

## Addendum #I - SCUSD - Abraham Lincoln ES - Fencing and Shade Structure

#### Civil Sheets

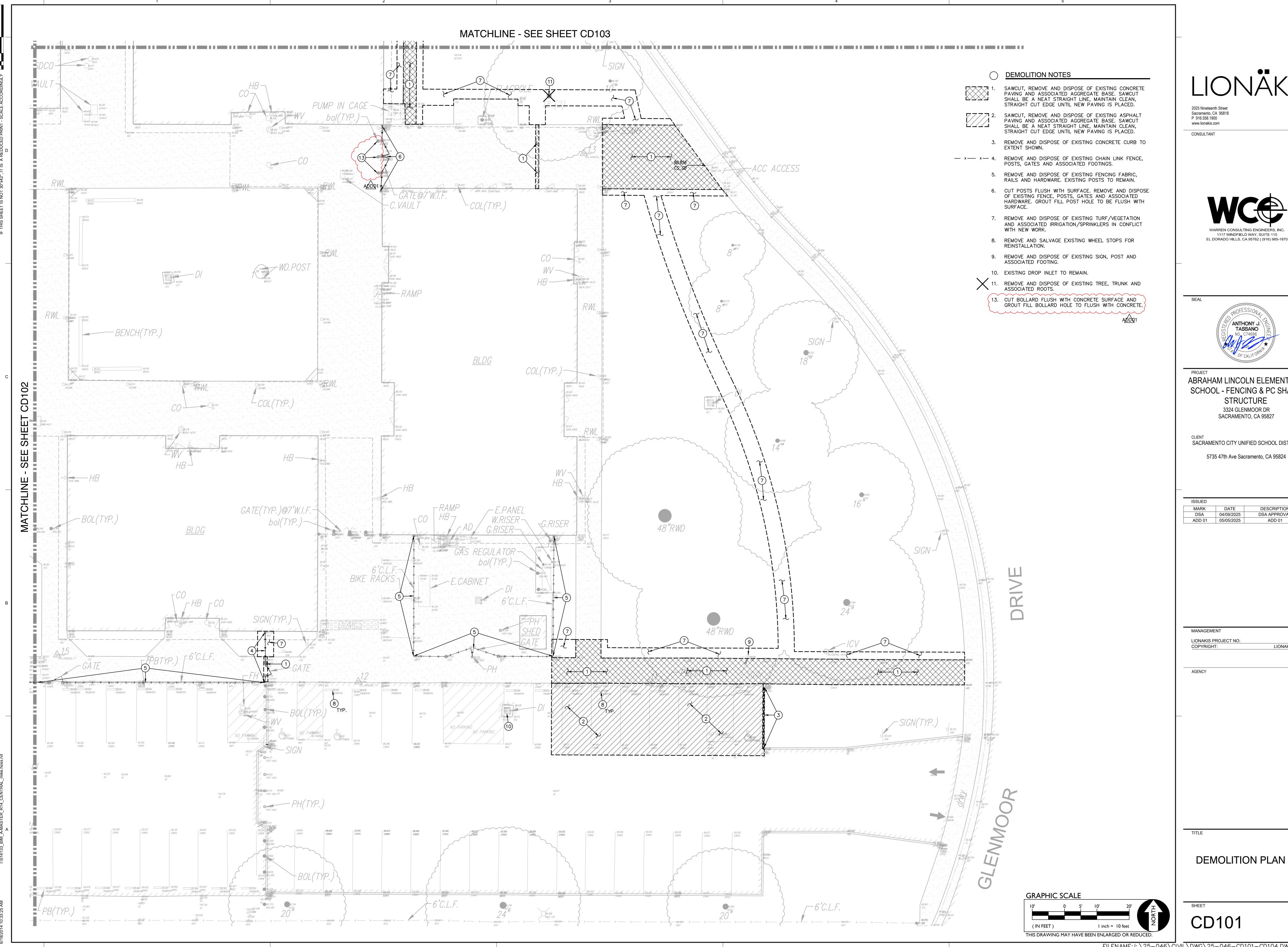
- CD101
  - o Call out added for Bollard Demolition
- CD104
  - o Removed Scope of work near north portable to match architectural drawings
- CG102
  - o Sheet revised to show grading plan
- CGI03
  - o Removed concrete scope of work at existing backflow preventer
- CGI04
  - o Removed Scope of work near north portable to match architectural drawings
- CPI01
  - o Removed concrete scope of work at existing backflow preventer
- C501
  - o Detail 8 revised to include nosing as specified
  - o Railing call out for painting to match arch plans

#### **Arch Sheets**

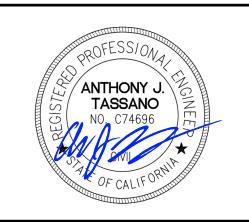
- ASI01
  - o Add Alt #1 info
  - o Revisions to scope of work at gate S021 and associated fence
  - Dimension Clarifications
- AS102
  - o Dimension Clarifications
  - o Call out added for paint at railing at stairs and ramp added
- AS501
  - o Hardware revisions
  - o Added post requirement at S001 and S022
  - o Astragal Clarifications
- AS502
  - o Perforated metal clarifications on fence and gate details

#### **Specifications**

- **087100** 
  - o Hardware revisions







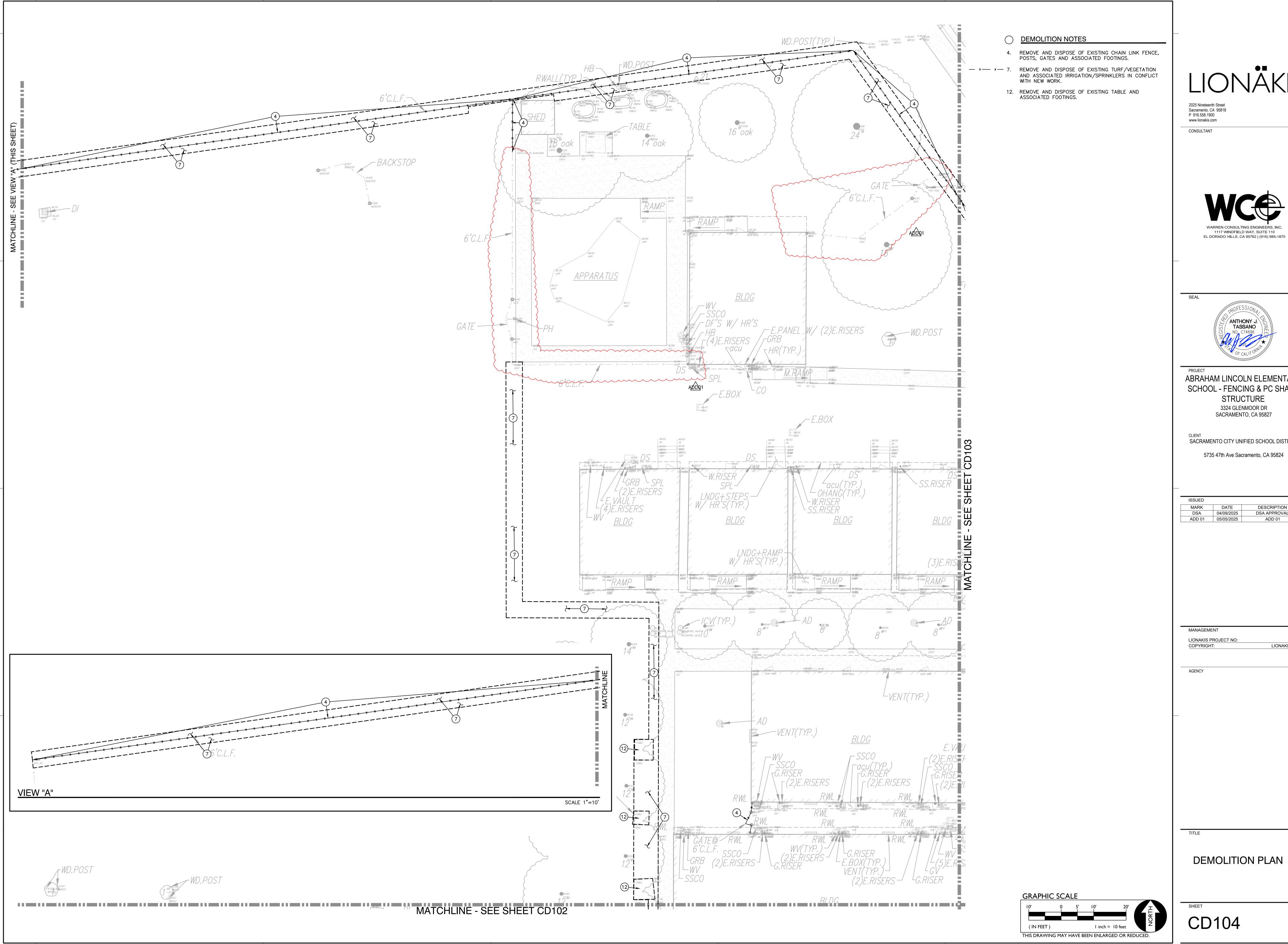
ABRAHAM LINCOLN ELEMENTARY SCHOOL - FENCING & PC SHADE STRUCTURE

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT 5735 47th Ave Sacramento, CA 95824

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025013 LIONAKIS 2024

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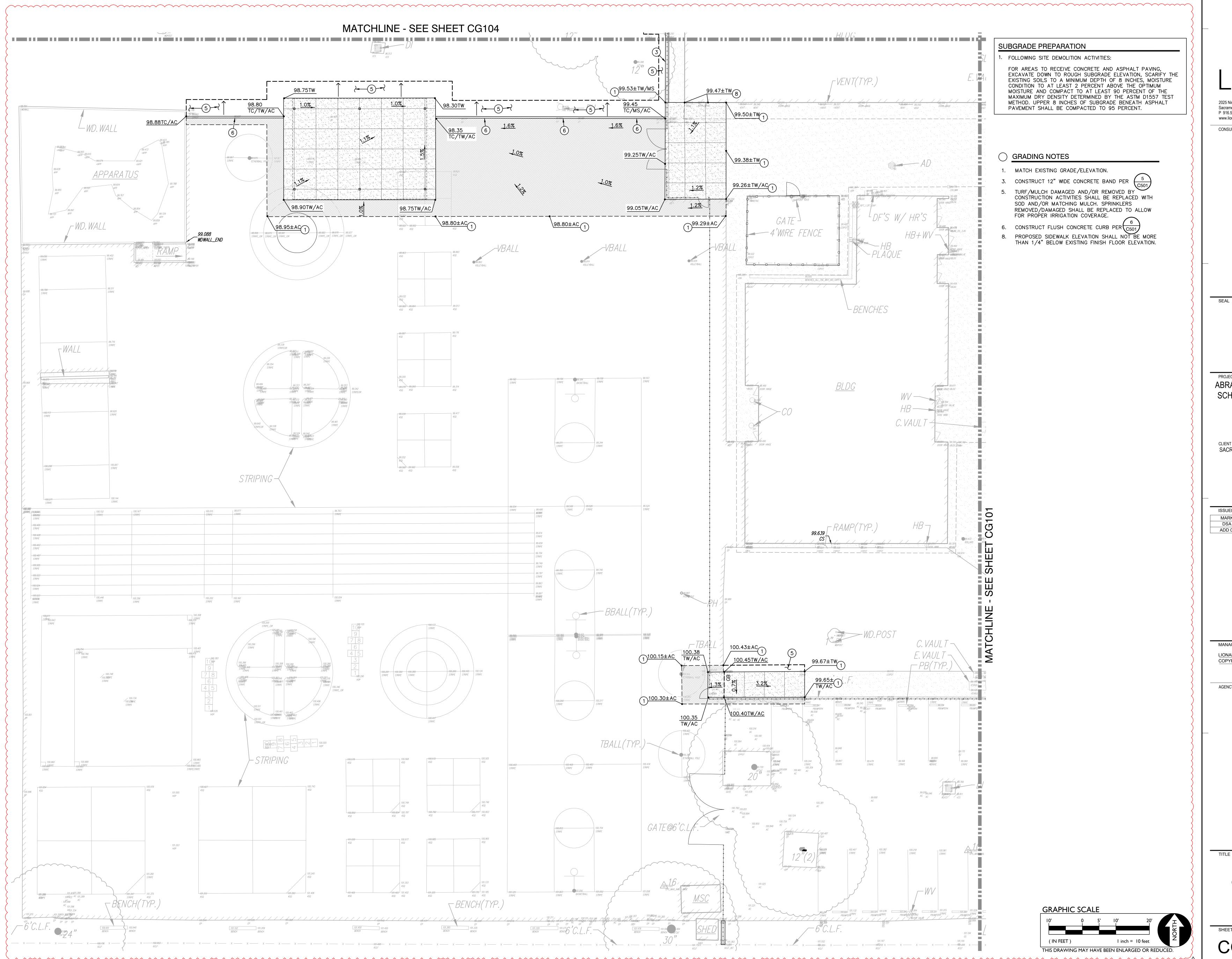
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**DEMOLITION PLAN** 

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**GRADING PLAN** 

CG102

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## SUBGRADE PREPARATION

## 1. FOLLOWING SITE DEMOLITION ACTIVITIES:

FOR AREAS TO RECEIVE CONCRETE AND ASPHALT PAVING, EXCAVATE DOWN TO ROUGH SUBGRADE ELEVATION, SCARIFY THE EXISTING SOILS TO A MINIMUM DEPTH OF 8 INCHES, MOISTURE CONDITION TO AT LEAST 2 PERCENT ABOVE THE OPTIMUM MOISTURE AND COMPACT TO AT LEAST 90 PERCENT OF THE MAXIMUM DRY DENSITY DETERMINED BY THE ASTM D1557 TEST METHOD. UPPER 8 INCHES OF SUBGRADE BENEATH ASPHALT PAVEMENT SHALL BE COMPACTED TO 95 PERCENT.

# GRADING NOTES

1. MATCH EXISTING GRADE/ELEVATION.

- 3. CONSTRUCT 12" WIDE CONCRETE BAND PER
- 5. TURF/MULCH DAMAGED AND/OR REMOVED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED WITH SOD AND/OR MATCHING MULCH. SPRINKLERS REMOVED/DAMAGED SHALL BE REPLACED TO ALLOW FOR PROPER IRRIGATION COVERAGE.
- 7. CONSTRUCT 8" RETAINING CURB WITH HANDRAIL PER  $\left(-\frac{1}{6}\right)$
- 9. CONSTRUCT CONCRETE STAIRS AND RAILINGS PER —
- 10. CONSTRUCT CONCRETE ACCESSIBLE RAMP PER  $\frac{7}{C501}$
- 11. CONSTRUCT 8" WIDE CONCRETE CURB WITH HANDRAIL PER (9)

GRAPHIC SCALE

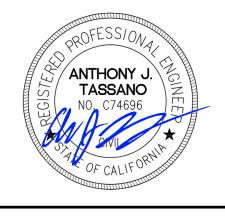


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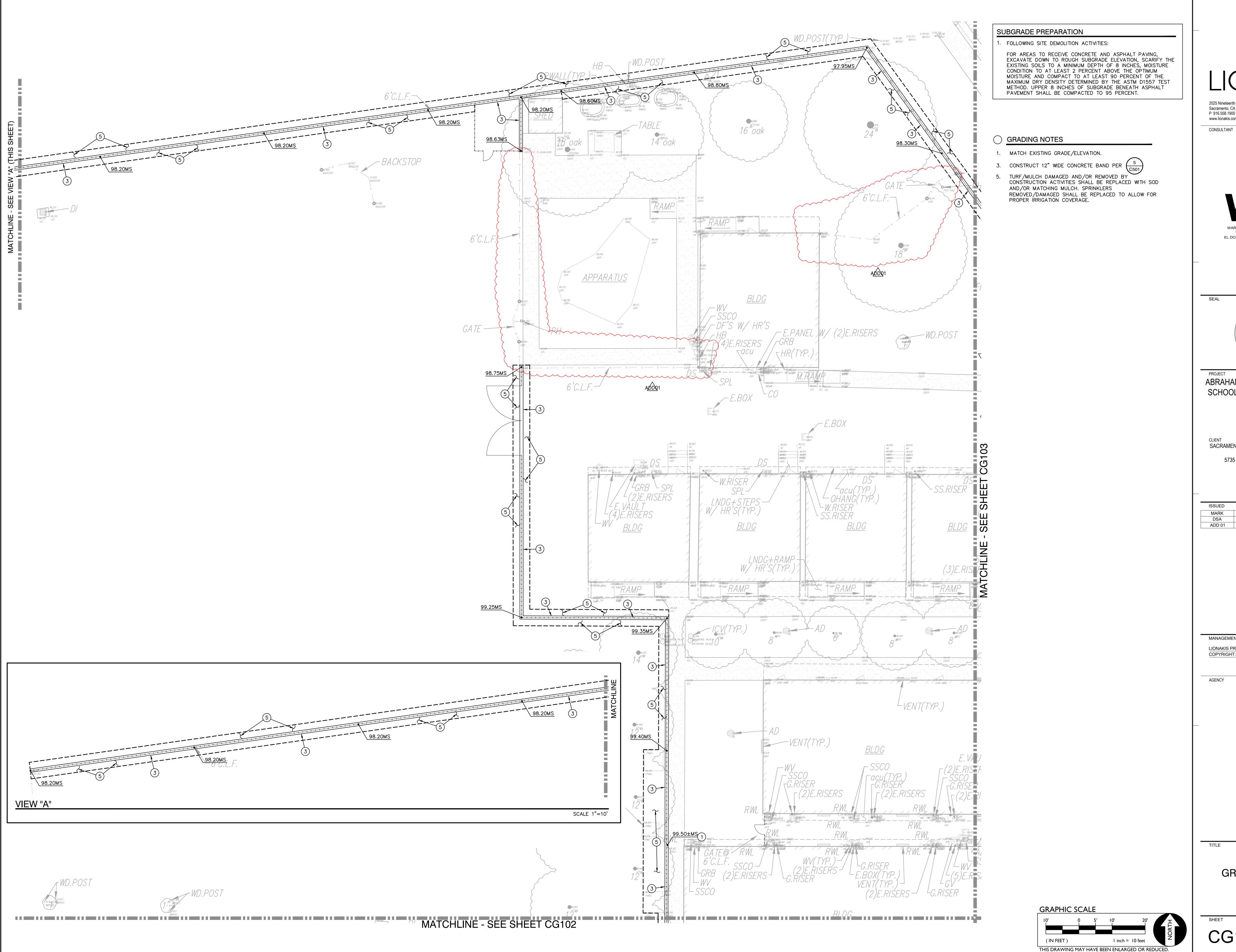
TITLE

GRADING PLAN

CG103

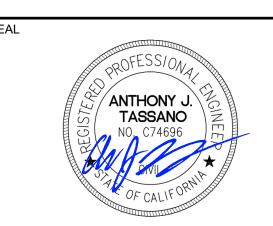
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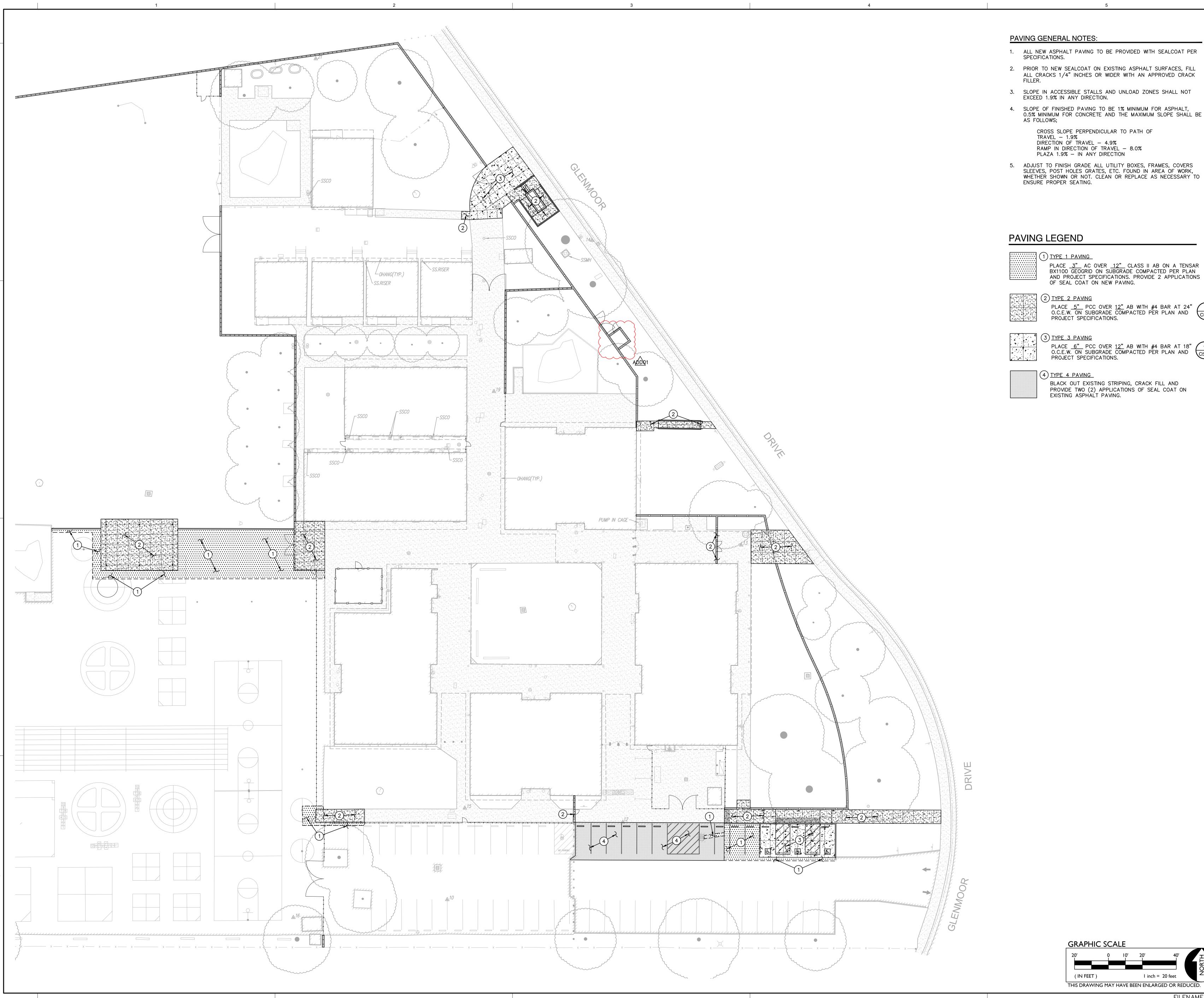
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GRADING PLAN

CG104

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## PAVING GENERAL NOTES:

- 1. ALL NEW ASPHALT PAVING TO BE PROVIDED WITH SEALCOAT PER
- 2. PRIOR TO NEW SEALCOAT ON EXISTING ASPHALT SURFACES, FILL ALL CRACKS 1/4" INCHES OR WIDER WITH AN APPROVED CRACK
- 3. SLOPE IN ACCESSIBLE STALLS AND UNLOAD ZONES SHALL NOT EXCEED 1.9% IN ANY DIRECTION.
- 4. SLOPE OF FINISHED PAVING TO BE 1% MINIMUM FOR ASPHALT, 0.5% MINIMUM FOR CONCRETE AND THE MAXIMUM SLOPE SHALL BE

CROSS SLOPE PERPENDICULAR TO PATH OF TRAVEL - 1.9% DIRECTION OF TRAVEL - 4.9% RAMP IN DIRECTION OF TRAVEL - 8.0% PLAZA 1.9% - IN ANY DIRECTION

ADJUST TO FINISH GRADE ALL UTILITY BOXES, FRAMES, COVERS SLEEVES, POST HOLES GRATES, ETC. FOUND IN AREA OF WORK, WHETHER SHOWN OR NOT. CLEAN OR REPLACE AS NECESSARY TO ENSURE PROPER SEATING.

## **PAVING LEGEND**

1) TYPE 1 PAVING PLACE <u>3"</u> AC OVER <u>12"</u> CLASS II AB ON A TENSAR BX1100 GEOGRID ON SUBGRADE COMPACTED PER PLAN

2 TYPE 2 PAVING PLACE <u>5"</u> PCC OVER <u>12"</u> AB WITH #4 BAR AT 24"
O.C.E.W. ON SUBGRADE COMPACTED PER PLAN AND PROJECT SPECIFICATIONS.

3 TYPE 3 PAVING

PLACE <u>6"</u> PCC OVER <u>12"</u> AB WITH #4 BAR AT 18" 1
O.C.E.W. ON SUBGRADE COMPACTED PER PLAN AND
PROJECT SPECIFICATIONS PROJECT SPECIFICATIONS.

4 TYPE 4 PAVING BLACK OUT EXISTING STRIPING, CRACK FILL AND PROVIDE TWO (2) APPLICATIONS OF SEAL COAT ON EXISTING ASPHALT PAVING.

**GRAPHIC SCALE** 

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ANTHONY J.

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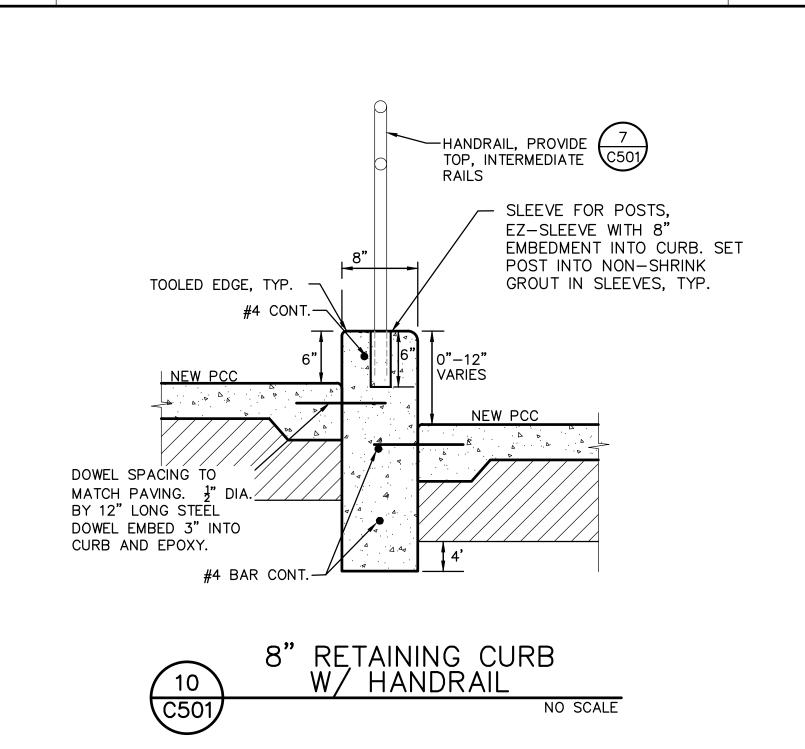
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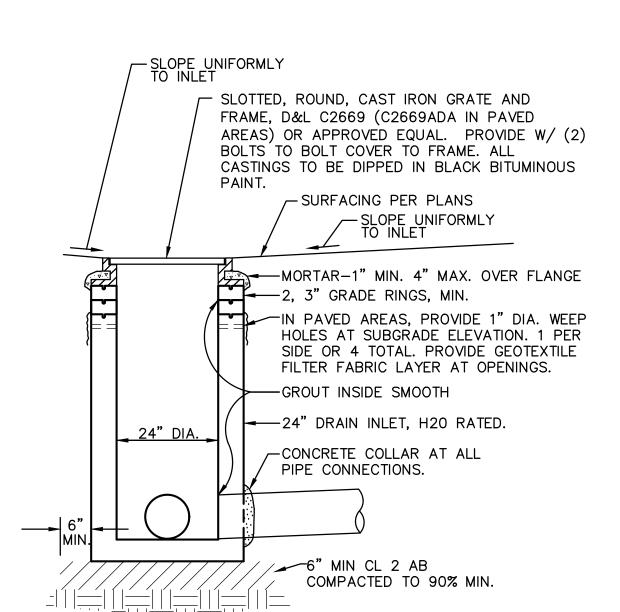
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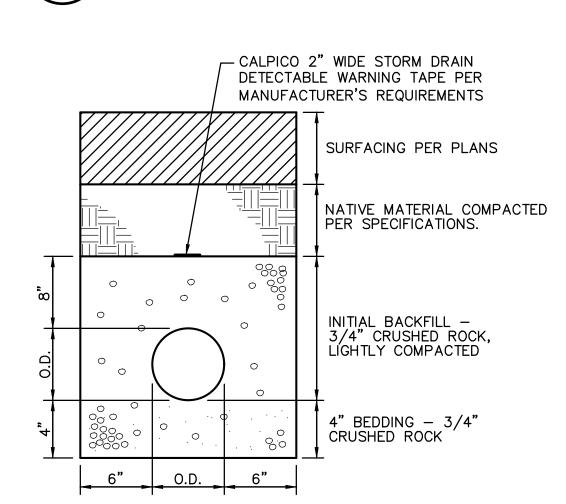
PAVING PLAN

CP101

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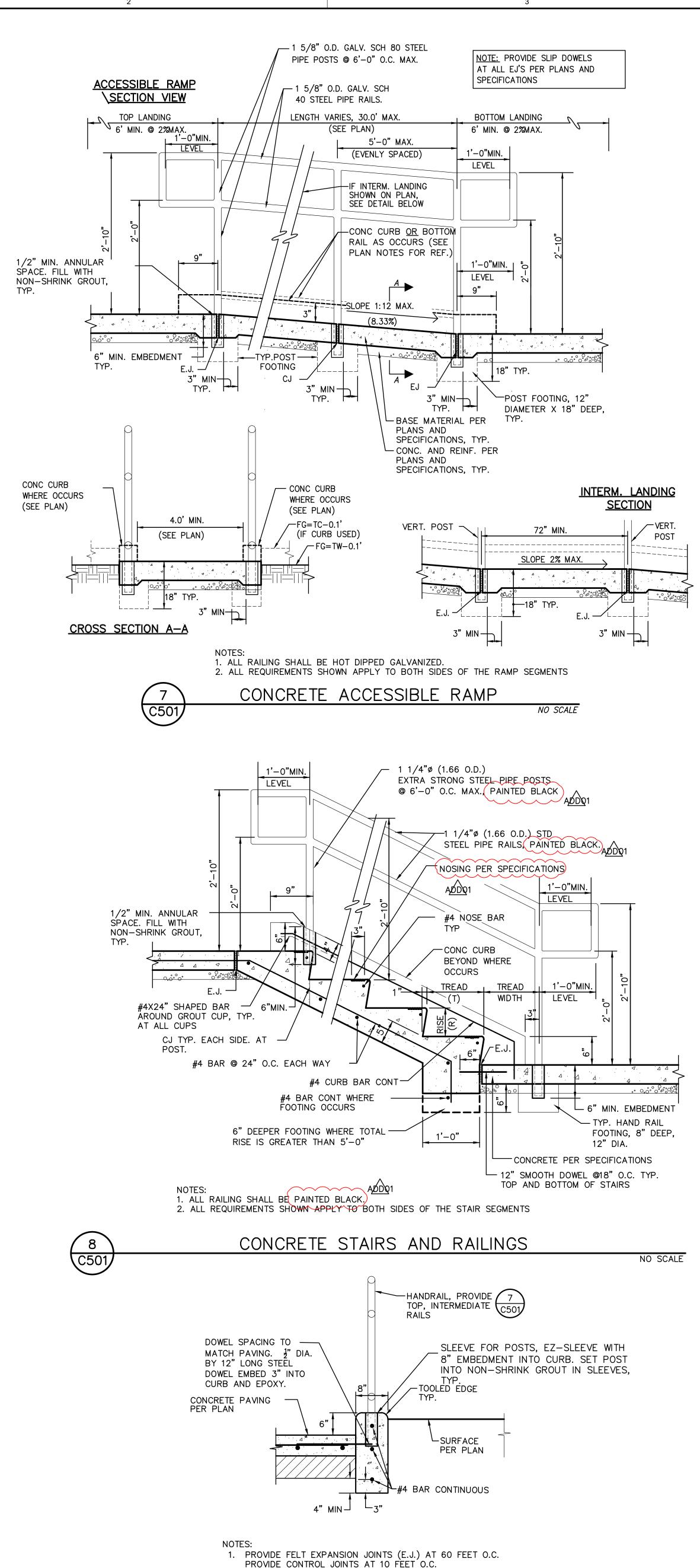


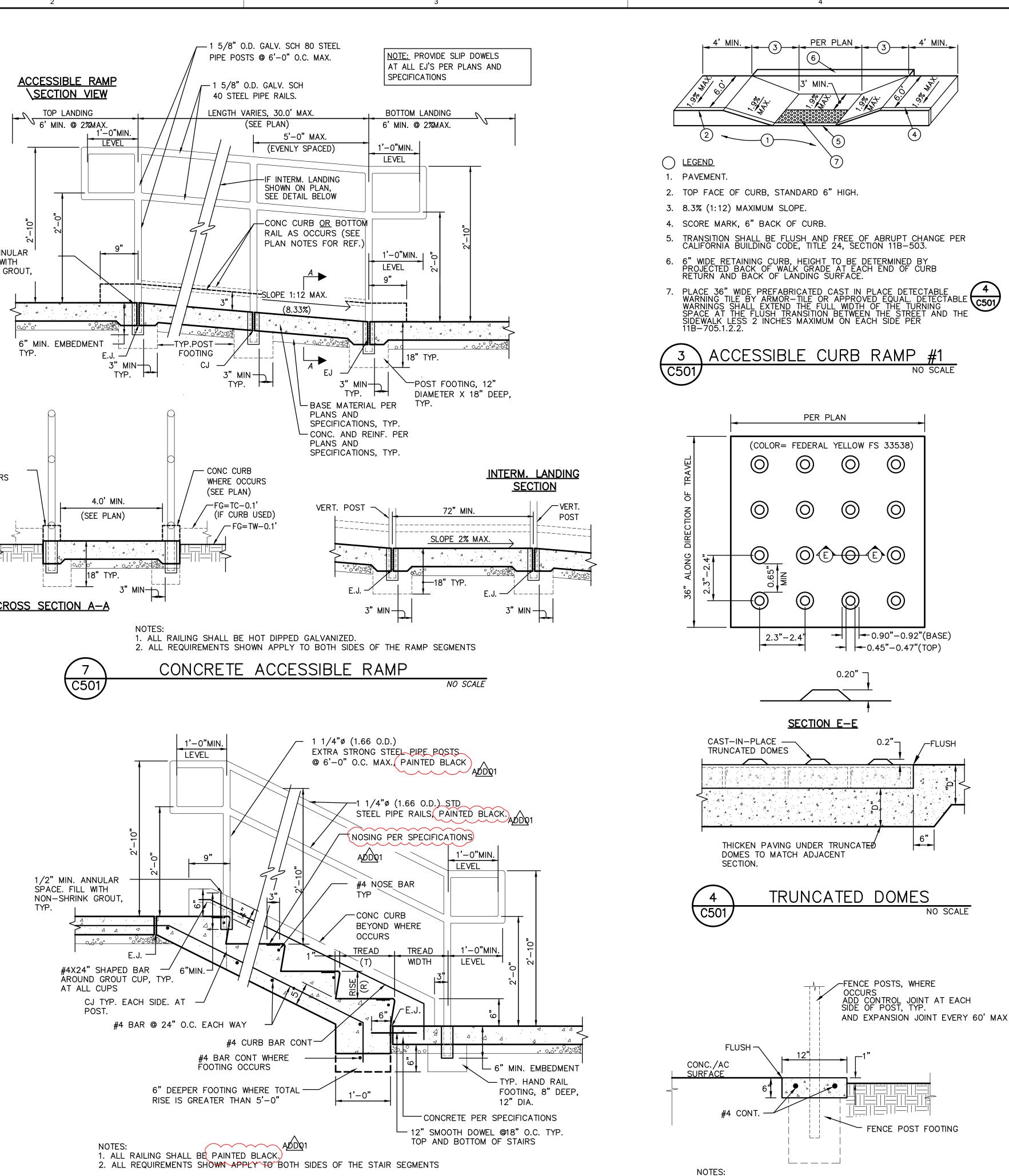
DROP INLET

NO SCALE

C501







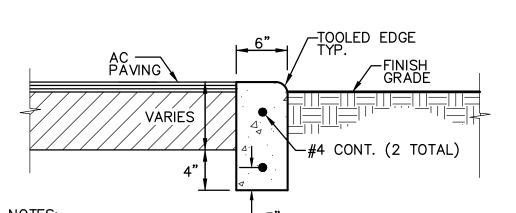
PROVIDE CONTROL JOINTS AT 10 FEET O.C. 2. AT E.J. USE 1/2"X24" SMOOTH DOWELS, ALIGN WITH REBAR, GREASE 1/2 THE LENGTH BEFORE CONCRETE PLACEMENT.



1. PROVIDE CONTROL JOINT CENTERED AT EVERY FENCE POST. PROVIDE EXPANSION JOINTS AT 60FT O.C. MAX. CONCRETE BAND

NO SCALE

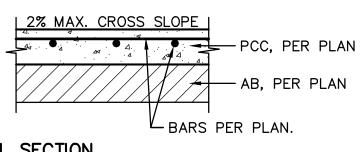
C501



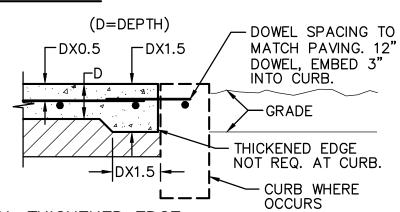
NOTES: PROVIDE FELT EXPANSION JOINTS (E.J.) AT 60 FEET O.C. PROVIDE CONTROL JOINTS AT 10 FEET O.C., EXCEPT WHEN PLACING ADJACENT TO CONCRETE WALKS THE EXPANSION JOINTS SHALL ALIGN WITH THE EXPANSION JOINTS SHOWN FOR THE CONCRETE WALKS.

2. AT E.J. USE 1/2"X24" SMOOTH DOWELS, ALIGN WITH REBAR, GREASE 1/2 THE LENGTH BEFORE CONCRETE PLACEMENT.

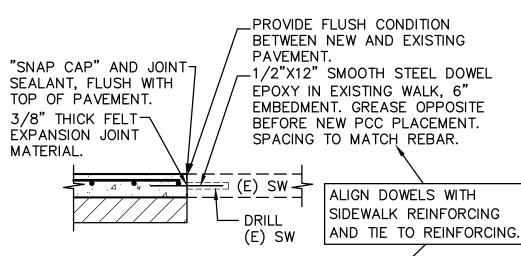




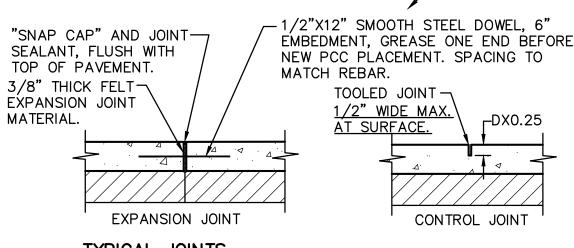
TYPICAL SECTION



TYPICAL THICKENED EDGE



CONNECTION TO (E) CONCRETE

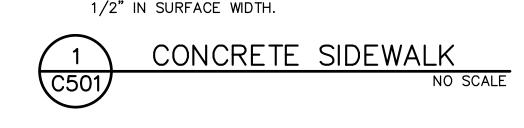


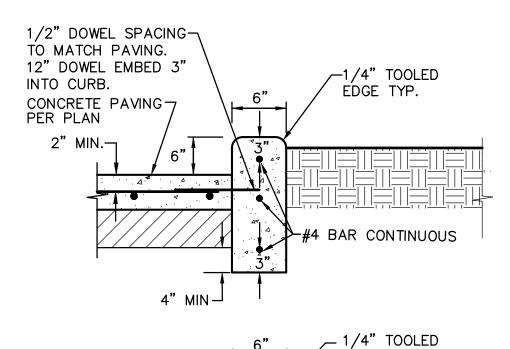
TYPICAL JOINTS

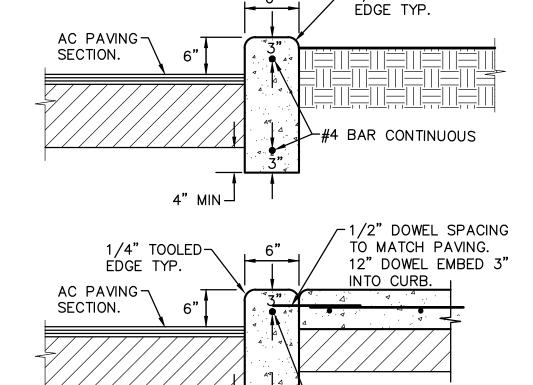
NOTES:

1. PROVIDE FELT EXPANSION JOINTS AT 20 FEET O.C. MAX. SEE PLAN FOR LAYOUT.

2. PROVIDE CONTROL JOINTS AT 10 FEET O.C. MAX. SEE PLAN FOR LAYOUT. 3. EXPANSION OR CONTROL JOINTS SHALL NOT EXCEED







4" MIN-1. PROVIDE FELT EXPANSION JOINTS (E.J.) AT 60 FEET O.C. MAXIMUM PROVIDE CONTROL JOINTS AT 10 FEET O.C. MAXIMUM, EXCEPT WHEN PLACING ADJACENT TO CONCRETE WALKS THE EXPANSION JOINTS SHALL ALIGN WITH THE EXPANSION JOINTS SHOWN FOR THE CONCRETE WALKS. 2. AT E.J. USE 1/2"X24" SMOOTH DOWELS, ALIGN WITH REBAR,

GREASE 1/2 THE LENGTH BEFORE CONCRETE PLACEMENT.

#4 BAR CONTINUOUS

NO SCALE

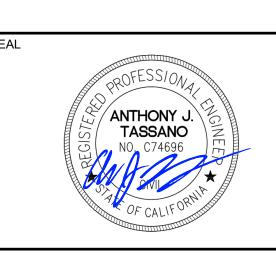
CONCRETE CURB

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**DETAILS AND** SECTIONS

C501

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SITE PLAN - OVERALL
SCALE 1" = 30'-0"

# GENERAL NOTES

- A. GRAY LINES INDICATE EXISTING TO REMAIN OR REFERENCE
- B. NOT ALL WORK SHOWN ON THIS SHEET; SEE BALANCE OF CONTRACT DOCUMENTS FOR FULL SCOPE OF WORK
- C. SEE "SITE PLAN ACCESSIBILITY" PLAN FOR SITE ACCESSIBILITY
- D. SEE "SITE PLAN FIRE ACCESS PLAN" FOR FIRE ACCESS
- E. SEE GATE SCHEDULE FOR GATE WIDTH AND PANIC HARDWARE REQUIREMENTS
- F. SEE "SITE PLAN ACCESSIBILITY" FOR EXIT DISCHARGE ROUTES TO PUBLIC WAY OR SAFE DISPERSAL AREAS
- G. FOR GATE / DOOR MANEUVERING CLEARANCES AT ALL ACCESS DOORS APPLICABLE TO PROJECT SCOPE OF WORK, SEE DETAIL

H. PROVIDE 18" CONCRETE MOW STRIP UNDER ALL FENCING AND GATES THROUGH SOFTSCAPE

- ANYWHERE (E) TO REMAIN HARDSCAPE IS DISTURBED BY DEMOLITION OR NEW
  CONSTRUCTION, REPLACE HARDSCAPE; SEE CIVIL FOR HARDSCAPE SECTION INFORMATION
- J. GATES IN FENCES MATCH FENCE TYPE UNO.

K. AT DECORATIVE GATES WITH PANIC BARS: INSTALL PREFINISHED PERFORATED METAL AT

- FULL CAMPUS SIDE OF GATE AT AND 24" MINIMUM ALONG ADJACENT FENCE EACH SIDE UNO.

  L. AT CHAIN LINK GATES WITH PANIC BARS: INSTALL SLATS IN FULL WIDTH OF GATE AND 24"
- MINIMUM ALONG ADJACENT FENCE EACH SIDE UNO.

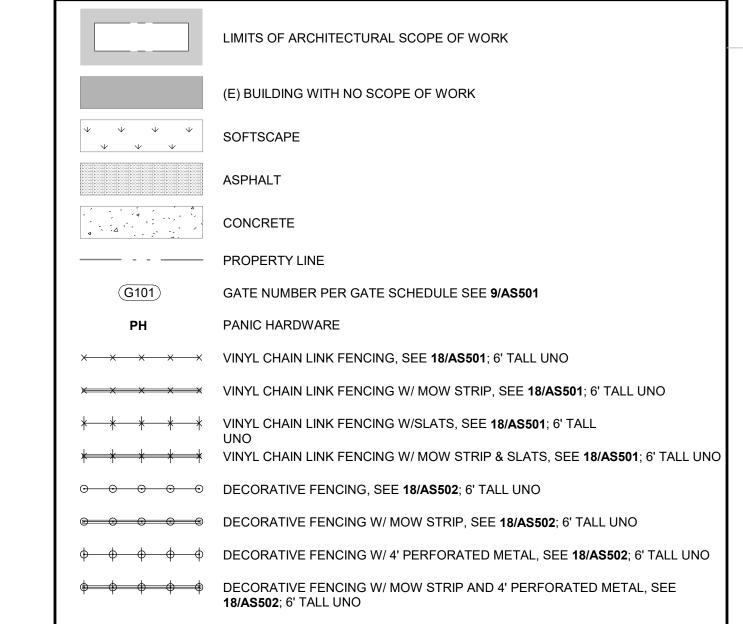
  M. FIELD VERIFY SPOT ELEVATIONS PRIOR TO SETTING FINAL GRADES
- N. AT HARDSCAPE ADJACENT TO BUILDING, PROVIDE A SLOPE OF 2% AWAY FROM BUILDING FOR AT LEAST 10 FEET FROM FACE OF WALL. AT SOFTSCAPE AREAS, PROVIDE A SLOPE OF 5% AWAY FROM BUILDINGS FOR AT LEAST 10 FEET FROM FACE OF WALL PER CBC. SEE CIVIL FOR SLOPE AND SPOT ELEVATIONS.

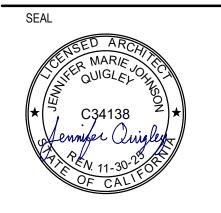
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# SITE PLAN LEGEND





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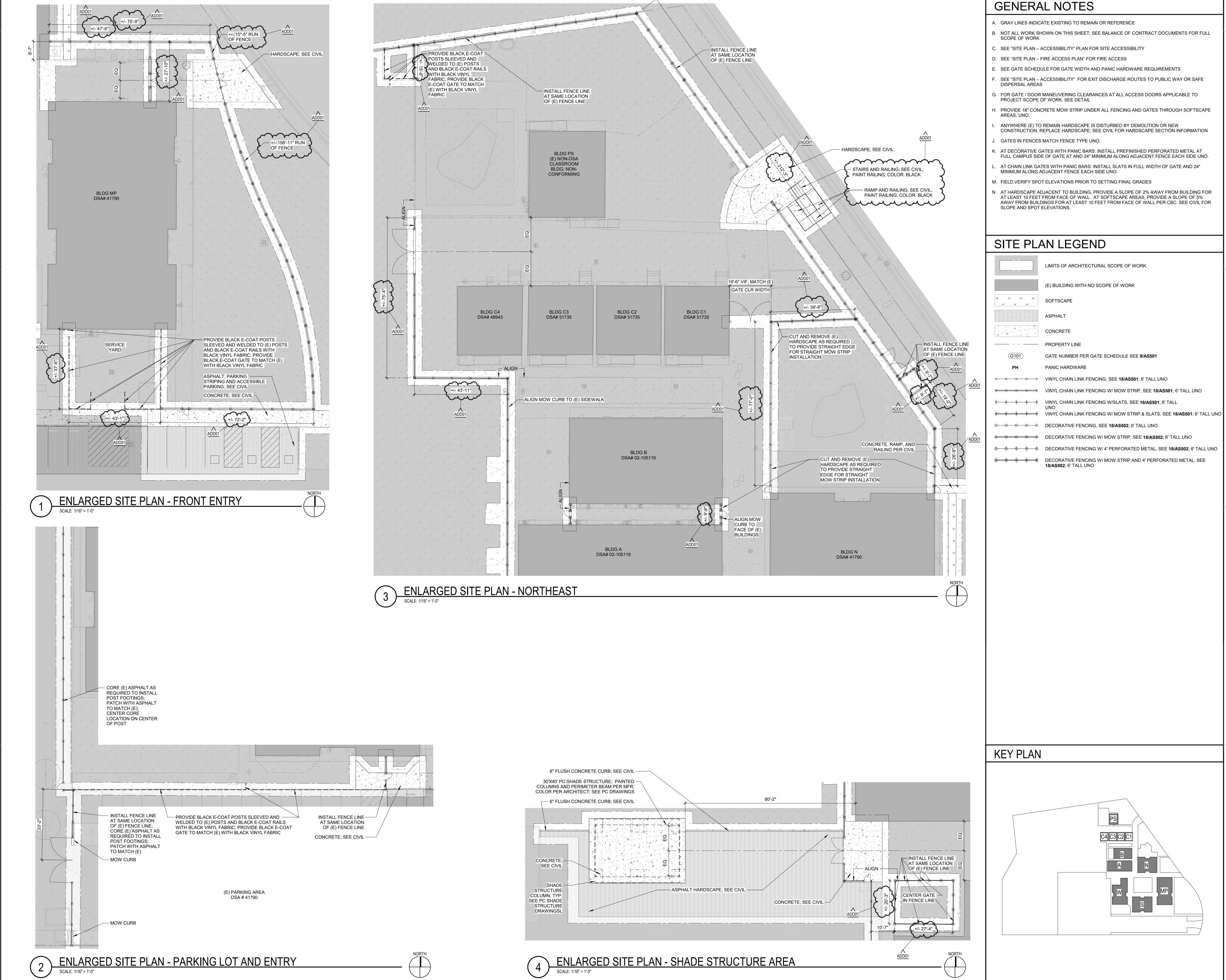
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TITLE

OVERALL SITE PLAN

HEET

AS101



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ENLARGED SITE PLANS

HEET

AS102

NOTE 4: WHERE REQ ON SCHED. PROVIDE 11 GA PERFORATED MTL SCREEN (56% OPEN AREA) AT GATE: FIN TO MATCH GATE FRAME: PROVIDE 11 GA PERFORATED MTL SCREEN (56% OPEN AREA) AT FENCE ADJACENT TO GATE BOTH SIDES 24" W (MIN), COLOR TO MATCH GATE FRAME, PROVIDE CHANNEL CLOSURE ON OUTSIDE OF METAL SCREEN; FIN TO MATCH GATE FRAME CHAIN LINK GATE - SWING - FIRE ACC DSA IR A-22 - APPENDIX A: A10 AND A16

E 2: RAILS. POSTS. STRETCHER BARS. TRUSS RODS. TIES. & CAPS TO BE POWDER COATED. UNO

E 3: ALL CAVITIES IN GATE ELEMENTS SHALL BE ENCLOSED AND WATERTIGHT ON ALL SIDES

TERMINAL POST W/ CAP

- FULCRUM LATCH W/

RECEIVER TO ACCEPT

PROVIDE FULL PRIVACY

WINGED SLATS OR PERF

METAL PER SCHED, FIN &

2' MIN FROM GATE FRAME

EACH SIDE PER SCHED

180 DEGREE HINGE, TYP

- CANE BOLTS PER SCHED:

RECEIVER IN CLOSED

POSITION ON SECOND

AT ALL LOCS; SEE

AS501

ACTION GATES ONLY:

PADLOCK; SEE HDW

- TOP RAIL

— KNOX BOX; LOCATE PER PER

32" CLR MIN @ 90°

@ ACC GATE; VIF

CODE ANALYSIS SITE PLAN; SEE

NOTE 1: VINYL COATED CHAIN LINK, UNO; COLOR PER SCHED

SEE SCHED

NOTE 1: POWDER COAT CANE BOLT, RECEIVER SET, AND STUDS; COLOR TO MATCH GATE FRAME NOTE 2: ALL WELDS TO BE FULL LENGTH AND GROUND SMOOTH INTERMEDIATE POST MINIMUM FOOTING DIMENSIONS FABRIC HT | POST SIZE | FTG DIA | TERMINAL POST (END, CORNER, GATE) MINIMUM FOOTING DIMENSIONS GATE LEAF HT GATE LEAF WIDTH POST SIZE FTG DIA FTG DEPTH 4' OR LESS OVER 4' - 6'

NOTE 1: THIS APPLIES TO FENCES W/ MAX HEIGHT OF 8'-0" TE 2: MAX DISTANCE TO ADJACENT POST IS 8'-0" FOR OPEN FENCES AND 4'-0" FOR SOLID FENCES, FENCES WITH SLATS, OR FENCES WITH PERF METAL

CL FENCE POST FOOTING AT BLDG NOT PART OF DSA SS AND FLS APPROVAL: DSA IR A-22 - APPENDIX A: A10 AND A16

OVER 14' - 16' 6 5/8" NOTE 1: SEE DECORATIVE METAL FENCE SPECIFICATION SECTION FOR ADDITIONAL INFO CL FENCE & GATE POST FTG SIZES NOT PART OF DSA SS AND FLS APPROVAL; SCALE: NTS DSA IR A-22 - APPENDIX A: A10 AND A16

OVER 6' - 8'

2-7/8"

2-7/8"

OVER 4' - 6'

OVER 8' - 10'

OVER 10' - 12'

OVER 12' - 14'

OVER 14' - 16'

OVER 4' - 6'

OVER 6' - 8'

OVER 8' - 10'

OVER 10' - 12'

OVER 12' - 14'

OVER 14' - 16' 4' OR LESS OVER 4' - 6'

OVER 6' - 8'

OVER 8' - 10'

OVER 10' - 12'

OVER 12' - 14'

4' OR LESS

OVER 6' - 8'

2-7/8"

CL POST FTG TO 8' & MOW STRIP DSA IR A-22 - APPENDIX A: A10 AND A16

CHAIN LINK GATE KICK PLATE

POST, SEE SPECS -

3/8" EASED EDGES; TYP -

DSA IR A-22 - APPENDIX A: A10 AND A16

SEE DETAIL AS501 CHANNEL CLOSURE ON OUTSIDE OF METAL SCREEN; FIN TO MATCH GATE FRAME CHAIN LINK GATE - SWING - DOUBLE

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STRUCTURE

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ADDENDUM #01

DATE

04/09/2025

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250325. Q

KICK | HDW | CANE | KNOX

-- -- -- --HINGE YES YES --

COMMENTS

OMIT PULL ON STREET SIDE OF THIS GATE

VOLTAGE

ACCESS

GATE FRAME; TERMINATES AT TOP AND BOTTOM OF HDW

250325. Q1

- FULL WELD TO FRAME AT

- 1/8" GALV STEEL KICKPLATE

TOP AND SIDES; GRIND

POWDER COAT FINISH;

COLOR TO MATCH GATE

PROVIDE WEEP PATH ON

SPOT WELD AND GRIND

CAPTURED WATER

HARDSCAPE PER

LANDSCAPE OR CIVIL

SLOPE TOP 2% MAX IF

PATH OF TRAVEL

12" OC MAX

LOCATED IN ACCESSIBLE

CONT CONC MOW STRIP, TYP

- CONCRETE FOOTING

- (2) #4 BARS AND #4 BARS AT

SMOOTH ON BOTTOM SIDE

PROVIDE WEEP TO RELEASE

FINISH GRADE / MOW STRIP

250325. Q1

WELDS SMOOTH

GATE FRAME

GATE FRAME

SIDES OF PIPE

OF GATE

NOTE: FORCE TO OPEN GATE NOT TO EXCEED 5 LBS, SHOULD BE OPERABLE WITH ONE HAND, AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST

250325. Q1

- 1/2" DIAMETER X 1" LONG

- 1/2" DIAMETER X 1" LONG

HANG STUD WELDED TO

- 1" DIAMETER (MIN) SOLID

- (2) STEEL SLEEVES WELDED

**BOTH SIDES TO GATE FRAME** 

- GALV STEEL RECEIVER SET

CONCRETE; 2" MINIMUM

LENGTH EMBED; PROVIDE

RECEIVER AT CLOSED AND

- FINISH GRADE / MOW STRIP /

PROVIDE 8" DIA X 24" DEEP

CONCRETE FOUNDATION TO

WELDED TO FRAME

STEEL CANE BOLT

IN AC PAVING OR

OPEN POSITIONS

HARDSCAPE PER

LANDSCAPE OR CIVIL

- AT TURF LOCATIONS:

RECEIVE CANE BOLT

RECEIVER: CONCRETE

STRENGTH TO MATCH

REQUIREMENTS FOR CONC

AT CONCRETE SIDEWALKS

GATE FRAME

FRAME

OVER-TRAVEL STOP STUD

DECORATIVE PDW COAT BLACK 3'-0" | 6'-0" DECORATIVE E-COAT BLACK PERF METAL BLACK FULL INGRESS / EGRESS PRIVACY 19/AS502

6'-0" DECORATIVE E-COAT BLACK PERF METAL BLACK FULL

101 DECORATIVE E-COAT BLACK 3'-0" 3'-0" 6'-0" DECORATIVE E-COAT BLACK PERF METAL BLACK FULL INGRESS / EGRESS PRIVACY 3/AS502 --

16 107.1 CHAIN LINK PDW COAT BLACK 9'-9" 9'-9" 6'-0" CHAIN LINK VINYL BLACK -- -- FIRE ACCESS PADLOCK 4/AS501
17 107 DECORATIVE E-COAT BLACK 6'-0" 6'-0" 6'-0" DECORATIVE E-COAT BLACK PERF METAL BLACK FULL MAINTENANCE PADLOCK 20/AS502

(E) (E) (E) 4'-0" 4'-0" (E) (E) (E) (E) (E) (E)

GATE PANEL

VISION / REACH BARRIER

6'-0" DECORATIVE E-COAT BLACK PERF METAL BLACK FULL INGRESS / EGRESS PRIVACY 19/AS502

6'-0" CHAIN LINK VINYL BLACK PERF METAL BLACK FULL INGRESS / EGRESS PRIVACY 19/AS501

6'-0" CHAIN LINK VINYL BLACK SLATS BLACK FULL INGRESS / EGRESS PRIVACY 19/AS501

6'-0" CHAIN LINK VINYL BLACK SLATS BLACK FULL INGRESS / EGRESS PRIVACY 19/AS501

6'-0" DECORATIVE E-COAT BLACK PERF METAL BLACK FULL MAINTENANCE PADLOCK 19/AS502

6'-0" CHAIN LINK VINYL BLACK \_-- -- INGRESS / EGRESS PRIVACY 19/AS501

- CHAINLINK FENCE - 3/16" STL PLATES, 6" HIGH x 6" WIDE MIN; POWDER COAT FIN; COLOR PER SCHED KNOX BOX HINGED DOOR VERIFY MNT HT W/
LOCAL FIRE AHJ (4) GRADE 5 OR GRADE 8, 3/8" DIA TAMPER PROOF FASTENER, PAINT EXPOSED SIDE TO MATCH PLATE KNOX BOX; COLOR TO MATCH FENCE POSTS

DSA IR A-22 - APPENDIX A: A10 AND A16

NOT PART OF DSA SS AND FLS APPROVAL

FTG DEPTH

DSA IR A-22 - APPENDIX A: A10 AND A16

NOT PART OF DSA SS AND FLS APPROVAL

DSA IR A-22 - APPENDIX A: A10 AND A16

GATE FRAME

CHAIN LINK PDW COAT BLACK 3'-0"

CHAIN LINK PDW COAT BLACK 3'-0"

105.1 DECORATIVE E-COAT BLACK 4'-0"

1 104.2 DECORATIVE E-COAT BLACK 3'-0" 1 101 (E) (E) (E) 4'-0" 4

**DIMENSIONS** 

CHAIN LINK PDW COAT BLACK 10'-6" 10'-6" 6'-0" CHAIN LINK VINYL BLACK

CHAIN LINK PDW COAT BLACK 10'-6" 10'-6" 6'-0" CHAIN LINK VINYL BLACK

108 DECORATIVE PDW COAT BLACK 10'-0" 10'-0" 6'-0" DECORATIVE E-COAT BLACK

007 107.1 CHAIN LINK PDW COAT BLACK 6'-0" 6'-0" 6'-0" CHAIN LINK VINYL BLACK 008 105 DECORATIVE E-COAT BLACK 4'-0" 4'-0" DECORATIVE E-COAT BLACK

LEAF 2

BOX; WELD TO HDW BOX HDW AND HOLES AS REQ FOR HDW; SEE HDW SCHED; SEAL HDW TO BOX PRIOR TO INSTALLING TRIM PLATES - 7 1/2" x 10" x 2" 14 GA STL PLATE HDW BOX AND 14 GA STEEL STRIKE PLATE BOX FULL WELD ON ALL SIDES TO BE WEATHERPROOF - GRIND SMOOTH ALL EDGES; POWDER COAT; COLOR TO MATCH GATE FRAME; EXTEND BOX FULL WIDTH OF LEAF AT PANIC BAR LOC TYP ALL SIDES 1/8 V CHAINLINK FENCE FABRIC; SLATS OR PERF METAL PERF METAL RIVETED TO CHANNEL TRIM (EXTEND 24" MIN FROM GATE PER SCHED; WELD TO FRAME & POSTS; EACH SIDE) PER GATE POWDER COAT FIN; COLOR PER SCHED, SCHED & FENCE TYPE ON ARCHITECTURAL SITE PLAN EXTEND STRIKE PLATE RECEIVER TO RECEIVE PANIC BAR STRIKE PLATE AS REQ 3/16" THICK STL PLATE FULL HT ASTRAGAL PER GATE SCHED; FULL LENGTH WELD TO HDW BOX & GATE FRAME; HINGE; NO ACCESS TO GRIND WELDS SMOOTH; FASTENERS ON PUBLIC SIDE; POWDER COAT; COLOR TO FIN TO MATCH GATE FRAME MATCH GATE FRAME - 3/16" THICK STL PLATE FULL HT - PANIC BAR / HDW PER HDW ASTRAGAL BETWEEN HINGES PER GATE SCHED; FULL LENGTH WELD TO POST; GRIND WELDS SMOOTH; POWDER - EXTEND HDW BOX FOR COAT; COLOR TO MATCH GATE FRAME PANIC HDW MOUNT AS REQ CHAIN LINK GATE HARDWARE BOX

DSA IR A-22 - APPENDIX A: A10 AND A16

GATE SCHEDULE

-- - FIRE ACCESS PADLOCK 4/AS501

MAINTENANCE

FIRE ACCESS

EGRESS

TYPE | FINISH | COLOR | TYPE | COLOR | HT | GATE USE TYPE | FUNCTION | DETAIL | OPNR | HDW | ASTRAGALS | CONTROL | CLOSER | PLATES | BOX | BOLT | BOX

PADLOCK 20/AS50

PADLOCK 4/AS502

PRIVACY 19/AS502

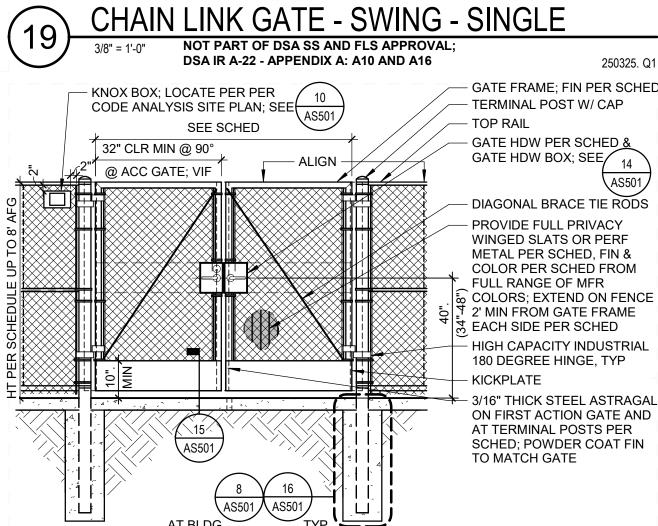
- POST CAP, TYP - PROVIDE FULL PRIVACY WINGED SLATS WHERE INDICATED ON SITE PLAN, COLOR PER ARCHITECT 10'-0" MAX - 8'-0" MAX AT SLATS FROM MFRS FULL RANGE SPACE EVENLY OF COLORS - VINYL COATED CHAIN LINK FABRIC: TOP OF FABRIC SHALL NOT EXTEND ABOVE TOP RAIL - INTERMEDIATE RAIL AT FENCES TALLER THAN 5' - TIES @ 24" OC MAX TOP AND BOTTOM, TYP - FLAT STRETCHER BAR AT END POSTS, TYP - 3/8" DIA TRUSS ROD W/ TIGHTERNER AT CORNERS - BOTTOM RAIL - GRADE / MOW CURB / HARDSCAPE PER CIVIL OR LANDSCAPE IOTE 1: VINYL COATED CHAIN LINK, UNO; COLOR PER SCHED

NOTE 2: RAILS, POSTS, STRETCHER BARS, TRUSS RODS, TIES, & CAPS TO BE POWDER COATED, UNO

NOT PART OF DSA SS AND FLS APPROVAL;

DSA IR A-22 - APPENDIX A: A10 AND A16 250325. Q GATE FRAME; FIN PER SCHE KNOX BOX; LOCATE PER PER CODE ANALYSIS SITE PLAN; SEE - TERMINAL POST W/ CAP 2'-0" SLAT - 3/16" THICK STL PLATE FULL OR PERF MTL HT ASTRAGAL PER GATE SCHED; FULL LENGTH WELDS SEE SCHEDULE GRIND WELDS SMOOTH; (32" CLR MIN @ 90°) POWDER COAT; COLOR TO MATCH GATE FRAME - TOP RAIL - DIAGONAL BRACE TIE RODS - GATE HDW PER SCHED & GATE HDW BOX; SEE - PROVIDE FULL PRIVACY WINGED SLATS OR PERFORATED METAL PER SCHED, FIN & COLOR PER SCHED FROM FULL RANGE OF MFR COLORS; EXTEND ON FENCE 2' MIN FROM GAT FRAME EACH SIDE PER AS501/ - HINGES PER HDW SCHED, TYP; FIN TO MATCH FENCE KICKPLATE PER GATE SCHED

TE 1: VINYL COATED CHAIN LINK, UNO; COLOR PER SCHED E 2: RAILS, POSTS, STRETCHER BARS, TRUSS RODS, TIES, & CAPS TO BE POWDER COATED, UNO TE 3: ALL CAVITIES IN GATE ELEMENTS SHALL BE ENCLOSED AND WATERTIGHT ON ALL SIDES E 4: WHERE REQ ON SCHED, PROVIDE 11 GA PERF MTL SCREEN (56% OPEN AREA) AT GATE; FIN MATCH GATE FRAME; PROVIDE 11 GA PERF MTL SCREEN (56% OPEN AREA) AT FENCE ADJACENT TO GATE BOTH SIDES 24" W (MIN), COLOR TO MATCH GATE FRAME, PROVIDE CHANNEL CLOSURE ON



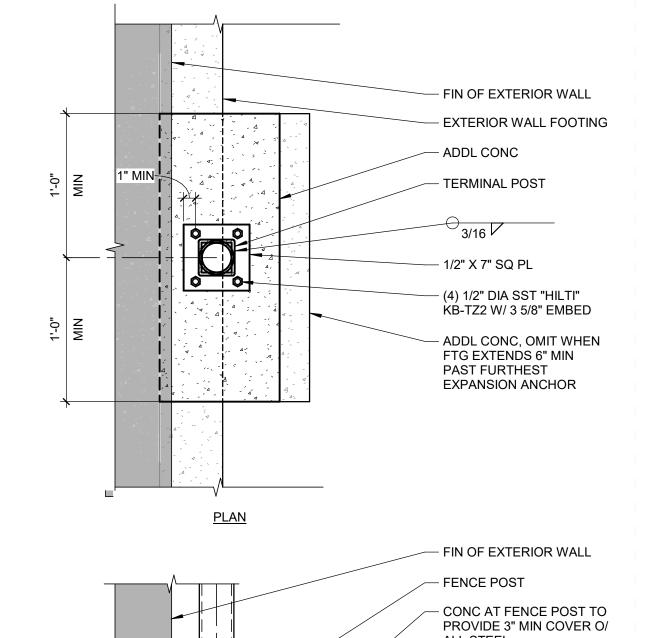
NOTE 1: VINYL COATED CHAIN LINK, UNO; COLOR PER SCHED E 2: RAILS. POSTS. STRETCHER BARS. TRUSS RODS. TIES. & CAPS TO BE POWDER COATED. UNO TE 3: ALL CAVITIES IN GATE ELEMENTS SHALL BE ENCLOSED AND WATERTIGHT ON ALL SIDES NOTE 4: WHERE REQ ON SCHED, PROVIDE 11 GA PERFORATED MTL SCREEN (56% OPEN AREA) AT GATE: FIN TO MATCH GATE FRAME: PROVIDE 11 GA PERFORATED MTL SCREEN (56% OPEN ARÉA) AT FENCE ADJACENT TO GATE BOTH SIDES 24" W (MIN), COLOR TO MATCH GATE FRAME, PROVIDE

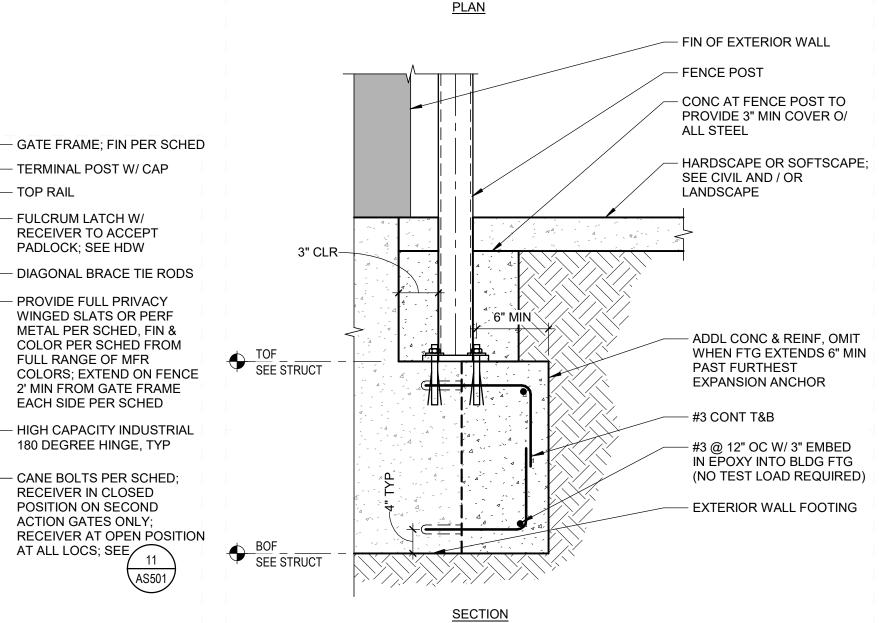
AS501

MANAGEMENT IONAKIS PROJECT NO **CLIENT PROJECT NO:** ?00.00.00?

LIONAKIS 2017 OUTSIDE OF METAL SCREEN; FIN TO MATCH GATE FRAME

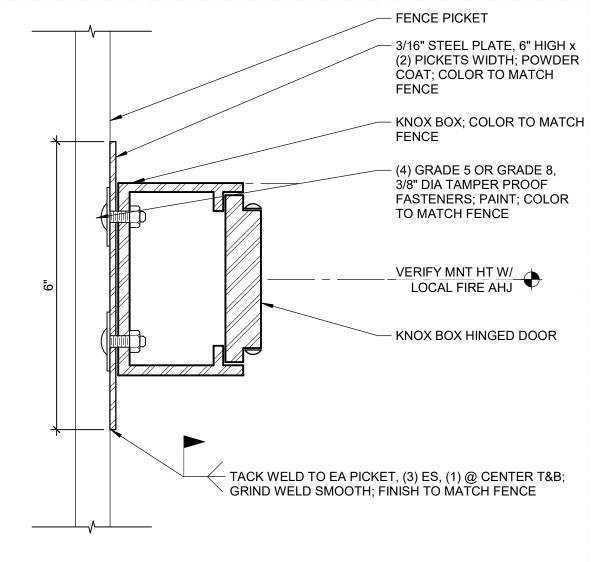
> GATE SCHEDULE & CHAIN LINK FENCE & GATE DETAILS





DSA IR A-22 - APPENDIX A: A10 AND A16

Sacramento, CA 95818 P 916.558.1900 www.lionakis.com CONSULTANT



 GATE FRAME; TERMINATES AT TOP AND BOTTOM OF HDW BOX; WELD TO HDW BOX HDW AND HOLES AS REQ FOR HDW; SEE HDW SCHED; SEAL HDW TO BOX PRIOR TO **INSTALLING TRIM PLATES** - 7 1/2" x 10" x 2" 14 GA STL PLATE HDW BOX AND 14 GA STEEL STRIKE PLATE BOX FULL WELD ON ALL SIDES TO BE WEATHERPROOF - GRIND SMOOTH ALL EDGES; POWDER COAT; COLOR TO MATCH GATE FRAME; **EXTEND BOX FULL WIDTH OF** LEAF AT PANIC BAR LOC TYP ALL SIDES 1/8 V DECORATIVE FENCE PICKET - PERF METAL RIVETED TO CHANNEL TRIM PERF METAL (EXTEND 24" PER SCHED; WELD TO FRAME & POSTS; MIN FROM GATE EACH SIDE) POWDER COAT FIN; COLOR PER SCHED, PER GATE SCHED & FENCE TYPE ON ARCH SITE PLAN - DECORATIVE FENCE TERMINAL POST - DECORATIVE FENCE PICKET 3/16" THICK STL PLATE FULL HT ASTRAGAL PER GATE SCHED; FULL LENGTH WELD TO HDW BOX & GATE FRAME; HINGE; NO ACCESS TO GRIND WELDS SMOOTH; FASTENERS ON PUBLIC SIDE; POWDER COAT; COLOR TO FIN TO MATCH GATE FRAME MATCH GATE FRAME - 3/16" THICK STL PLATE FULL HT - PANIC BAR / HDW PER HDW ASTRAGAL BETWEEN HINGES PER GATE SCHED; FULL LENGTH WELD TO POST; GRIND WELDS SMOOTH; POWDER - EXTEND HDW BOX FOR PANIC HDW MOUNT AS REQ COAT; COLOR TO MATCH GATE FRAME DECORATIVE GATE HARDWARE BOX

1 1/2" = 1'-0" NOT PART OF DSA SS AND FLS APPROVAL

POST CAP, TYP 8'-0" NOMINAL - 1 3/4" RAILS, TYP FLAT MOUNT OR SWIVEL BRACKET WHERE REQ PER MFR, TYP

GALV PERF METAL INFILL W/ PVDF FIN & U-EDGE ON PRIVATE SIDE OF FENCE PER SITE PLAN; 16 GA; 3/16" ROUND ON 1/4" STAGGERED CENTERS, 51% OPEN AREA; COLOR: BLACK TO MATCH FENCE; INSTALL PER MFR RECOMMENDATIONS mmm 2-1/2" SQ X 12 GA POSTS @ FENCES UP TO 6' AFG; 4" SC X 12 GA POSTS @ FENCES FROM 6' TO 8' AFG - 1" SQ X 14 GA PICKET @ 4.98" OC, TYP - GRADE / MOW CURB / HARDSCAPE PER CIVIL OR LANDSCAPE

NOTE 1: E-COAT ALL ELEMENTS OF FENCE; COLOR PER ARCHITECTURAL SITE PLAN NOTE 2: ALL WELDS TO BE 1/8" FILLET AT ALL PICKETS AND HORIZ TO POST WHERE NEEDED

DSA IR A-22 - APPENDIX A: A10 AND A16

PER SCHED ·

SEE SCHED

(32" CLR MIN @ 90°)

250325. Q DATE DESCRIPTION DSA APPROVAL 04/09/2025 HEAVY DUTY 180° HYDRAULIO ADDENDUM #01 GATE CLOSER AND HINGE, TY ADD01 05/12/2025

ABRAHAM LINCOLN ELEMENTARY

SCHOOL - FENCING & PC SHADE

STRUCTURE

3324 GLENMOOR DR

SACRAMENTO, CA 95827

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

5735 47th Ave Sacramento, CA 95824

TO MATCH PERF METAL AT FENCING; EXTEND ON ONAKIS PROJECT NO FENCING 2' MIN BOTH CLIENT PROJECT NO: ?00.00.00? LIONAKIS 2017 POSITION ONLY; SEE AS502

MANAGEMENT

– KNOX BOX, SEE 🛑

- 4" SQ X 12 GA POST

\AS502/

– GATE HARDWARE BOX,

- 1" SQ X 14 GA PICKET @ 4" OC

2" SQ X 11 GA GATE FRAME

HARDSCAPE PER CIVIL OR

 $\sim\sim\sim\sim$ 

MATCH PERF METAL AT

CANE BOLTS PER SCHED;

RECEIVER IN CLOSED

POSITION ON SECOND

**ACTION GATES ONLY;** RECEIVER AT OPEN POSITION AT ALL LOCS; SEE

FENCING; EXTEND ON FENCING 2' MIN BOTH SIDES

PERF METAL PER SCHED

- GRADE / MOW CURB /

LANDSCAPE

NOTE 1: E-COAT ALL ELEMENTS OF FENCE; COLOR PER ARCHITECTURAL SITE PLAN NOTE 2: ALL WELDS TO BE 1/8" FILLET AT ALL PICKETS AND HORIZ TO POST WHERE NEEDED DECORATIVE GATE - SWING - SINGLE NOT PART OF DSA SS AND FLS APPROVAL; ?DRS TRACKING NUMBER? DSA IR A-22 - APPENDIX A: A10 AND A16 ?YYMMDD?. C

- 4" SQ X 12 GA POST - 2" SQ X 11 GA GATE FRAME 2' PERF METAL . PER SCHED - KNOX BOX, SEE / 10 ` SEE SCHEDULE — 1" SQ X 14 GA PICKET @ 4" OC — GATE <u>HA</u>RDWARE BOX, SEE 14 AS502 HYDRAULIC GATE CLOSER & HINGE, TYP GRADE / MOW CURB / HARDSCAPE PER CIVIL OR LANDSCAPE
PERF METAL PER SCHED TO

DECORATIVE METAL FENCE & GATE DETAILS

AS502

DSA IR A-22 - APPENDIX A: A10 AND A16 DSA IR A-22 - APPENDIX A: A10 AND A16 250325. Q1 250325. Q1 - 1/2" DIAMETER X 1" LONG OVER-TRAVEL STOP STUD WELDED TO FRAME 1/2" DIAMETER X 1" LONG HANG STUD WELDED TO - 1" DIAMETER (MIN) SOLID STEEL CANE BOLT GATE FRAME - (2) STEEL SLEEVES WELDED 1-3/4" MIN DEEP GALV STEEL BOTH SIDES TO GATE FRAME U-CHANNEL; FIN TO MATCH - GALV STEEL RECEIVER SET IN AC PAVING OR CONCRETE; 2" MINIMUM - 1/8" GALV STL PLATE - FIN TO LENGTH EMBED; PROVIDE MATCH GATE RECEIVER AT CLOSED AND OPEN POSITIONS 1-3/4" MIN DEEP GALV STEEL U-CHANNEL; FIN TO MATCH FINISH GRADE / MOW STRIP / HARDSCAPE PER LANDSCAPE OR CIVIL - DRILL 1/8" DIA WEEP HOLES - AT TURF LOCATIONS: PROVIDE 8" DIA X 24" DEEP CONCRETE FOUNDATION TO RECEIVE CANE BOLT RECEIVER; CONCRETE STRENGTH TO MATCH REQUIREMENTS FOR CONC AT CONCRETE SIDEWALKS

OTE 1: POWDER COAT CANE BOLT, RECEIVER SET, AND STUDS; COLOR TO MATCH GATE FRAME NOTE 2: ALL WELDS TO BE FULL LENGTH AND GROUND SMOOTH OTE 3: WHERE CANE BOLT IS REQUIRED AT EGRESS GATE, INSTALL RECEIVER SET IN OPEN

1 1/2" = 1'-0" NOT PART OF DSA SS AND FLS APPROVAL DSA IR A-22 - APPENDIX A: A10 AND A16

FABRIC HT	POST SIZE	FTG	DIA FTG [	EPTH	
3'	2-1/2"	12	" 24	<u>!"</u>	
3.5'	2-1/2"	12			
4'	2-1/2"	12			
5' 2-1/2"		12	" 24	ļ."	
6'	3"	13	" 30	)"	
7'	3"	13	" 36	6"	
8'	3"	13	" 42	2"	
TERMIN	AL POST (END	, CORNE	ER, GATE) MININ	IUM FOOTIN	G DIMENSIONS
GATE LEAF H	T GATE LEAF	WIDTH	POST SIZE	FTG DIA	A FTG DEPTH
	4' OR LE	SS	2-1/2"	12"	24"
	OVER 4'	- 6'	3"	13"	24"
	OVER 6'	- 8'	3"	13"	24"
4' OR LESS	OVER 8'	- 10'	4"	18"	30"
	OVER 10'	- 12'	4"	18"	30"
	OVER 12'	- 14'	4"	18"	30"
	OVER 14'	- 16'	6"	26"	36"
	4' OR LE	SS	3"	13"	30"
	OVER 4'	- 6'	4"	18"	30"
	OVER 6'	- 8'	4"	18"	30"
OVER 4' - 6'	OVER 8'	- 10'	6"	26"	36"
	OVER 10'	- 12'	6"	26"	36"
	OVER 12'	- 14'	6"	26"	42"
	OVER 14'	- 16'	6"	26"	42"
	4' OR LE	SS	3"	13"	42"
	OVER 4'	- 6'	4"	18"	42"
	OVER 6'	- 8'	6"	26"	48"
OVER 6' - 8'	OVER 8'	- 10'	6"	26"	48"
	OVER 10'	- 12'	6"	26"	48"
	OVER 12'	- 14'	6"	26"	48"
	OVER 14'	- 16'	6"	26"	48"

NOT PART OF DSA SS AND FLS APPROVAL;

DSA IR A-22 - APPENDIX A: A10 AND A16

- SLOPE TOP 2% MAX IF POST, SEE SPECS -LOCATED IN ACCESSIBLE PATH OF TRAVEL 3/8" EASED EDGES; TYP -- CONT CONC MOW STRIP, TYP - (2) #4 BARS AND #4 BARS AT 12" OC MAX - CONCRETE FOOTING SEE DETAIL AS502

DSA IR A-22 - APPENDIX A: A10 AND A16

DECORATIVE GATE KICK PLATE

NOT PART OF DSA SS AND FLS APPROVAL

DSA IR A-22 - APPENDIX A: A10 AND A16

NOTE 1: THIS APPLIES TO FENCES W/ MAX HEIGHT OF 8'-0" OTE 2: MAX DISTANCE TO ADJACENT POST IS 8'-0" FOR OPEN FENCES AND 4'-0" FOR SOLID FENCES, FENCES WITH SLATS, OR FENCES WITH PERF METAL

<u>SECTION</u>

<u>PLAN</u>

DECOR FENCE POST FOOTING AT BLDG NOT PART OF DSA SS AND FLS APPROVAL; DSA IR A-22 - APPENDIX A: A10 AND A16

- FIN OF EXTERIOR WALL

ADDL CONC

- 1/2" X 7" SQ PL

- (4) 1/2" DIA SST "HILTI"

FTG EXTENDS 6" MIN

**EXPANSION ANCHOR** 

FIN OF EXTERIOR WALL

- CONC AT FENCE POST TO

PROVIDE 3" MIN COVER O/

- HARDSCAPE OR SOFTSCAPE;

- ADDL CONC & REINF, OMIT

- #3 @ 12" OC W/ 3" EMBED

IN EPOXY INTO BLDG FTG

(NO TEST LOAD REQUIRED)

EXTERIOR WALL FOOTING

PAST FURTHEST **EXPANSION ANCHOR** 

- #3 CONT T&B

WHEN FTG EXTENDS 6" MIN

SEE CIVIL AND / OR

FENCE POST

ALL STEEL

LANDSCAPE

PAST FURTHEST

KB-TZ2 W/ 3 5/8" EMBED

- ADDL CONC, OMIT WHEN

**TERMINAL POST** 

- EXTERIOR WALL FOOTING

DECOR POST FTG TO 8' & MOW STRIP

DECOR FENCE & GATE POST FTG SIZES

NOTE 1: E-COAT ALL ELEMENTS OF FENCE; COLOR PER ARCHITECTURAL SITE PLAN OTE 2: ALL WELDS TO BE 1/8" FILLET AT ALL PICKETS AND HORIZ TO POST WHERE NEEDED NOTE 3: FORCE TO OPEN GATE NOT TO EXCEED 5 LBS DECORATIVE GATE - SWING - DOUBLE NOT PART OF DSA SS AND FLS APPROVAL; DSA IR A-22 - APPENDIX A: A10 AND A16

NOTE 1: E-COAT ALL ELEMENTS OF FENCE; COLOR PER ARCHITECTURAL SITE PLAN NOTE 2: ALL WELDS TO BE 1/8" FILLET AT ALL PICKETS AND HORIZ TO POST WHERE NEEDED DECORATIVE GATE - SWING - FIRE ACC NOT PART OF DSA SS AND FLS APPROVAL; DSA IR A-22 - APPENDIX A: A10 AND A16

2' PERF METAL

PER SCHED

SEE SCHEDULE

NOTE 1: E-COAT ALL ELEMENTS OF FENCE; COLOR PER ARCHITECTURAL SITE PLAN NOTE 2: ALL WELDS TO BE 1/8" FILLET AT ALL PICKETS AND HORIZ TO POST WHERE NEEDED

NOT PART OF DSA SS AND FLS APPROVAL:

DSA IR A-22 - APPENDIX A: A10 AND A16

SEE SCHEDULE; 20'-0" CLR BTWN GATES AT

90 DEGREES MIN AT FIRE LANE ACCESS

DECOR GATE - SWING - DBL - MULLION

- 4" SQ X 12 GA POST

- KNOX BOX, SEE / 10

POST MULLION AS502

4" OC

SEE/ 14 >

AS502

- HEAVY DUTY 180°

HYDRAULIC GATE

CLOSER & HINGE, TYP

GRADE / MOW CURB /

PERF METAL PER SCHED

TO MATCH PERF METAL

AT FENCING; EXTEND ON

FENCING 2' MIN BOTH

- CANE BOLTS PER

SCHED; RECEIVERS AT

OPEN POSITIONS ONLY;

250325. Q1

3" CLR-

TOF SEE STRUCT

BOF SEE STRUCT

SIDES OF GATE

- FULCRUM LATCH W/

PADLOCK; SEE HDW

GRADE HINGES; TYP

– KNOX BOX, SEE √ 10

- DIAGONAL BRACING TIE

— 1" SQ X 14 GA PICKET @

— 6" SQ X 12 GA POST

RODS AT INTERIOR SIDE

- 2" SQ X 11 GA GATE FRAME

CANE BOLTS ON PRIVATE

SIDE OF GATE: (1) EA GATE

AT CLOSED POSITION AND (1)

EA GATE IN OPEN POSITION,

- GRADE / MOW CURB / HARDSCAPE PER CIVIL OR

LANDSCAPE

AS502

- POST CAP

4.98" OC

RECEIVER TO ACCEPT

- HIGH CAPACITY INDUSTRIAL

HARDSCAPE PER CIVIL

2" SQ X 11 GA GATE FRAME

— 1" SQ X 14 GA PICKET @

– GATE <u>HA</u>RDWARE BOX,

#### **SECTION 08 71 00**

#### **GATE HARDWARE**

#### **PART 1 - GENERAL**

#### 1.01 SECTION INCLUDES

- A. BHMA finish gate hardware for gate and gate frames.
- 1.02 PRODUCTS SUPPLIED BUT NOT INSTALLED UNDER THIS SECTION
  - A. Hardware templates for gates, gates, and frames.

#### 1.03 RELATED SECTIONS

- A. Section 32 31 13 Chain Link Fences and Gates.
- B. Section 32 31 19.16 Swinging Decorative Metal Gates.
- C. Section 32 31 19.23 Specialty Metal Fences and Gates.
- D. Divisions 26 through 28: Electrical rough in, wiring and connectors for electrified hardware including, but not limited to:
  - 1. Wire and connectivity from ceiling through frame to electrified hardware devices including non-Section 08 71 00 task of providing wiring inside of gates.

#### 1.04 REFERENCES

- A. The publications listed below form a part of this Section to the extent referenced. The publications are referred to in the text by the basic designation only.
  - 1. Refer to Division 01 for definitions, acronyms, and abbreviations.
  - 2. Unless otherwise noted; standards, manuals, and codes refer to the latest edition as of the issue date of this Project Manual.
- B. Conform to the following Referenced Standards and Requirements:
  - 1. CBC 2022 California Building Code.
  - 2. ADA Americans with Disabilities Act 2010 Standards for Accessible Design.
  - 3. ANSI A156 Series Builders Hardware Manufacturers Association (BHMA) Standards Set.
- C. Conform to the following Regulatory Requirements (CBC 2022 California Building Code):
  - 1. Gates / Gateways as part of an accessible route shall comply with CBC Section 11B-404.
  - 2. All hardware for accessible gates shall meet the requirements of CBC Sections 11B-404.2.7, 11B-404.2.9, and 1010.1.9.1.

- 3. The clear opening width for a gate shall be 32 inches minimum. The swinging gates it shall be measured between the face of the gate and the frame stop, with the gate open 90 degrees.
  - a. There shall be no projections into it below 34 inches above finish floor and 4 inch maximum projections into it between 34 inches and 80 inches above finish floor or ground.
  - b. Gate closers and stops shall be permitted to be 78 inches minimum above finish floor or ground per CBC Section 11B-404.2.3.2.
- 4. Hand-activated gate opening hardware, handles, pulls, latches, locks, and other operating devices on accessible gates:
  - a. Shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.
  - b. Lever hardware shall be so mounted / centered between 36 inches and 44 inches above finished floor or ground.
  - c. Panic hardware shall be so mounted / centered between 36 inches and 44 inches above finished floor or ground. The clear width of the exit way is not less than 32 inches measured between the face of the gate and the opposite stop per CBC Section 11B-404.2.3.
  - d. Hardware for gate handles, pulls, latches, locks and other operating devices for use on means of egress gates shall comply with SFM Standard 12-10-2, Section 12-10-202 as contained in CCR Title 24, Part 12.
- 5. The force for pushing or pulling a gate open shall be as follows per CBC Section 11B-404.2.9:
  - a. Interior hinged gates, sliding or folding gates and exterior hinged gates operating force required to push or pull open a gate shall not exceed 5 pounds (22.2 N).
    - 1) These forces do not apply with to the force required to retract latch bolts or disengage other devices that hold the gate in a closed position.
  - b. The force required to activate any operable parts, such as retracting latch bolts or disengaging other devices, shall be no greater than 5 pounds to comply with CBC Section 11B-309.4.
  - c. Forces shall be applied to the latch side of the gate per CBC Section 1010.1.3.1.
- 6. Gate closing speeds shall be as follows per CBC Section 11B-404.2.8:
  - a. Mount gate closers for maximum swing of gate before setting stops.
  - b. Gates/gates closers, when provided, shall have sweep period adjusted: minimum of 5 seconds for a gate/gate to close from the 90-degree position to the 12 degree position.
  - c. Gates/gates with spring hinges require a minimum of 1.5 seconds to close from the 70 degree to the closed position.
- 7. Floor stops shall not be located in the path of travel and 4 inches maximum from walls.
- 8. Hardware, including panic hardware, shall not be provided with "Night Latch" (NL) function for any accessible gates or gates unless the following conditions are met. Such conditions must be clearly demonstrated and indicated in the specifications for devices:
  - a. Such hardware has a "dogging" feature.
  - b. It is dogged during the time the facility is open.
  - c. Such "dogging" operation is performed only by employees as their job function (non-public use).
- 1.05 QUALITY ASSURANCE

#### A. Supplier Qualifications and Documentation:

- 1. Hardware Supplier Qualifications: Firm specializing in the supply and servicing of institutional and commercial gate hardware; accredited by manufacturers; and having a minimum of three years documented experience. Hardware supplier to furnish list of at least ten past, finished projects. Include date competed, project location, and references. At least one member of the firm's staff shall be a member of DHI in good standing and is a DHI certified consultant having earned the title Architectural Hardware Consultant (AHC).
- B. Manufacturer of Submitted Devices Qualifications and Documentation:
  - Manufacturer Qualifications: Manufacturer specializing in manufacturing institutional and commercial gate hardware with a minimum five years with the following documented experience. Furnish list of at least ten past, finished projects. Include date competed, project location, and references. Past project contact information will determine if Builders Hardware is acceptable.
- C. Installer of Submitted Devices Qualifications and Documentation:
  - Installer of assembly shall be trained in the trade of hanging commercial gates on commercial frames with commercial hardware. Supplier and Installer of gate assemblies shall be authorized representative of manufacturers and have minimum of five years successful experience in detailing, supplying, and installing gate assemblies specified on projects of similar size, complexity, and type to this Project. Provide written documentation to show closers will be installed by an individual with successful experience installing closers to meet 5-pound opening force for gate complexity.

#### 1.06 SUBMITTALS

- A. The hardware groups/sets specified in Section 08 71 00 Part 3 are intended to establish type and design standard when used together with the requirements of this Section, Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections. Examine Contract Documents and furnish proper hardware for gate openings. Refer to specifications for clarification and detailed requirements and provide products and services in specifications even if not written in hardware groups/sets in Section 08 71 00 Part 3.
- B. For each opening submit coordinated (means and methods) requirements in accordance with Division 01 and a detailed gate, frame and hardware schedule. See pre-hardware and hardware scheduling requirements below. Submittals that do not meet means and methods, including missing related gates/frames submittal/shop drawings, will be returned for correction before checking.
- C. Pre-Hardware Scheduling Tasks:
  - 1. Coordinate work of this Section with other directly affected Sections and scope.
  - Provide required Division 08, means and method type work in accordance with Contract
    Documents at no additional cost to project, including Division 01 and language below. This
    Section supplier shall be provided with full documents, not just Section 08 71 00 Part 3
    hardware group/sets as that process does not meet Contract requirements.

- 3. Means and method type work includes, but is not limited to, coordination with plans and other specifications, templating, Section 08 71 00, and other Division 08 Section engineering and coordination. Starting submittal work or labor before means and method type work is completed does not constitute change orders.
- 4. Provide Request for Information (RFIs) for clarification items before submittals. This Section is not to be a stand-alone submittal but requires multiple Sections and Drawings coordination before submittals will be reviewed.
  - a. Coordinate length and sizes for hardware devices before submittals, Verify the gate hardware is compatible for use with the gates and gate/frames.
  - b. Report all prevailing conditions that will adversely affect satisfactory execution of work before submittals.
    - 1) Example 1: If gate stiles would inhibit the use of specified hardware, provide RFIs before starting detailed hardware headings or group submittal process.
    - 2) Example 2: Coordinate length and sizes for hardware devices before ordering materials. Verify the gate hardware is compatible for use with the gates and/or gate/frames including, but not limited to, special templates and sizes of devices.
  - c. This Section clarification items (RFIs) shall be reviewed by a non-design team coordinator before sending to design team for review.
    - 1) For clarification items that are means and methods (directed to or from one vendor to another vendor, framer/installer), Contractor shall coordinate and answer or list questions that are not design scope.
- 5. Multiple submittals for this Section work will not meet Contract requirements. Exceptions are as follows:
  - a. Submittals may be broken up into different gate vendor packages (for example: one gate vendor package, one hollow metal gate vendor package) but breaking each of these packages into multiple or separate packages is not permissible (example: separate project buildings or different floors broken out not permitted).
  - b. Frames that are required to be ordered early in the build process (under ten frames / openings required to meet project deadlines for early site work) may be broken into separate packages but remaining hardware in these packages will be rejected and not reviewed.
- 6. Coordinate with gate/frame internal reinforcement for gate hardware. In particular, coordinate gate preparation in accordance with applicable regulatory and trade standards specified.
- 7. Coordinate keying requirements with all openings with one Vendor. For keying scope, even if different Section gate/frame/gate scope packages are submitted with different hardware schedule submittals, only one Section 08 71 00 supplier is to oversee, coordinate, submit, furnish, and install keying. Coordinate per Section 08 71 00 and per means and methods before submits begin.
- 8. To detail submittals and nomenclature for electrified hardware, review and coordinate electrical specifications and drawings for scope that could affect hardware selections:
  - a. Scope includes, but not limited to bollard locations if related to project and/or access control if related to project and/or electrical Divisions 26-28 and applicable Drawings.
  - b. For electrified hardware interface with non-Division 08 access control or electrified tasks, the non-Division 08 access control or security vendor task shall provide a written agenda/plan how access control or security scope will be installed for a complete and

operational system. Written agenda shall include power requirements and additional relays at no additional cost.

#### D. Hardware Schedule:

- 1. Submit required vendor qualification letters and documentation (see above "QUALITY ASSURANCE").
- 2. Non-design team coordination and requirements:
  - a. Submittals for coordinated gate/frame/hardware items, shall be submitted at the same time for review of total opening requirements. Do not submit Section 08 71 00 scope without coordinated gate and frame packages and above RFI/clarification process tasks completed. Submittals that do not include related gates/frames will be returned for correction before checking.
  - b. Section submittals and/or shop drawings to be reviewed and have comments by non-design team (Contractor) before sending to design team. If submittals do not meet Contract requirements, return to hardware vendor for re-submittal. In many cases, unacceptable submittals are passed though without non-design team (Contractor) comments. Coordinate per Contract.
- 3. Submit hard copies of hardware schedule (number of copies per Division 01) as well as submit editable, PDF files via electronic email of ftp site process in Vertical Format as illustrated by the Sequence of Format for the Hardware Schedule as published by the Gate and Hardware Institute. Horizontal-type schedules will be returned for correction before reviewing.
  - Shop drawings / hardware schedule shall clearly indicate each hardware group specified and manufacturer of each item proposed as well as each gate number that the hardware is assigned to.

b. Vertical schedule format sample:

_	lumber 1 (Gate Scho t number from Part		tural Assigned	l Hardwa	re
1 Single G from Corr	ate #1 - Exterior idor 101	Opening Size	90°	RH	Rating
Quantity	Device Description	Device # (include specification la		Finish	Manu- facturer
4	Hinges	4.5 x 4.5 NRP	630		
1	Lockset			630	SC
1	I/C Cylinders	Rim or Mortise appropriate car rings as require mortise type ar as required by device)	m x blocking ed (rim or nd quantity	626	SC
1	Permanent Core	20-740		626	SC
1	Stop and Holder	1261		626	TR
1	Gate Silencers	SR64 or SR65 (a	as required)	GR	IV

- 4. Illustrations from manufacturer's catalogs and product data:
  - a. Provide cut sheets and product data with vertical format hardware submittal (same timeframe) as well as gate and frame information to be reviewed as one submittal package. Manufacturer's hard copy as well as PDF catalog cut sheets and product data shall not be submitted before editable, PDF files vertical format hardware submittal. See above Sequence of Format requirement. Catalog cut sheets and product data sent as submittals before the typed-out nomenclature of hardware part numbers (vertical format hardware submittal) will be returned without review.
- 5. Provide hardware schedule and hardware templates to gate and frame manufacturer. Provide two templates to those manufacturers who are not currently registered template book holders.
- 6. Wiring Information: Provide manufacturers' wiring information including manufacturers' gate elevation diagrams for electrified hardware based on Gate Hardware Institute (DHI) core class "Electrified Architectural Hardware" DHI class #COR133. Openings where only magnetic holdopens or gate position switches are specified do not require wiring information. Provide information with hardware schedule submittal for review. Provide detailed wiring diagrams with hardware delivery to jobsite.
- E. Vendor meetings or coordination prior to purchasing materials:
  - Convene coordination meeting between all opening vendors and installers at least two weeks
    prior to purchasing gates, frames, gate hardware, and electrical devices required for complete
    systems. Attendance includes but is not limited to hardware supplier and/or installer, gate
    supplier and/or installer, frame supplier and/or installer, security card reader vendor and/or
    installer, and electrical. If hardware changes are required due to these meetings, communicate
    changes to design team before ordering materials.

#### F. Templates:

- 1. Provide listing of manufacturer's template numbers for each item of hardware in hardware schedule.
- 2. Submit templates and "Reviewed Hardware Schedule" to gate and frame supplier and others as applicable to enable proper and accurate sizing and locations of cutouts and reinforcing.

#### G. Installation Instructions:

- 1. Provide manufacturer's written installation and adjustment instructions for finish hardware.
- 2. Send installation instructions to site with hardware.
- H. Contract Closeout Submittals: Include specific requirements indicated below.
  - 1. Operating and maintenance manuals: Submit three sets containing the following:
    - a. Complete information in care, maintenance, and adjustment, data on repair and replacement parts, and information on preservation of finishes.
    - b. Catalog pages for each product.
    - c. Name, address, and phone number of local representative for each manufacturer.
    - d. Parts list for each product.

- e. Copy of final accepted hardware schedule, edited to reflect "As installed".
- f. Copy of final keying schedule.

#### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Comply with requirements of Division 01.
- B. Deliver products in manufacturer's original containers, dry and undamaged, with seals and labels intact.
- C. Storage: Store materials in a cool and dry location, elevated from the ground and protected from the elements, and secured from theft or pilferage.

#### 1.08 WARRANTY

- A. Comply with provisions of Division 01.
- B. Provide warranties of respective manufacturers' regular terms of sale from day of final acceptance as follows:
  - 1. Locksets: "L" Series Three years "ND" Ten years.
  - 2. Electronic: One year.
  - 4. Exit devices: Three years.
  - 5. All other hardware: Two years.

#### 1.09 MAINTENANCE

- A. Provide special wrenches and tools applicable to each special hardware component.
- B. Provide maintenance tools and accessories supplied by hardware manufacturer.

#### **PART 2 - PRODUCTS**

#### 2.01 FINISHES

- A. Typical BHMA finish designation references:
  - 1. Typical BHMA finish designation references:
    - a. BHMA 626 Satin chromium plated brass or bronze.
    - b. BHMA 628 Satin or dull aluminum, clear anodized (uncoated).
    - c. BHMA 630 Satin stainless steel.

#### 2.02 HARDWARE TEMPLATE

- A. Make templates for hardware to be applied to gates, metal gates, and pre-finished gates.
- B. Hinge templates shall conform to ANSI A156.7.

- C. Promptly furnish template information or templates to gate and frame manufacturers.
- D. Coordinate hardware items to prevent interference with each other.

#### 2.03 SCREWS, BOLTS, AND FASTENING DEVICES

- A. All exposed fasteners to be stainless steel or zinc plated.
- B. Exposed head oval Phillips type screws in countersunk holes unless otherwise specified.
  - 1. Use screws, bolts, washers, grommets, nuts, and other fastening devices of appropriate length, type, head, metal, and finish as necessary for proper match and application of hardware.

#### C. Exit/panic devices:

 Install using concealed fasteners. Where there is insufficient blocking in the gate or reinforcement in the gate and/or frames utilize through bolts or SNB devices. See related Sections as design should have blocking in the gate or reinforcement in the gate and/or frames.

#### 2.04 EXIT GATES

- A. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on drawings and detailed requirements for each type of device. Provide all specifications even if not written in hardware sets/groups.
- B. Provide all hardware necessary to meet the requirements of CBC for exit gates, as well as to other requirements specified, even if such hardware is not specifically mentioned under Article "Hardware Schedule" of this Section.

#### 2.05 SUBSTITUTIONS

- A. Products referenced by specific brand names and model numbers have been identified by Owner to match other products in use either completed or in the course of completion. No substitutions permitted per Public Contract Code Section 3400.
  - 1. Otherwise refer to Division 01 for substitutions.

#### 2.06 HANGING HARDWARE

- A. Gate Hanging Devices:
  - 1. Ornamental and Steel Gate Self-Closing Hinges:
    - a. Acceptable Manufacturers:
      - 1) Locinox Manufacturing (no known equal).
    - b. Mammoth 180 Hydraulic Closers/Hinges Set. Ultra heavy duty 180 degree hydraulic gate closer and hinge for gates up to 440 pounds.
    - c. Heavy duty full surface mounted hinge and vertical built-in closer not exceed 5 pounds opening force.

#### 2.07 SECURING DEVICES (INCLUDING ACCESS CONTROL CARDREADER LEVER TRIM)

- A. Provide all latching devices that are lockable including, but not limited to, gate locks and panic/exit devices that comply with CBC Sections 1010.2 through 1010.2.8.2. All new construction projects shall include locks that allow the gates to be locked from the inside.
  - This requirement applies to classrooms and any other school room with an occupancy of five or more persons, but does not include gates that are locked from the outside at all times or student restrooms.
  - For access control card reader Schlage AD-300 lever trim locks and panic/exit hardware, an
    interior button is to be part of the factory locking trim units so that when the interior side
    lockdown button is pushed by building occupants, the exterior or lockable -side of the lock/lever
    will automatically lock down for no entry by un-authorized persons.

#### B. Cylindrical Locksets and Latchsets:

- 1. Acceptable Manufacturers:
  - a. Schlage Lock Co. ND Series x RHODES levers.
  - b. Owner's standard, no substitutions permitted.

#### 2. Levers:

- a. Provide levers to return to gate within 1/2 inch.
  - Provide exterior side lever trim with vandal resistant feature. Locked exterior lever freely rotates withstanding abuse and vandalism while remaining securely locked. Example: Schlage ND series Vandlgard™.
- 3. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:
  - a. Provide cylindrical locksets exceeding the ANSI/BHMA A156.2 Grade 1 performance standards for strength, security, and durability in the categories below.
    - 1) Abusive Locked Lever Torque Test minimum 3,100 inch-pounds without gaining access.
    - 2) Offset lever pull minimum 1,600-foot pounds without gaining access.
    - 3) Vertical lever impact minimum 100 impacts without gaining access.
    - 4) Cycle life tested to minimum 16 million cycles per ANSI/BHMA A156.2 Cycle Test with no visible lever sag or use of performance aids such as set screws or spacers.
  - b. Backsets: 2-3/4 inches.
  - c. Provide solid steel anti-rotation through bolts and posts to control excessive rotation of
  - d. Provide lockset that allows lock function to be changed to over twenty other common functions by swapping easily accessible parts.
  - e. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
  - f. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
  - g. Provide wired electrified options as scheduled in the hardware sets.
    - 1) 12 through 24-volt DC operating capability, auto-detecting.
    - 2) Selectable EL (fail safe)/EU (fail secure) operating mode via switch on chassis
    - 3) 0.230A (230mA) maximum current draw.

- 4) 0.010A (10mA) holding current.
- 5) Modular / "plug in" request to exit switch.
- h. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
  - 1) Provide ANSI 4-7/8 inch standard strike.
  - 2) Provide curved lip-type strike at all locations if possible to prevent catching clothing or other objects on strike. Where required, provide detail and flat strike.
  - 3) Where required, provide extended lip strike so that the lock or latchset latch will not come in contact with frame or added trim on or adjacent to the frame. Example: Don Jo device #MEST-104, but provide submitted manufacturer equivalent extended lip strike.

#### C. Mortise Locksets and Latchsets:

- 1. Acceptable Manufacturers:
  - a. Schlage Lock Co. L9000 Series.
  - b. Owner's standard, no substitutions permitted.

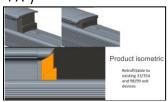
#### 2. Levers:

- a. Provide levers to return to gate within 1/2 inch (levers that have return to gate within 1/2 inch to meet California code mandates: no space/gap greater than 1/2 inch between face of gate and lever return).
- 3. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:
  - a. Locksets shall meet the requirements of ANSI/BHMA A156.13-1994, Operational Grade 1.
  - b. Provide only thumbturn devices that meet accessibility requirements. Example: Schlage L583-363 devices. No center pivoting thumbturns allowed.
  - c. Provide thumbturn devices that meet accessibility requirements (no center pivoting thumbturns allowed). Example: Schlage thumbturn x L583-363 device.
  - d. If deadbolts or lockbolts are utilized on the project, devices shall be interconnected with the latching mechanism on all gates to provide single movement function to unlatch gates.
  - e. Backset: 2-3/4 inches. Provide minimum 1 inch throw stainless steel deadbolt Provide minimum 3/4 inch throw for latch bolt.
  - f. Strikes:
    - 1) Provide ANSI 4-7/8 inch standard strike.
    - 2) Provide curved lip-type strike at all locations if possible to prevent catching clothing or other objects on strike. Where required, provide detail and flat strike.
    - 3) Where required, provide extended lip strike so that the lock or latchset latch will not come in contact with frame or added trim on or adjacent to the frame. Example: Don Jo device #MEST-104, but provide submitted manufacturer equivalent extended lip strike.

#### D. Exit Devices and Removable Mullions:

- 1. Acceptable Manufacturers:
  - a. Von Duprin.
  - b. Owner's standard, no substitutions permitted.

- 2. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:
  - a. The unlatching force of panic hardware shall not exceed 5 pounds, applied in the direction of travel, certified by UL to meet requirements of CBC Section 11B-309.4 (Von Duprin nomenclature "AX").
  - b. Exit devices shall be ANSI A156.3, Grade 1; UL Listed.
  - c. Provide panic devices complying with CBC Section 1010.2.9. The panic/exit device push-bar shall extend across no less than one-half the width of the gates/gates.
  - d. Panic hardware shall comply with 2022 CBC. Panic bar shall be mounted 38 inches to 44 inches above finish floor.
  - e. All exit devices shall meet Section 12-10-302: For Von Duprin shipped to project site with exit device, isometric cap as to not catch items on panic device push bar (nomenclature "PA")



- f. Where removable mullions are not specified in hardware groups, provide keyed removable mullions at all locations in order for gate to properly latch and secure rooms and buildings with rim or mortise type exit/panic bar devices.
  - 1) Removable with single turn of building key. Securely reinstalled without need for key.
  - 2) Provide stabilizers for removable mullions at all locations.
- g. Trim:
  - 1) Where lever trim is specified, provide lever design to match lockset levers.
  - 2) Where levers are specified for exit devices, provide exit device lever trim with vandal resistant feature (heavy duty lever trim designed to with stand abuse and vandalism):
    - a) Von Duprin 996 R/V.

#### 2.08 KEY SYSTEMS (CYLINDERS, CORES, AND KEYS)

- A. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on drawings and detailed requirements for each type of device. Keying specifications below override hardware set/group nomenclature.
- B. For all locking or dogging devices, provide complete cylinder system and coordination whether or not specified in Section 08 71 00, Part 3 hardware sets as required by locking device.
  - Different locking devices require a set of different requirements including, but not limited to, appropriate cams for mortise-type cylinders, appropriate tail pieces and size for rim-type cylinders, blocking rings as required for locking and cylinder devices to not rattle and meet manufacturers' warranties, as well as cylinders that are to be coordinated with construction cores/cylinders and final pinned cores/cylinders shipped to Owner by Registered Mail per below to meet system requirements.

2. Scope is means and method type work by a certified locksmith and/or DHI individual to engineer rim or mortise cylinders and blocking rings or tail-piece components as required for submitted locking devices. Since there could be as many as 500 options for rim or mortise cylinders with the locking devices and different manufactures that may be submitted, this means/methods-type work is required (similar to templating gates and frames to accept hardware). Coordinate as required.

#### C. Key Systems (Cylinders, Cores, and Keys):

- 1. Manufacturers:
  - a. Schlage Lock Co.
  - b. Owner's standard, no substitutions permitted.
- 2. For all locking or dogging devices, provide complete Primus XP Level 3/Primus keying system whether or not specified in Section 08 71 00, Part 3 hardware sets including lock cores, mortise cylinders, and rim cylinders keyed as directed by Owner in submittal process. Key System shall be:
  - a. Furnish a Proprietary Schlage master key system as directed by the Owner or Architect. Key system shall be designated and combinationed by the Schlage Master Key Department even if pinned by the Authorized Key Center, Authorized Security Center or a local authorized commercial dealer. This is to be a Schlage Primus keying system. SCUSD to verify all keyways. Patented Schlage Lock Co. Primus XP provide as follows: Patented Schlage Lock Co. Primus I/C mortise and exit devices with non-I/C #20-750 or 20-765-XP or per above what # needs to be for the cylindrical locks to have primus for locking devices (final keyway to be selected in keying meeting):
    - 1) 6 pin x Standard Core plug (D Series) x 626 finish
    - 2) 6 pin x Rim type x IC Core (Exit Device) x 626 finish
    - 3) 6 pin x 1-1/4" Mortise x IC Core (KR Mullions and CD) x 626 finish
  - b. Furnish Schlage Padlocks and the cylinders to tie them into the master key system for gates, storage boxes, utility valve security, roof hatches and roll-up gates keyed as directed in the keying schedule.
    - 1) Furnish KS43D2200 padlock for use with non-I/C Schlage cylinders. Furnish 47- 413 (conventional) or 47-743-XP (PrimusXP) with above.
    - 2) Furnish KS43G3200 padlock for use with FSIC Schlage cylinders. Furnish 23-030 (Classic / Everest) or 20-740 (PrimusXP) with above.
    - 3) Furnish KS41D1200 padlock for use with SFIC Schlage cylinders. Furnish 80-037 (Everest-B) with above.
  - c. Keyway: Provide as instructed by Owner during submittal process.

#### D. Keying Requirements:

- 1. Provide keyed construction cores and keys during the construction period.
  - a. Provide full sized cylinders or brass construction cores and brass keys at all interior and exterior gates. Plastic cores are not permitted.
  - b. Construction control and operating keys and core shall not be part of the Owner's permanent keying system or furnished in the same keyway or key section as the Owner's

permanent keying system. Permanent cores and keys prepared according to the accepted keying schedule shall be furnished to the Owner.

- 2. Keying Meeting and Programming Schedule:
  - a. Do not provide keying matrix in original hardware submittals. After hardware has been submitted and reviewed in accordance with Division 01 and Section 08 71 00 requirements, arrange a keying matrix/programming meeting with Owner Representative and the project hardware suppliers/vendors that is certified to assist the Owner Representative in developing cylinders/keying system based on reviewed submittals per below. Contract with a certified hardware suppliers/vendors/locksmith to perform the following tasks without the design team or design consultants input. Keying meetings require confidentiality with no one outside these meetings knowing the District keying system.
    - Copies of all plans (pages with gate or gate numbers on them) shall be brought to the
      meeting with keyed gates highlighted for review (Contractor scope). After the meeting,
      provide the Owner Representative with both a scanned digital/PDF copy of the marked-up
      plans, as well as the original copies of the plans delivered to the District with meeting
      notes.
    - 2) Copies of all reviewed gate, frame, gate, and hardware submittals shall be brought to the meeting with keyed gates highlighted for review (do not use the original specifications for keying meeting). After the meeting, provide the Owner Representative with both a scanned digital/PDF copy of any hardware submittal pages that have mark ups, as well as the original copies of the meeting's hardware submittal pages delivered to the Owner's Representative with meeting notes.
    - 3) Follow procedures for keying meeting and programming schedule as outlined by the Gate Hardware Institute. DHI procedures are based on Gate Hardware Institute core class entitled Masterkeying class #AHC200.
  - b. Keying meeting to produce a programming schedule/matrix based on the following:
    - 1) Furnish keys in the following quantities (total quantity of keys part of bid package):
      - a) 5 each Grand master-keys per set.
      - b) 6 each Masterkeys per set.
      - c) 3 each Change keys each lock, core, or cylinder.
      - d) 5 each Permanent Extractor keys.
      - e) 9 each Construction masterkeys.
      - f) 2 each Construction Core Extractor keys.
    - 2) Provide keying system expansion parameters.
      - a) Plan twenty changes directly under the grand.
      - b) Plan ten master keys.
      - c) Plan fifty changes each for each master.
    - 3) Permanent keys and cores shall be stamped with the applicable key mark for identification. The visual key control marks or codes shall not include the actual key cuts.
    - 4) Permanent keys shall be stamped "Do Not Duplicate".
  - c. Furnish typed programming meeting notes in PDF, editable electronic format as well as mailed, hard copy to Owner Representative (see above required PDF and hard-copy requirements).
  - d. Transmit pinned cores/cylinders as well as cut grand masterkeys, masterkeys, change keys, and other security keys to Owner Representative by Registered Mail, return receipt

requested. All permanent cores and keys shall be sent directly from the factory to the Owner Representative for ID and verification.

- 3. Accompany Owner Representative to install permanent cylinders and/or cores:
  - a. In above keying meeting, plan time to accompany Owner Representative/assist the installation process of permanent cores in contracted permanent locking or keying housings.
  - b. Owner Representative and Contractor to agree on timeline when Owner Representative will have their completed pinned cores ready for installation.
  - c. Contractor responsible to prepare locking systems, installation ready for final cores, free from dirt, debris or overtightening of locking devices that my cause binding of keyed devices.
  - d. On project walk to assist in permanent core install, Contractor responsible to un-install construction cores. Construction core devices are Contractor purchased and Contractor could keep or dispose of non-security construction cores.
  - e. Provide instructions for adjustments and maintenance of hardware and hardware finishes.

#### 2.09 STOPS AND HOLDERS

- A. Floor and Wall Gate Stops/Holders and Bumpers:
  - 1. Acceptable Manufacturers:
    - a. Ives Manufacturing.
    - b. Triangle Brass Manufacturing Company, Inc. (Trimco).
    - c. Rockwood.
    - d. Hager Manufacturing.
  - 2. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:
    - a. Stops, Bumpers and/or Holders shall meet the requirements of BHMA A156.16, Grade 1.
    - b. Provide required wall backing.

#### 2.10 ACCESSORIES

- A. Anti-Vandal Pulls:
  - 1. Acceptable manufacturers.
    - a. Ives Manufacturing.
    - b. Triangle Brass Manufacturing Company, Inc. (Trimco).
- B. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device.
  - Coordinate length and sizes for hardware devices before ordering materials (verify the gate hardware is compatible for use with the gates and gate/frames). Protection plate example: LDW nomenclature in Part 3 means "less gate width". A 48 inch wide gate would have a 46 inch wide protection plate. Width shall be one inch less than gate width unless gates have protective edge guards or center mullions. Coordinate before submittals.

#### C. Lock Guards:

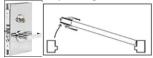
- 1. Acceptable Manufacturers:
  - a. Ives Manufacturing.
  - b. Rockwood.
  - c. Triangle Brass Manufacturing Company, Inc. (Trimco).

#### D. Gate Silencers:

- 1. Acceptable Manufacturers:
  - a. Ives Manufacturing.
  - b. Triangle Brass Manufacturing Company, Inc. (Trimco).
  - c. Rockwood.
  - d. Hager Manufacturing.

#### E. Gates and Gate Hardware Accessories:

Provide welded astragals, lock patches (templates), and/or welded mounting devices required
for a complete installation of specified hardware, whether or not shown on Drawings and
details. Weld in accordance with manufacturer's recommendations. Provide devices ground
smooth, prime and paint to match gate/fence system. See Section 09 91 00 for paint and primer
requirements. Inserted pictures below are examples of lock patches and/or welded mounting
devices. Template gates for each type of hardware device.



#### 2. Gate Astragal:

- a. Provide fully welded astragal full height of gate to overlap either adjacent fence post or the adjacent gate at pair of gates.
  - 1) Provide full height astragal in width indicated on Drawings. If not indicated, provide astragal width no less than 2 inches wide. See inserted picture below.
  - 2) Provide full height astragal overlap width per details. If not indicated, provide overlap of astragal no less than 3/4 inch wide.
  - 3) Provide 1/8 inch astragal thickness. See inserted picture below.
  - 4) Where Pemko Manufacturing 357 Series astragal is utilized by gate manufacturer, do not use screws or order with screw holes. Nomenclature: ND prefix or suffix required by Pemko on 357 Series astragal.



b. Provide devices ground smooth and painted to match gate/fence system. See Section 09 91
 00 for paint and primer requirements.

#### 3. Gate Canebolts:

a. Where nomenclature or device "524 Series" non-padlock canebolt-type devices are specified in hardware group/sets, provide by Crown Industrial, South San Francisco, CA; (650) 952-5150; <a href="http://www.crown-industrial.com/">http://www.crown-industrial.com/</a>, or accepted equal.

- b. Where nomenclature or device "stock #0524PL and/or part #0000478" series padlockable canebolt-type devices are specified in hardware group/sets, provide series by Crown Industrial, South San Francisco, CA; (650) 952-5150; <a href="http://www.crown-industrial.com/">http://www.crown-industrial.com/</a>, or accepted equal.
- c. On pairs of gates that have ingress or egress lever trim and or exit/panic device push-pad trim on active side gate, install canebolt away from the gate edge so that both the canebolt and supplied the padlock cannot not impede the active gate from opening at any time, providing free egress. No cane bolt at active leaf or exit or ingress gate unless it is fully automatic and opens with the same motion that releases the latch.
- d. Provide compatible galvanized steel pipe canebolt receptor and strike plate mounted in concrete slab as required.
  - 1) At padlockable canebolts, provide sufficient canebolt receptor depth to enable use of padlock.
  - 2) Provide canebolt receptors at both closed position of gate and open position of gate at 90 degrees, unless shown differently on Drawings.
- e. Canebolts shall be mounted and welded in accordance with manufacturer's recommendations.
  - 1) Coordinate with other welding requirements in Contract Documents.
  - 2) Provide devices ground smooth and painted to match gate/fence system. See Section 09 91 00 for paint and primer requirements.

#### 2.11 POWER SUPPLIES, ELECTRIFIED HARDWARE, AND WIRES

- A. Power Supplies, Wires, and Relays:
  - 1. Where hardware groups/sets have different information (number of hinge wires and power supply information), refer to the following specifications for clarification and submit according to complete and intended electrified system per Contract Documents. See Architectural and Security drawings and specifications.
    - a. Coordinate use of power supplies with gate and frame locations. Provide power supplies, relay, and battery backup units as part of the overall system in accordance with the manufacturer's warranty and system requirements. UL listed for applicable use; housed in an accepted enclosure; and provide both Class 1 and Class 2 outputs. At all gates with electric locking devices, if a power supply is not specified in the hardware set (Part 3 below).
    - b. Output shall be filtered and regulated. Relay, timer, and logic modules shall be provided as required for interface to indicated security components, and shall be assembled, connected, and fully contained within the power supply enclosure.

#### **PART 3 - EXECUTION**

#### 3.01 EXAMINATION

- A. Examine gates and frames and verify mounting locations as indicated on shop drawings.
- B. Report unacceptable conditions to the Architect. Begin installation only when unacceptable conditions have been corrected.
- 3.02 INSTALLATION

- A. Install in accordance with manufacturer's printed instructions and accepted shop drawings.
- B. Gate-Floor Clearances:
  - 1. Unless otherwise shown, provide the following gate-floor clearances:
    - a. Maximum 3/8 inch.

#### C. Hardware Placement:

- 1. Unless otherwise shown or required by CBC 2022, ADA 2010 Standards for Accessible Design and/or Title 24, place hardware at the following heights:
  - a. Hinges: Gate and frame manufacturer's standard scope per additional specifications and plans.
  - b. Lever handles for latchsets, lockset and panic/exit device pull, lever trim:
    - 1) 38 inches above finish floor/surface.
    - 2) Verify manufacturer's template with gate design.
  - c. Panic devices push bar:
    - 1) Panic hardware shall be so mounted / centered between 36 inches and 44 inches above finished floor or ground.
    - 2) Verify manufacturer's template with gate design to meet CBC 2022 exterior, pull side trim.
  - d. Closers:
    - 1) To meet opening force requirements
    - 2) See installation below.
- 2. Hardware for gate handles, pulls, latches, locks, and other operating devices for use on means of egress gates shall comply with SFM Standard 12-10-2, Section 12-10-202 as contained in CCR Title 24, Part 12.

#### D. Installation:

- 1. Except for hinges, do not install hardware until painting and finishing work is completed.
- 2. Pre-drill pilot holes in wood for screws. Drill and tap for surface mounted hardware on metal.
- 3. Hinges: Set hinges snug and flat in mortises. Hand turn screws to flat seat do not drive.
- 4. Locksets: Install locks with keyways in proper position. Install levers, roses, and escutcheons firmly affixed.
- 5. Closers:
  - a. To meet non-rated opening/exterior opening force requirements as well as close and latch non-smoke non-fire rated gates:
    - 1) Closers are to be installed as close to the hinge side of gate as possible by a trained installer per this Section, Part 1 "Quality Assurance, Installer Qualifications", installer an authorized representative of manufacturers, minimum of five years successful experience installing closers to meet 5-pound opening force for gate complexity".
    - 2) For non-smoke or non-fire rated gates, before installation of closers install one mockup gate for each kind of closer application. Example: parallel, regular arm, stop arm and/or top-jamb arm application if specified. Confirm gates meet 5-pound opening force and still close gate. This will ensure proper installation for gates to open at 5 pounds opening force before remaining non-rated opening closers are installed. The closer the closer is installed to the hinge, the better performance for 5 pound opening force, but still close

and latch gate.

- b. Mount gate closers for maximum swing to meet 5-pound opening force. At all possible openings, mount gate closers for maximum swing of gate before setting stops.
- c. Mount gate closers for maximum swing, but at gates to meet 5-pound opening force. Drawings may show gates open to only 90 degrees (Revit or CAD system set up), but unless noted or specified with limiter (stop arm devices below), all gates to open for maximum swing against adjacent 180 wall if nothing inhibits gate from doing so. Include wide-throw hinges per specs and installation for 170 degree to 180 degree or maximum swing of gate before installing stops.
- 6. Floor Stops: See notes on closers and hinges above. After closer devices are installed, and gate is opened as far as possible without #1) occupant excessive force on closer arm for CUSH arms; and #2) gate does not hit adjacent wall or other surfaces, stops shall be installed at substantial completion a maximum of 4 inches from adjacent walls and as far away from the hinge point as possible. Preference is to have stops installed just below lever or pull locations.
- 7. Silencers: Set in place before adjusting strikes.

#### 3.03 PAINT OR FIELD FINISHES

A. Coordinate with Contact Documents including, but not limited to, Section 09 91 00 for paint and primer requirements.

#### 3.04 ADJUSTING

- A. Adjust parts for smooth, uniform operation.
- B. Lubricate moving parts with manufacturer recommended lubricant.
- C. Replace units that cannot be adjusted and lubricated to operate freely and smoothly as intended for the application.
- D. Adjust gate closer devices:
  - 1. Adjust closer operating.
    - a. Gates: not to exceed 5.0 pounds force.
  - 2. Adjust closer delay and operating speeds to comply with requirements of 2022 CBC Section 11B-404.2.8.1 and ADA Americans with Disabilities Act 2010 Standards for Accessible Design.
    - a. Gates/gates closers, when provided, shall have sweep period adjusted: minimum of 5 seconds for a gate/gate to close from the 90-degree position to the 12-degree position.
    - b. Gates/gates with spring hinges require a minimum of 1.5 seconds to close from the 70 degree to the closed position.

#### 3.05 CLEANING

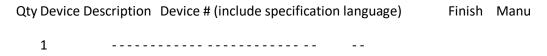
A. Clean as recommended by manufacturer. Do not use materials or methods which may damage finish or surrounding construction.

#### 3.06 HARDWARE SCHEDULE

### A. Manufacturers Legend:

<u>Code</u>	<u>Name</u>
IV	Ives Manufacturing
AD	Adams Rite Manufacturing
SC	Schlage Manufacturing
VO	Von Duprin Manufacturing
LC	LCN Closers
PE	Pemko Manufacturing
TR	Trimco Manufacturing
AB	ABH Manufacturing
LO	Locinox (Mammoth Hinges)
TO	TORXUN Manufacturing
RX	Rixson Manufacturing

B. Hardware Columns - Example (Legend):



C. The following hardware sets are intended to establish type and standard of quality when used together with the requirements of this Section (see above Section and related Sections including Division 01). Examine Contract Documents and furnish proper hardware for gate openings. Refer to Gate Schedule on the Drawings for Hardware Group/Set assignments for each opening.

### **Hardware Sets (Typically Three-Digit Set Numbers)**

Hardware Group/Set #101

Hard	lware	Group/Set #101			T
2	Ea.	Hydraulic Closers / Hinges Sets	Mammoth 180 Hydraulic Closers/Hinges Set: Ultra heavy duty 180 degr hydraulic gate closer and hinge for gates up to 440 pounds x Silver Finis (Note: if round post similar to chain-link, provide additional Locinox brackets part #CLB Mammoth)  TORXUN BARGUARD INSIDE #9912.002R  CROWN IND CANE BOLTS HOS24.0002*IMOUNTED INSIDE  LOCINOX MAMMOTH HINGES		LO
1	Ea.	Power Transfer	#798C-12 - 12" x 1 /2" with four 20 gauge, 20" long conductor wires (regreen, white, black) by Schlage	ed,	SC
1	Ea.	RHR Electrified Leaf: Rim-Type Exit/Panic Device x Key Override	WH LD AX RX PA 98L-NL x <b>110NL</b> -996L-NL <b>MD</b> -R/V x 06 Lever-x strike / mount with weldable box as required for panic device and strike template requirements – see www.keedex.com and below:	626	VO
1	Ea.	RHR Leaf Electric Strike, Electrified Power Transfer and Power Supply	For inactive Leaf: Furnish and install #1) single gang power drop located inside building (not wet space); #2) provide power supply # AQ-D-2-4-F-1-R-2 x Securitron manufacturing; #3) run conduit from ground through inactive HSS or chainlink post/ framing system and complete wiring as required to meet manufacturer warranties; #4) provide Schlage manufacturing # #798C-12 wire loop in 630 finish (conduit then to be run horizontally across inactive leaf to the electric strike); #4) provide HES manufacturing surface mount #9600 in 630 stainless steel finish; #5) In shop drawings provide detail to show how to install electric strike to not catch clothing (example only drawing here showing active leaf rim-latch latching into inactive leaf 9600 electric strike).		
1	Ea.	LHR Leaf Non- Electrified Leaf: Rim-Type Exit/Panic Device x Key Override	WH LD AX PA 98L-NL x <b>110NL</b> -996L-NL-R/V x <del>06</del> Lever-x strike / mount with weldable box as required for panic device and strike template requirements – see www.keedex.com and below:	626	VO

1	and Weldable Boxes. 3/4" Template as required by all furnished hardware, see 08 71 00 Part 1 for templating requirements and full specs which call for fully welded, no seams, ground smooth, prime and finishes per architectural drawings and welding/paint specifications.				templated areas for devices (requires 1-te stile and/or boxes as required where alled. Templates to have custom a preferred yet contact technicians at a com for alternate weldable boxes if means and methods no-designer, show plating in submittals and shop welded areas and brackets as condition for either special abo devices #050996 strike eans and methods no-detemplating in submittals	des	ke cket igner,		
2	Ea.	Anti-Vandal Pulls	VR91	ONL ser	ies (coordinate with 99NL x 110NL)			630	I۱
2	Ea.	I/C Cylinders (Rim Mortise)	n or		or 20-061 x appropriate cam x blocking rings as required mortise type and quantity as required by locking device)	626	SC		
2	Ea.	Both Leafs: Permanent Core			I/C #20-750 or 20-765-XP per above what # needed to be xterior-side of locks to have Primus (Exterior and Padlock)				
2	Ea.	Stop and Hold Op	en	1804		630	AB		
2	Ea.	Bottom of gates t than 10" Clear, U and Smooth Surfa	nobst		Per above specifications and by gate manufacturer (pu ground smooth, primed, and painted to match gate).	sh-sid	e,		
1	Ea.	Painted Full Heigl Astragal	ht	(utilize	ove specifications and by gate manufacturer and per speci d as a positive stop – when gate closes against the astraga g cannot swing back in toward the egress side)		ins		
		Coordination task for security and/or electrical design and additional non-Division 08 Section scope including, but not limited to, wire / connectivity from ground through frame to electrified hardware.			By security or electrical as required per Contract Docume electrified hardware specified above can be utilized for #2 reader, remote access control applications (unlocked / loc remotely for open during business hours / locked after-how #2) local card readers at openings as directed by architect drawings, security or electrical. Coordinate with security Divisions 26-28 and applicable drawings as hardware does include card reader locations.  rdware groups/set above in accordance with Contract Dordware devices required in Section 08 71 00 language, are	L) non- cked ours) a cural or elec s not cumer	-card nd ctrical		

plans, and full specification documents.

### Hardware Group/Set #102

· ····	···	310up/ 3Ct #102			
2	Ea.	Hydraulic Closers / Hinges Sets	Mammoth 180 Hydraulic Closers/Hinges Set: Ultra heavy duty 180 degree hydraulic gate closer and hinge for gates up to 440 pounds x Silver Finish (Note: if round post similar to chain-link, provide additional Locinox brackets part #CLB Mammoth)  TORXUN BARGUARD CROWN IND CANE BOLTS HOS24.00021MOUNTED INSIDE  LOCINOX MAMMOTH HINGES		LO
1	Ea.	Power Transfer	#798C-12 - 12" x 1 /2" with four 20 gauge, 20" long conductor wires (rec green, white, black) by Schlage	d,	SC
1	Ea.	RHR Electrified Leaf: Rim-Type Exit/Panic Device x Key Override	WH LD AX RX PA 98-NL x 110NLR/V x strike / mount with weldable box as required for panic device and strike template requirements – see www.keedex.com and below:	626	VO
1	Ea.	RHR Leaf Electric Strike, Electrified Power Transfer and Power Supply	For inactive Leaf: Furnish and install #1) single gang power drop located inside building (not wet space); #2) provide power supply # AQ-D-2-4-F-1-R-2 x Securitron manufacturing; #3) run conduit from ground through inactive HSS or chainlink post/ framing system and complete wiring as required to meet manufacturer warranties; #4) provide Schlage manufacturing # #798C-12 wire loop in 630 finish (conduit then to be run horizontally across inactive leaf to the electric strike); #4) provide HES manufacturing surface mount #9600 in 630 stainless steel finish; #5) In shop drawings provide detail to show how to install electric strike to not catch clothing (example only drawing here showing active leaf rim-latch latching into inactive leaf 9600 electric strike).		
1	Ea.	LHR Leaf Non- Electrified Leaf: Rim-Type Exit/Panic Device x Key Override		626	VO

1	Ea.	LHR Leaf Strikes	Furnish an	d ins	tall:	_	1				
		and Weldable	#1) Welde	d, te	mplated areas for devices (requires 1-						
		Boxes.	3/4" thick								
		Template as	3/4" thick gate stile and/or boxes as required where device is installed. Templates to have custom								
		required by all	welded areas preferred yet contact technicians at								
		furnished	www.keedev.com for alternate weldable hoves if								
		hardware, see	necessary - means and methods no-designer, show								
		08 71 00 Part 1	detailed to	detailed templating in submittals and shop							
		for templating	drawings.		PULL SIDE						
			#2) Provid	e we	Ided areas and brackets as		_				
		and full specs	required f	or co	ndition for either special	stril	ке				
		which call for	#1609 or 0	omb	o devices #050996 strike	bra	bracket				
		fully welded, no	with 299F	(mea	ans and methods no-	des	designer,				
		seams, ground	show deta	iled t	templating in submittals 1609	and	shop				
		smooth, prime	drawings)		3/0 1/0 1/0						
		and finishes per architectural			3 <sup>1</sup> / <sub>4</sub> " (10mm)						
		drawings and			(83mm) 1/152 (8mm) 1/152 (8mm)						
		welding/paint	11/16 7/18								
		specifications.									
2	Ea.	Anti-Vandal Pulls	VR9	VR910NL series (coordinate with 99NL x 110NL) 63							
2	Ea.	I/C Cylinders (Rim			r 20-061 x appropriate cam x blocking rings as required	626	SC SC				
-	24.				im or mortise type and quantity as required by locking device)						
2	Ea.	a. Both Leafs: non			n-I/C #20-750 or 20-765-XP per above what # needed to be 626 SC						
		Permanent Core	for e	for exterior-side of locks to have Primus (Exterior and Padlock							
			core	core)							
2	Ea.	Stop and Hold Open 1804				630	AB				
	_										
2	Ea.	Bottom of gates t	_		Per above specifications and by gate manufacturer (pu	sh-sid	e,				
		than 10" Clear, U		tructed ground smooth, primed, and painted to match gate).							
1		and Smooth Surfa				£: +: _					
1	Ea.	Painted Full Heigh			e specifications and by gate manufacturer and per speci		ns				
		Astragal	-	(utilized as a positive stop – when gate closes against the astragals the opening cannot swing back in toward the egress side)							
1	Ea	Fire Central Koy				۱۵ ca+۱					
1	Ea.	Fire Control Key Boxes/Product	KIIO	к вох	3200 Series (no Knox Box at other openings assigned th	ie set)					
1	Ea										
1	Ea.				By security or electrical as required per Contract Documents: The electrified hardware specified above can be utilized for #1) non-card						
		design and addition		· ·							
		Division 08 Section		remotely for open during business hours / locked after-hours) and							
		including, but not	•		#2) local card readers at openings as directed by architectural						
		wire / connectivity from			drawings, security or electrical. Coordinate with security or electrical						
		ground through frame to			visions 26-28 and applicable drawings as hardware does						
		electrified hardwa			include card reader locations.						

Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices required in Section 08 71 00 language, architectural plans, and full specification documents.

Blank space below and after a Group/Set is intentional to avoid, if possible, splitting a Hardware Group/Set onto two pages

	Set	· ·		Mammoth 180 Hydraulic Closers/Hinges Set: Ultra heavy duty 180 degree				
		Hinges Sets		hydraulic gate closer and hinge for gates up to 440 pounds x Si  Note: if round  TORXUN BARGUARD  TORXUN BARGUARD  TORXUN BARGUARD  TORXUN BARGUARD	Iver Fin			
				post similar to	0021MOUNTED	INSIDE		
				chain-link,		ا ا		
				provide				
				additional				
				Locinox brackets				
				part #CLB Mammoth.				
				Manimoth.	ı			
1	Ea.	Electrified Po	ower	#798C-12 - 12" x 1 /2" with four 20 gauge, 20" long	630	SC		
		Transfer		conductor wires (red, green, white, black) by Schlage				
1	Ea.	Rim-Type Exi		#WP-RX WH-LD-AX-PA-99NL x 110NL-MD x welded templated	626	VO		
		Device x Key	Override	for devices including, but limited to, custom strike or mount				
				with weldable box as required for panic device and strike				
				templates.				
1	Ea.	Anti-Vandal		VR910NL series (coordinate with 99NL x 110NL)	630	IV		
1	Ea.	Electric		nd install #1) single gang power drop for below power supply loc		side		
		Strike,		not wet space); #2) provide power supply #PS902 by Schlage; #3	-			
		Electrified		om ground through inactive HSS or chainlink post/ framing syste				
		Power	complete	wiring as required to meet manufacturer warranties; #4) provid	e Schla	ge		
		Transfer	manufacti	uring #798C-12 in 630 finish				
		and Power	(conduit t	hen to be run horizontally				
		Supply	across ina	ctive leaf to the electric strike);				
			#4) provid	le HES manufacturing surface				
			mount #9	600 in 630 stainless steel finish;				
			#5) In sho		RFACE MOUNTE	D		
			show how	to install electric strike to not	CTRIC STRIKE			
			catch clot	hing (example only drawing				
			here show	ying active leat rim-latch	WELDED PLATE AP AT TOP AND CTRIC STRIKE.	BOTTOM OF		
			latching in	nto inactive leaf 9600 electric				
			strike)					
1	Ea.	Bar Guard (ir	nside)	TORXUN Guard (inside) Part #9912.002R – see www.torxun.co	m nart	_		
_		Bar Gaara (ii	10.00	#9912.001R (or equal devices as required by architectural deta				
				language in Section 08 71 00)	iis, ana			
1	Ea.	I/C Cylinders	(Rim or	20-057 or 20-061 x appropriate cam x blocking rings as	626	SC		
_	Lu.	Mortise)	(11111)	required (rim or mortise type and quantity as required by	020	50		
		Wioi tiscj		locking device)				
1	Fa	Permanent (	`ore		626	SC		
1	Ea.	Permanent C	Core	non-I/C #20-750 or 20-765-XP per above what # needed to be	626	SC		
				non-I/C #20-750 or 20-765-XP per above what # needed to be for exterior-side of locks to have Primus (Exterior)				
1	Ea.	Permanent C		non-I/C #20-750 or 20-765-XP per above what # needed to be	626 630	SC AB		
				non-I/C #20-750 or 20-765-XP per above what # needed to be for exterior-side of locks to have Primus (Exterior)				

1	Ea.	Bottom of gates to be greater than 10" Clear, Unobstructed and Smooth Surface		bove specifications and by gate manufacturer (push-side, ground th, primed, and painted to match gate).
1	Ea.	Painted Full Height Astragal	(utiliz	bove specifications and by gate manufacturer and per specifications ed as a positive stop – when gate closes against the astragals the ing cannot swing back in toward the egress side)
1	Ea.	Coordination task for security and/or electrica design and additional not Division 08 Section scopincluding, but not limited wire / connectivity from ground through frame to electrified hardware.	on- e d to,	By security or electrical as required per Contract Documents: The electrified hardware specified above can be utilized for #1) non-card reader, remote access control applications (unlocked / locked remotely for open during business hours / locked after-hours) and #2) local card readers at openings as directed by architectural drawings, security or electrical. Coordinate with security or electrical Divisions 26-28 and applicable drawings as hardware does not include card reader locations.
1	Ea.	Fire Control Key Boxes/Product		At gate #G002 only furnish and install Knox Box 3200 Series (no Knox Box at other openings assigned the set)

Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices required in Section 08 71 00 language, architectural plans, and full specification documents.

naru	waie	oroup/Set #104	T		
1	Ea.	Hydraulic Closers / Hinges Sets	Mammoth 180 Hydraulic Closers/Hinges Set: Ultra heavy duty 180 degree hydraulic gate closer and hinge for gates up to 440 pounds x Silver Finish (Note: if round post similar to chain-link, provide additional Locinox brackets part #CLB Mammoth)  TORXUN BARGUARD INSIDE #9912.002R INSIDE #9912.002R INSIDE #9912.002R INSIDE #0524.00021MOUNTED INSIDE		LO
1	Ea.	Rim-Type Exit/Panic Device x Anti-Vandal Pull Key Override	#WP-WH-LD-AX-PA-99NL x 110NL-MD x welded templated for devices including, but limited to, custom strike or mount with weldable box as required for panic device and strike templates.	626	VO
1	Ea.	Anti-Vandal Pulls	VR910NL series (coordinate with 99NL x 110NL)	630	IV
1	Ea.	Strikes and Weldable Boxes. Template as required by all furnished hardware, see 08 71 00 Part 1 for templating requirements and full specs which call for fully welded, no seams, ground smooth, prime and finishes per architectural drawings and welding/paint specifications.	31/4* (83mm)	1-3 thill man 1/1s 7/1s 1/1s	- (6nm)
1	Ea.	I/C Cylinders (Rim or Mortise)	20-057 or 20-061 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)	626	SC
1	Ea.	Permanent Core	non-I/C #20-750 or 20-765-XP per above what # needed to be for exterior-side of locks to have Primus (Exterior)	626	SC
1	Ea.	Auxiliary Floor Stop	FS18L (see Section 08 71 00, Part 3 installation)	630	IV

1	Ea.	Bar Guard (inside)	TOR	XXUN Guard (inside) Part #9912.002R		то	
1	Ea.	Bottom of gates to be greater than 10" Clear, Unobstructed and Smooth Surface		Per above specifications and by gate manufacturer (push-side, ground smooth, primed, and painted to match gate).			
1	Ea.	Painted Full Height Astragal	spe	above specifications and by gate manufacturer and per cifications (utilized as a positive stop – when gate closes astragals the opening cannot swing back in toward the e	_		
Dod	Note: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.						

паги	waie	5roup/Set #104.1		1	
1	Ea.	Hydraulic Closers / Hinges Sets	Mammoth 180 Hydraulic Closers/Hinges Set: Ultra heavy duty 180 degree hydraulic gate closer and hinge for gates up to 440 pounds x Silver Finish (Note: if round post similar to chain-link, provide additional Locinox brackets part #CLB Mammoth)  TORXUN BARGUARD INSIDE #9912.002R  CROWN IND CANE BOLTS HOS24.00021MOUNTED INSIDE		LO
1	Ea.	Rim-Type Exit/Panic Device x Anti-Vandal Pull Key Override	#WP-WH-LDCD-AX-PA-99NL x 110NL-MD x welded templated for devices including, but limited to, custom strike or mount with weldable box as required for panic device and strike templates.	626	VO
1	Ea.	Anti-Vandal Pulls	VR910NL series (coordinate with 99NL x 110NL)	630	IV
1	Ea.	Strikes and Weldable Boxes. Template as required by all furnished hardware, see 08 71 00 Part 1 for templating requirements and full specs which call for fully welded, no seams, ground smooth, prime and finishes per architectural drawings and welding/paint specifications.	Furnish and install: #1) Welded, templated areas for devices. Requires 1-3/4" thick gate stile and/or boxes as required where device is installed. Templates to have custom welded areas preferred yet contact technicians at www.keedex.com for alternate weldable boxes if necessary - means and methods nodesigner, show detailed templating in submittals and shop drawings. #2) Provide welded areas and brackets as required for condition for either special strike #1609 or combo devices #050996 strike bracket with 299F (means and methods no-designer, show detailed templating in submittals and shop drawings).  1609  1609	Ja* This Tyles	- (6nm)
1	Ea.	I/C Cylinders (Rim or Mortise)	20-057 or 20-061 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)	626	SC
1	Ea.	Permanent Core	non-I/C #20-750 or 20-765-XP per above what # needed to be for exterior-side of locks to have Primus (Exterior)	626	SC
1	Ea.	Auxiliary Floor Stop	FS18L (see Section 08 71 00, Part 3 installation)	630	IV

1	Ea.	Bar Guard (inside)	TOR	XXUN Guard (inside) Part #9912.002R		ТО	
1	Ea.	Bottom of gates to be greater than 10" Clear, Unobstructed and Smooth Surface		Per above specifications and by gate manufacturer (push-side, ground smooth, primed, and painted to match gate).			
1	Ea.	Painted Full Height Astragal	spe	Per above specifications and by gate manufacturer and per specifications (utilized as a positive stop – when gate closes against the astragals the opening cannot swing back in toward the egress side)			
Doc	Note: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.						

naru	waie	3roup/Set #104.2		1	
1	Ea.	Hydraulic Closers / Hinges Sets	Mammoth 180 Hydraulic Closers/Hinges Set: Ultra heavy duty 180 degree hydraulic gate closer and hinge for gates up to 440 pounds x Silver Finish (Note: if round post similar to chain-link, provide additional Locinox brackets part #CLB Mammoth)  TORXUN BARGUARD INSIDE #9912.002R  CROWN IND CANE BOLTS HOS24.00021MOUNTED INSIDE		LO
1	Ea.	Rim-Type Exit/Panic Device x <del>Lever Key Override Exit</del> <b>Only</b>	#WP-WH-LDCD-AX-PA-99BENL x 110NL-MD x welded templated for devices including, but limited to, custom strike or mount with weldable box as required for panic device and strike templates.	626	VO
1	Ea.	Anti-Vandal Pulls	VR910NL series (coordinate with 99NL x 110NL)	630	₩
1	Ea.	Strikes and Weldable Boxes. Template as required by all furnished hardware, see 08 71 00 Part 1 for templating requirements and full specs which call for fully welded, no seams, ground smooth, prime and finishes per architectural drawings and welding/paint specifications.	Furnish and install: #1) Welded, templated areas for devices. Requires 1-3/4" thick gate stile and/or boxes as required where device is installed. Templates to have custom welded areas preferred yet contact technicians at www.keedex.com for alternate weldable boxes if necessary - means and methods nodesigner, show detailed templating in submittals and shop drawings. #2) Provide welded areas and brackets as required for condition for either special strike #1609 or combo devices #050996 strike bracket with 299F (means and methods no-designer, show detailed templating in submittals and shop drawings).	1-3 thi	4" ck - (6mm)
1	Ea.	I/C Cylinders (Rim or Mortise)	20-057 or 20-061 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)	626	SC
1	Ea.	Permanent Core	non-I/C #20-750 or 20-765-XP per above what # needed to be for exterior-side of locks to have Primus (Exterior)	626	SC
1	Ea.	Auxiliary Floor Stop	FS18L (see Section 08 71 00, Part 3 installation)	630	IV

1	Ea.	Bar Guard (inside)	TOR	XXUN Guard (inside) Part #9912.002R		ТО	
1	Ea.	Bottom of gates to be greater than 10" Clear, Unobstructed and Smooth Surface		Per above specifications and by gate manufacturer (push-side, ground smooth, primed, and painted to match gate).			
1	Ea.	Painted Full Height Astragal	spe	Per above specifications and by gate manufacturer and per specifications (utilized as a positive stop – when gate closes against the astragals the opening cannot swing back in toward the egress side)			
Doc	Note: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.						

1	Set	Hydraulic Closers / Hinges Sets	Mammoth 180 Hydraulic Closers/Hinges Set: Ultra heavy duty 3 hydraulic gate closer and hinge for gates up to 440 pounds x Sil		_
			(Note: if round post similar to chain-link, provide additional Locinox brackets part #CLB Mammoth)	OWN IND CAN	E BOLTS ) INSIDE
1	Ea.	Security Classroom- Type Lockset	Schlage ANSI  ND95PD -  Classroom security lock  · Key in either lever locks or unlocks outside lever.  · Vandlgard allows outside spindle to disengage from latch when locked.  · Inside lever always free for immediate egress.  Outside Inside	626	VO
1	<del>Ea.</del>	Bar Guard (inside)	TORXUN Guard (inside) Part #9912.002R — see www.torxun.cor #9912.001R (or equal devices as required by architectural deta language in Section 08 71 00)	•	
1	Ea.	I/C Cylinders (Rim or Mortise)	20-057 or 20-061 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)	626	SC
1	Ea.	Permanent Core	non-I/C #20-750 or 20-765-XP per above what # needed to be for exterior-side of locks to have Primus (Exterior)	626	SC
1	Ea.	Stop and Hold Open	1804	630	AB
1	Ea.	Bottom of gates to be greater than 10" Clear, Unobstructed and Smooth Surface	Per above specifications and by gate manufacturer (push-side, smooth, primed, and painted to match gate).	ground	i
1	Ea.	Painted Full Height Astragal	Per above specifications and by gate manufacturer and per spe (utilized as a positive stop – when gate closes against the astragopening cannot swing back in toward the egress side)		
1	Ea.	Coordination task for security and/or electricadesign and additional no	By security or electrical as required per Contract Docume electrified hardware specified above can be utilized for #	1) non	

Division 08 Section scope	remotely for open during business hours / locked after-hours) and
including, but not limited to,	#2) local card readers at openings as directed by architectural
wire / connectivity from	drawings, security or electrical. Coordinate with security or electrical
ground through frame to	Divisions 26-28 and applicable drawings as hardware does not
electrified hardware.	include card reader locations.

Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices required in Section 08 71 00 language, architectural plans, and full specification documents.

Blank space below and after a Group/Set is intentional to avoid, if possible, splitting a Hardware Group/Set onto two pages

_	Ea.	Gate Hinge/Hanging Devices	Hanging device hardware by chain-link gate manufacturer		
1	Ea.	Lockable Canebolt-Type Devices	0524PL and/or part #0000478 x 24"x black zinc x Stainless Steel Ground Receiver/Strike		CR
1	Ea.	Padlocks	KS43D2200		SC
1	Ea.	Permanent Core	23-030	626	SC

### Hardware Group/Set #106 – add alternate for possible future construction

8	Ea.	Gate Hinge/Hanging Devices	Guardian manufacturing: 2060.200 GORILLA Heavy-Duty Hi Mount, Both Sides (Zinc Plated) - Liftmaster 2060Z - Rated 1 pounds per pair. Reduce space between the Jamb/Gate/Po for 180 degree Swing, Welded Pin Design, Hardened Roller Note: if round post similar to chain-link, provide additional brackets/parts to weld these devices to squared off/flat cor and still meet size/weight of gate warranties.	L,000 st, Allo Bearin	ow Ig.
2	Ea.	Lockable Canebolt-Type Devices	0524PL and/or part #0000478 x 24"x black zinc x Stainless Steel Ground Receiver/Strike		CR
2	Ea.	Padlocks	KS43D2200		SC
2	Ea.	Permanent Core	23-030	626	SC
2	Ea.	Heavy Duty Gate Caster Bracket	G3 Series #G327ZZ60JZ83YY x coordinated/correct sized who Consult factory representative for help in determining the representative for help in determining the representative series, wheel diameter, wheel type are to use. Factors to be considered are gate size, gate weight, condition, working environment and floor slope, etc. Customare available with varying spring types, deflection ranges are capacities.	ight nd bea floor m cast	

Note: Balance of hardware by gate manufacturer. Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices required in Section 08 71 00 language, architectural plans, and full specification documents.

0	Го	Cata Hingo/Hanging	Cuardian manufacturing, 2000, 200, CORULA Hagyar Duty Hi	nao [	-lo+		
8	Ea.	Gate Hinge/Hanging	Guardian manufacturing: 2060.200 GORILLA Heavy-Duty Hi	•	<del>·iat</del>		
		Mount, Both Sides (Zinc Plated) - Liftmaster 2060Z - Rated 1	<del>ated 1,000</del>				
			pounds per pair. Reduce space between the Jamb/Gate/Post, Allow for 180 degree Swing, Welded Pin Design, Hardened Roller Bearing				
			Note: if round post similar to chain-link, provide additional				
			brackets/parts to weld these devices to squared off/flat conditions				
			and still meet size/weight of gate warranties.				
	-	0.1.1.11					
_	Ea.	Gate Hinge/Hanging	Hanging device hardware by chain-link gate manufacturer				
		Devices					
2	Ea.	Lockable Canebolt-Type	0524PL and/or part #0000478 x 24"x black zinc x Stainless		CR		
		Devices	Steel Ground Receiver/Strike				
2	Г-	Dodlosko	·		cc		
2	Ea.	Padlocks	KS43D2200		SC		
2	Ea.	Permanent Core	23-030	626	SC		

2	Ea.	Hydraulic Closers / Hinges Sets	hydraulic g	n 180 Hydraulic Closers/Hinges Set: Ultra heavy duty 1 gate closer and hinge for gates up to 440 pounds x Silv te: if round post similar to chain-link, provide additior	er/	LO
			Locinox br	ackets part #CLB Mammoth)		
1	Ea.	Inactive Leaf: Lockable Canebolt- Type Devices	Ground Re	d/or part #0000478 x 24"x black zinc x Stainless Steel eceiver/Strike (same as above do not install canebolt i would inhibit free egress on lever hardware active gate		CR
1	Ea.	Padlock	KS43F320	(2" inch shackle per above to not inhibit free egress)		sc
1	Ea.	Institutional Storeroom Lockset	mortise de primed and manufactu Keedex Inc • 51	HO x 10-025 (provide Weldable Box as required for evice — see www.keedex.com) ground smooth finish, d painted to match remaining area with Torxun uring lock guard #9912.001R  10 Cameron Street • Placentia, Ca • 92807  (714) 993-4300 • Fax (714) 993-4303  15@keedex.com • Web- www.keedex.com	626	SC
1	Ea.	Active Leaf: Lock Guard (inside)		nanufacturing part #9912.001R (or equal devices as by architectural details, and language in Section 08 71	00)	то
1	Ea.	Both Leafs: Permanent Core	1	20-750 or 20-765-XP per above what # needed to be or-side of locks to have Primus (Exterior and Padlock	626	SC
2	Ea.	Stop	1209		630	TR
2	Ea.		Per above specifications and by gate manufacturer (push-si ground smooth, primed, and painted to match gate).  nd Smooth Surface		ush-si	de,
1	Ea.	Painted Full Height Astragal	(utilized as	specifications and by gate manufacturer and per spec s a positive stop – when gate closes against the astrag annot swing back in toward the egress side)		

Note: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.

8	Ea.	Gate Hinge/Hanging	Guardian manufacturing: 2060.200 GORILLA Heavy-Duty Hinge - Flat			
		<del>Devices</del>	Mount, Both Sides (Zinc Plated) – Liftmaster 2060Z – Rated 1	•		
			pounds per pair. Reduce space between the Jamb/Gate/Po			
			for 180 degree Swing, Welded Pin Design, Hardened Roller	<del>Bearir</del>	<del>ng</del>	
			Note: if round post similar to chain-link, provide additional			
			brackets/parts to weld these devices to squared off/flat cor	nditior	<del>1S</del>	
			and still meet size/weight of gate warranties.			
_	Ea.	Gate Hinge/Hanging Devices	Hanging device hardware by chain-link gate manufacturer			
<u> </u>	Ea.	Lockable Canebolt-Type	0524PL and/or part #0000478 x 24"x black zinc x Stainless		CR	
		Devices	Steel Ground Receiver/Strike			
<u>)</u>	Ea.	Padlocks	KS43D2200		SC	
	Ea.	Permanent Core	23-030	626	SC	
	Ea.	Heavy Duty Gate Caster Bracket	G3 Series #G327ZZ60JZ83YY x coordinated/correct sized wh Consult factory representative for help in determining the r			
		550° 550° 550° 550° Mazzing Mazzing Byb.	bracket series, caster series, wheel diameter, wheel type ar	_	ring	
		3-10° hd. 1.30° hd. 1.31° hd. 1.51°	to use. Factors to be considered are gate size, gate weight,		J	
		ANY SOME	condition, working environment and floor slope, etc. Custon		ers	
			are available with varying spring types, deflection ranges ar			
		0	capacities.			
	Ea.	Fire Control Key	At gate #G016 only furnish and install Knox Box 3200 Series	(no K	nox	
		Boxes/Product	Box at other openings assigned the set)			

8	Ea.	Gate Hinge/Hanging	Guardian manufacturing: 2060.200 GORILLA Heavy-Duty Hinge - Flat Mount, Both Sides (Zinc Plated) Liftmaster 2060Z Rated 1,000 pounds per pair. Reduce space between the Jamb/Gate/Post, Allow				
		<del>Devices</del>					
			for 180 degree Swing, Welded Pin Design, Hardened Roller	<del>Bearir</del>	<del>ig</del>		
			Note: if round post similar to chain-link, provide additional				
			brackets/parts to weld these devices to squared off/flat cor	ndition	<del>1S</del>		
			and still meet size/weight of gate warranties.				
_	Ea.	Gate Hinge/Hanging Devices	Hanging device hardware by chain-link gate manufacturer				
2	Ea.	Lockable Canebolt-Type	0524PL and/or part #0000478 x 24"x black zinc x Stainless		CR		
		Devices	Steel Ground Receiver/Strike				
2	Ea.	Padlocks	KS43D2200		SC		
2	Ea.	Permanent Core	23-030	626	SC		
2	Ea.	Heavy Duty Gate Caster	G3 Series #G327ZZ60JZ83YY x coordinated/correct sized wh	<del>reel.</del>			
		Bracket	Consult factory representative for help in determining the				
		3.71 3.71 3.71 3.71 3.71 3.71 3.71 3.71	bracket series, caster series, wheel diameter, wheel type ar	<del>id bea</del>	ring		
		17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	to use. Factors to be considered are gate size, gate weight, floor				
			condition, working environment and floor slope, etc. Custom casters				
			are available with varying spring types, deflection ranges and				
		<b>O U</b>	<del>capacities.</del>				
L	Ea.	Fire Control Key	At gate #G016 only furnish and install Knox Box 3200 Series	(no K	nox		
		Boxes/Product	Box at other openings assigned the set)				

**END OF SECTION**