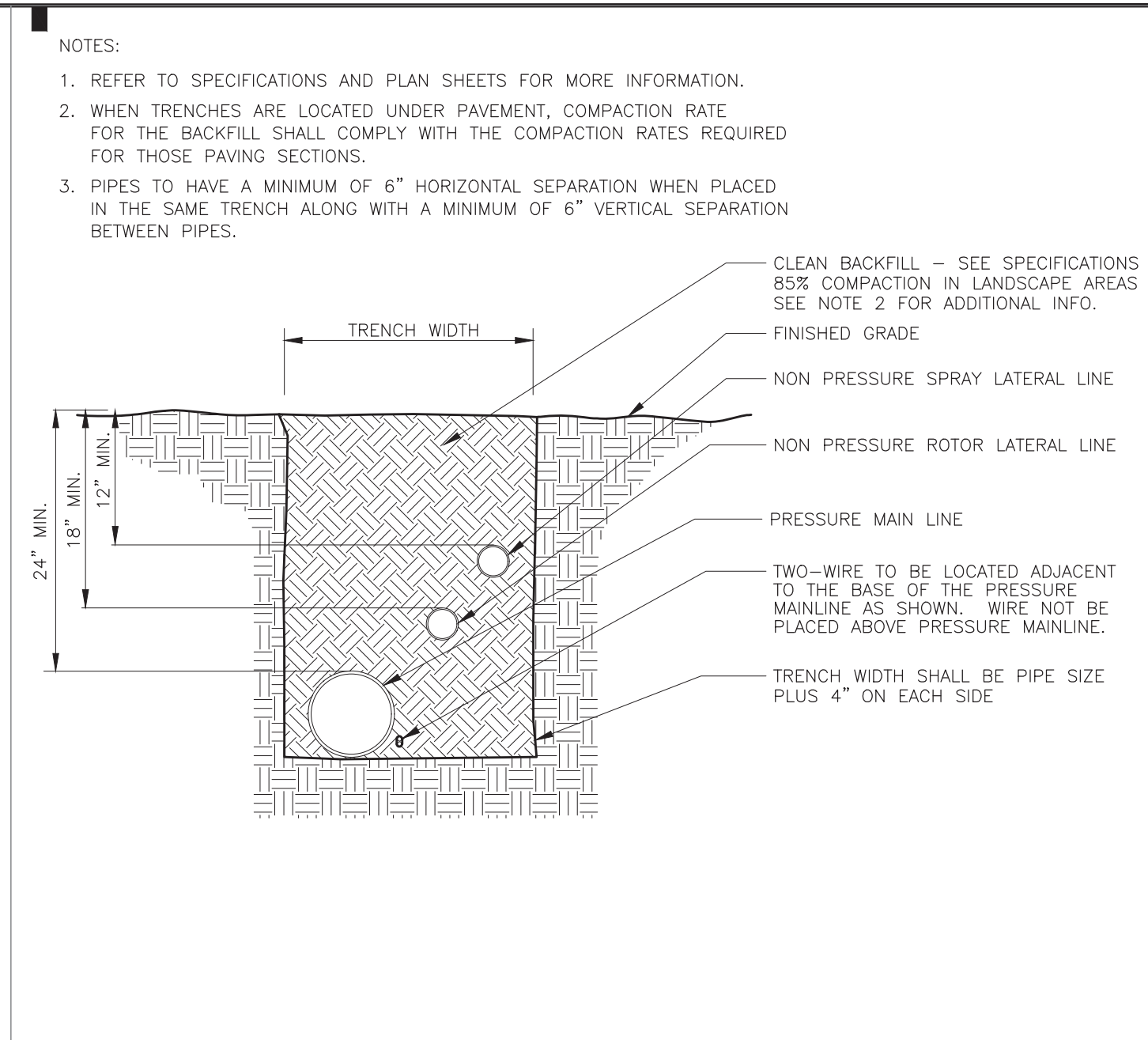
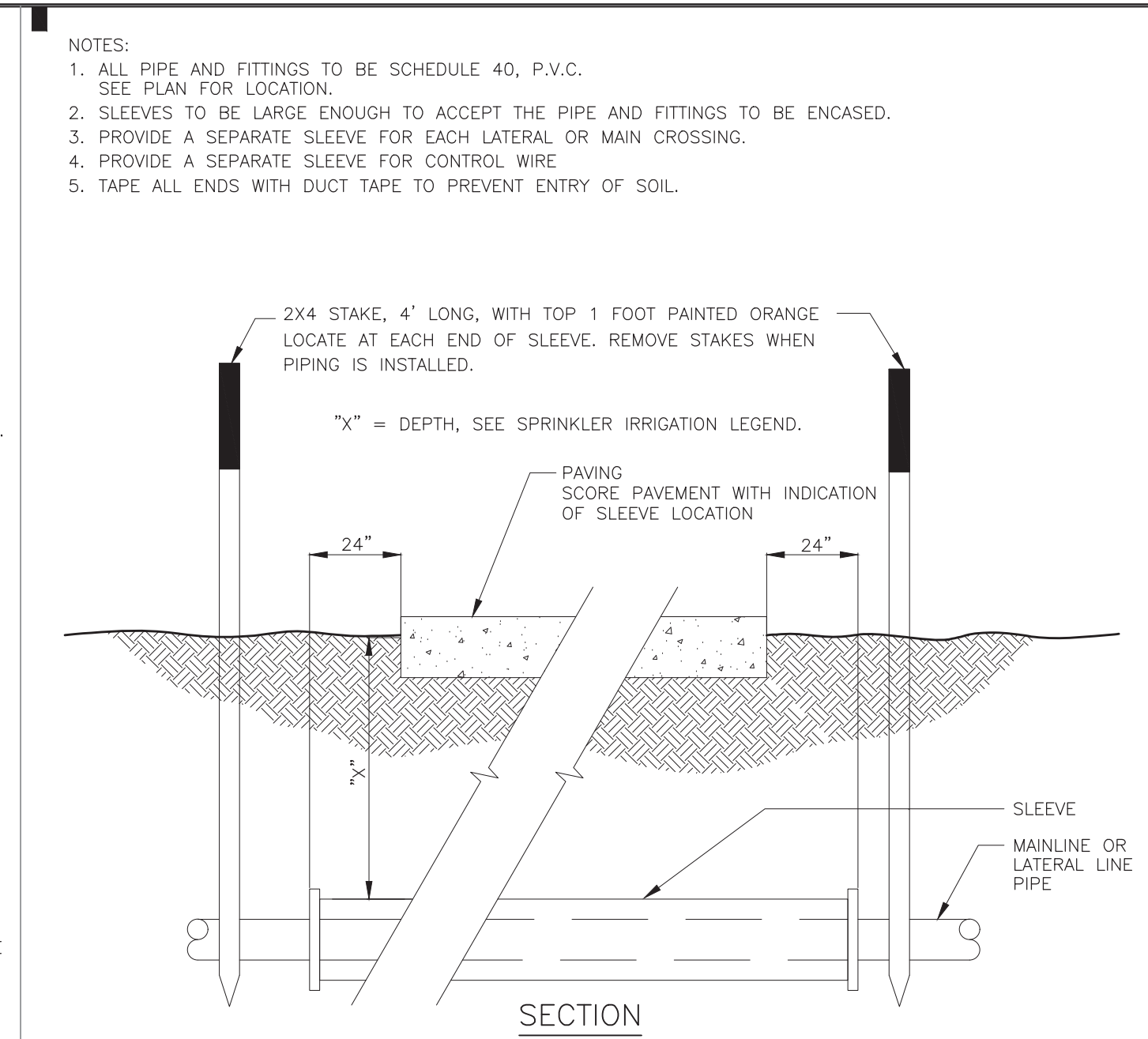
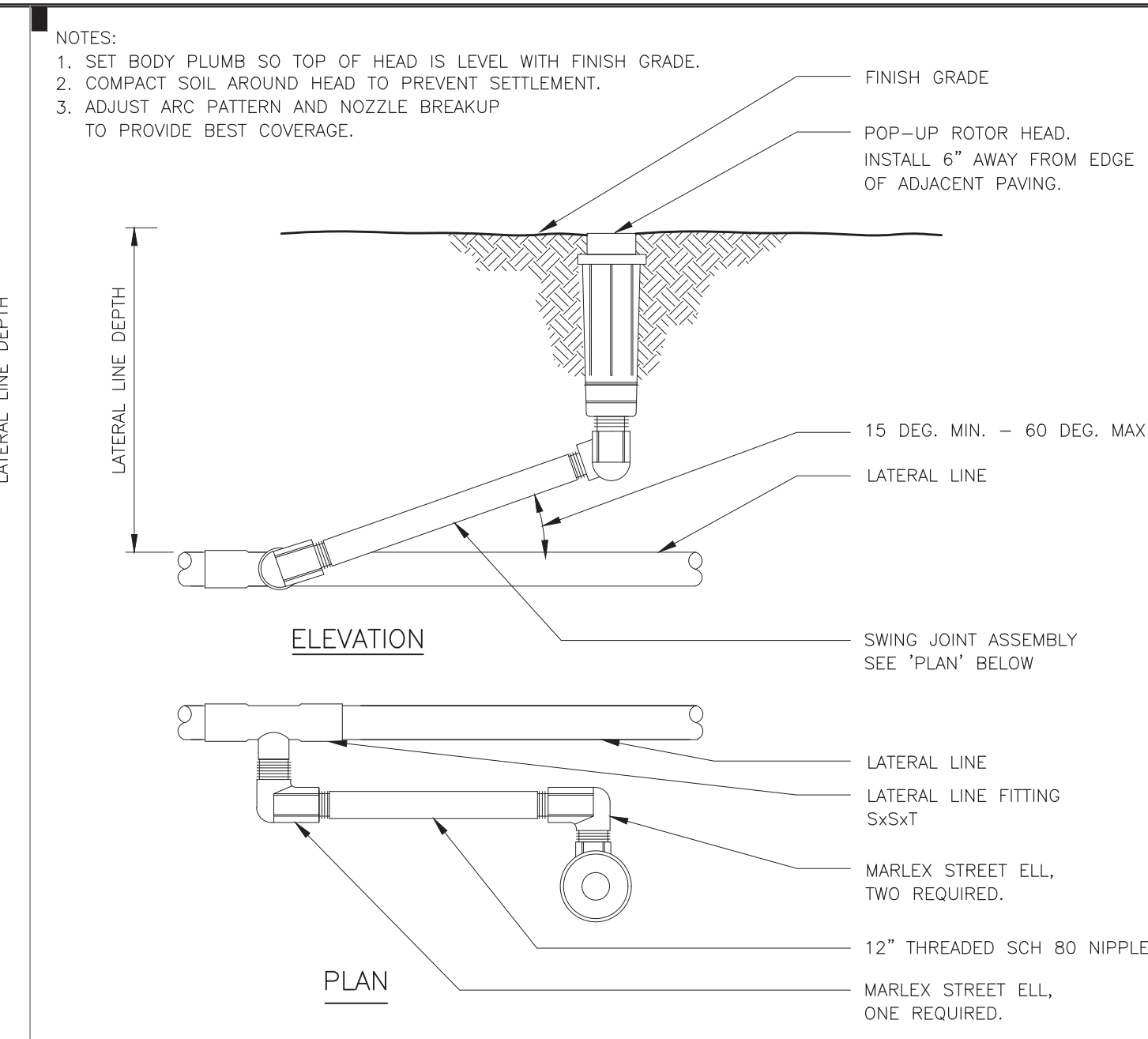
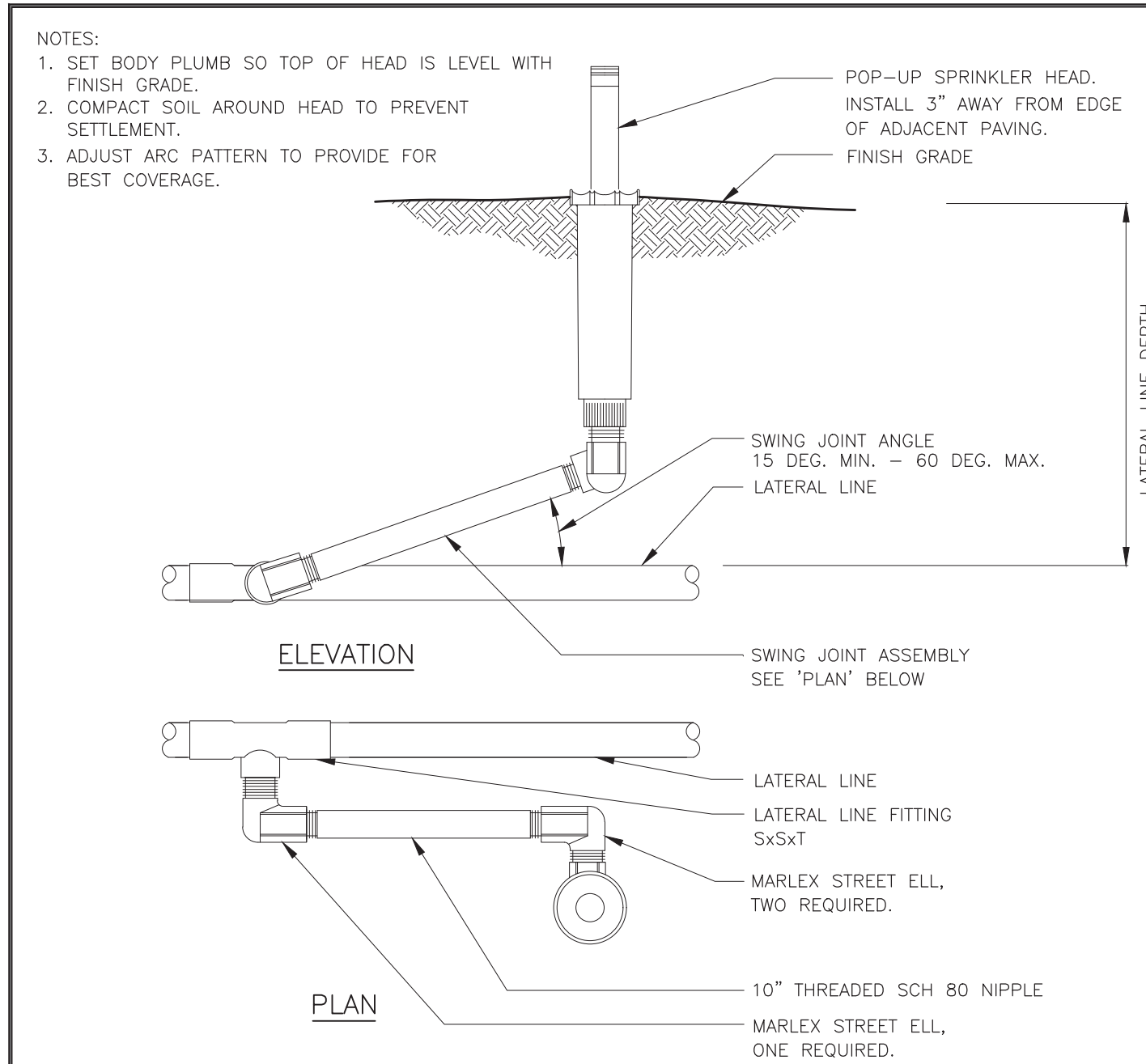
EARL WARREN/TAHOE ES - MASTER VALVE AND FLOW SENSOR DETAIL



SECTION VIEW

DECODER GROUNDING ROD





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REVISIONS		
NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS
SACRAMENTO, CA 95820

DATE 2/15/18
JOB NO. 17-68
SHEET TITLE
EARL WARREN ES
LANDSCAPE
IRRIGATION AND
CONSTRUCTION
DETAILS

SHEET NO.
L3.3
SHEET 28 OF 35