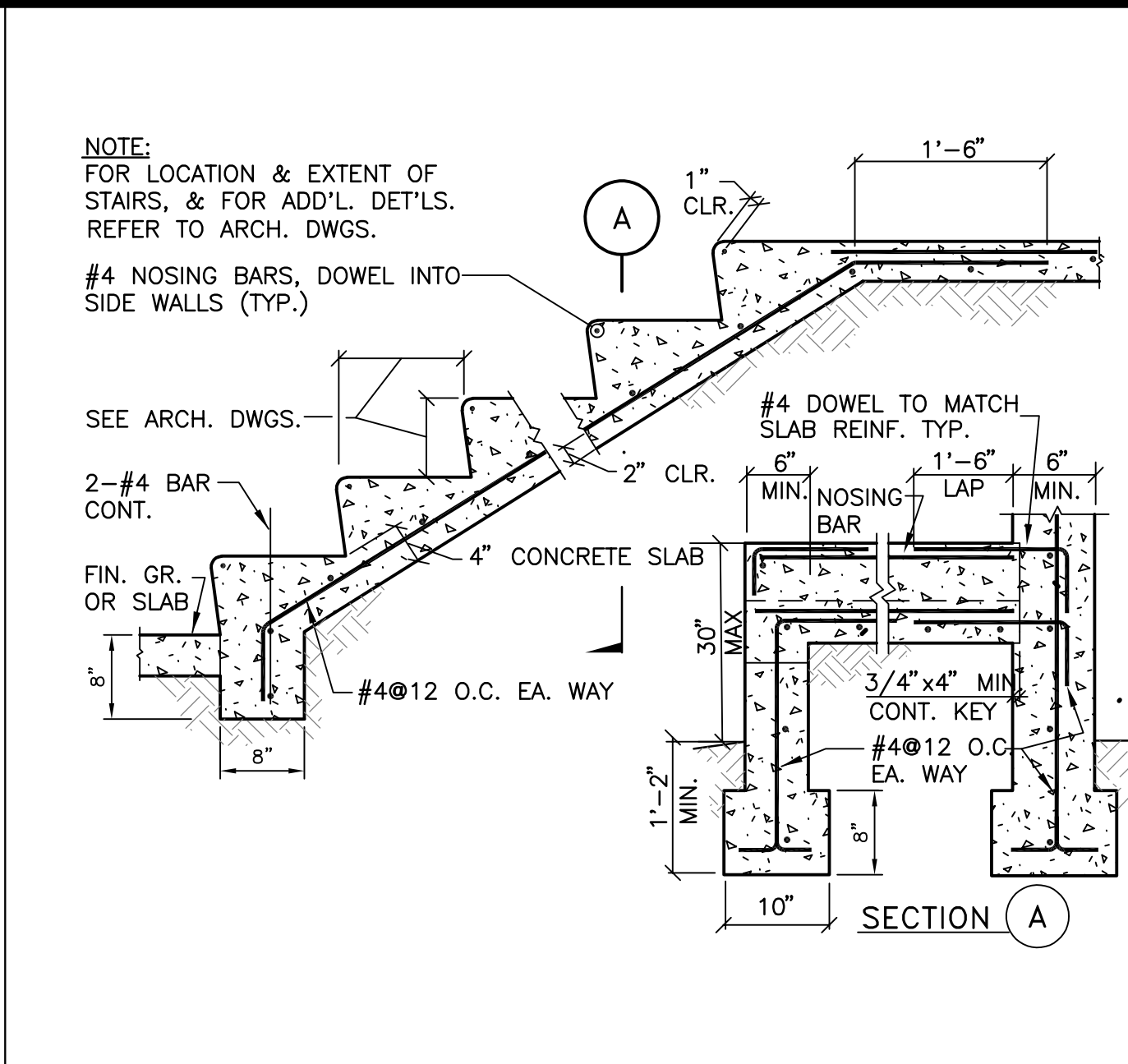
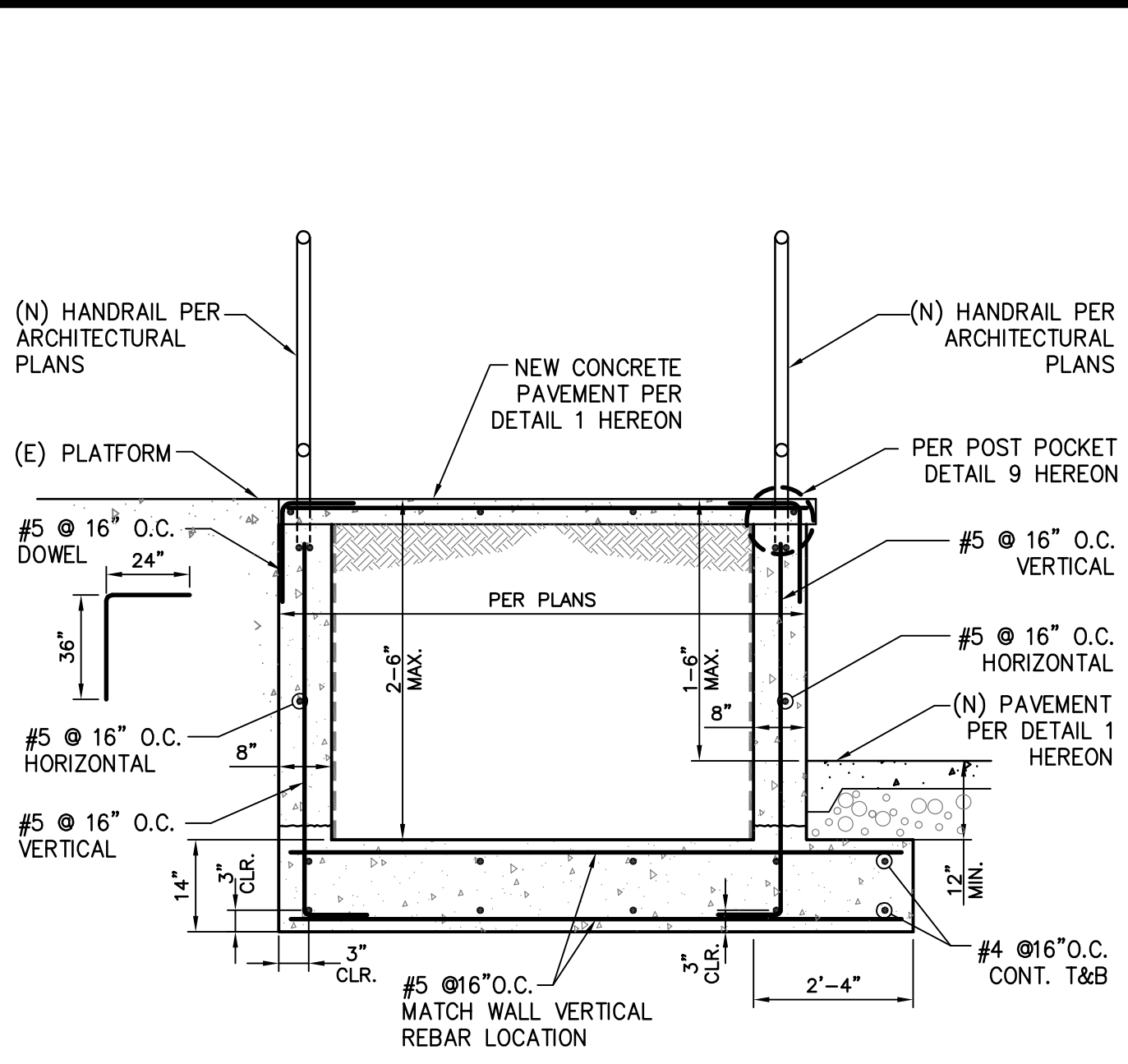


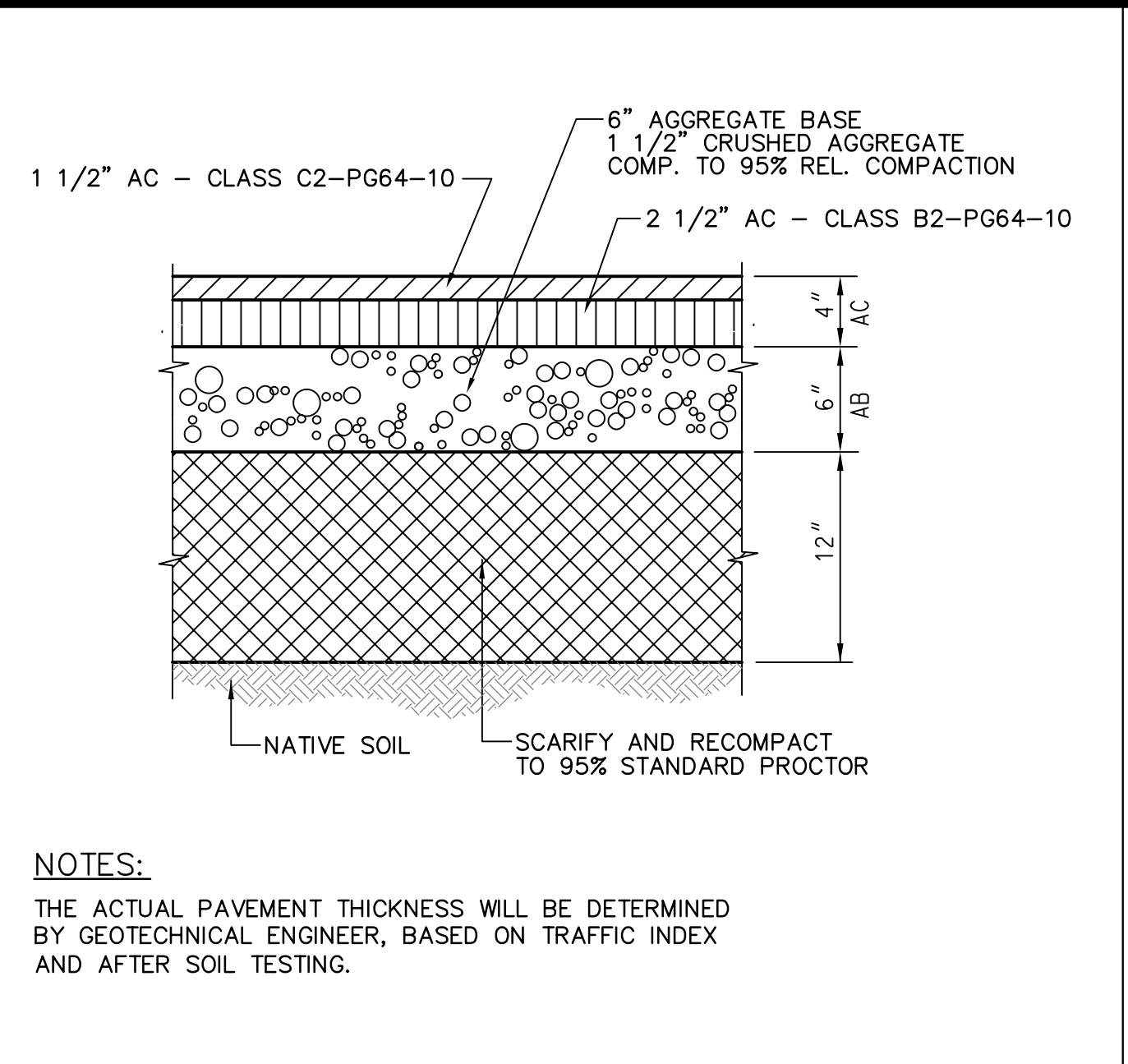
REDWOOD HEADER DETAIL SCALE: NO SCALE 15



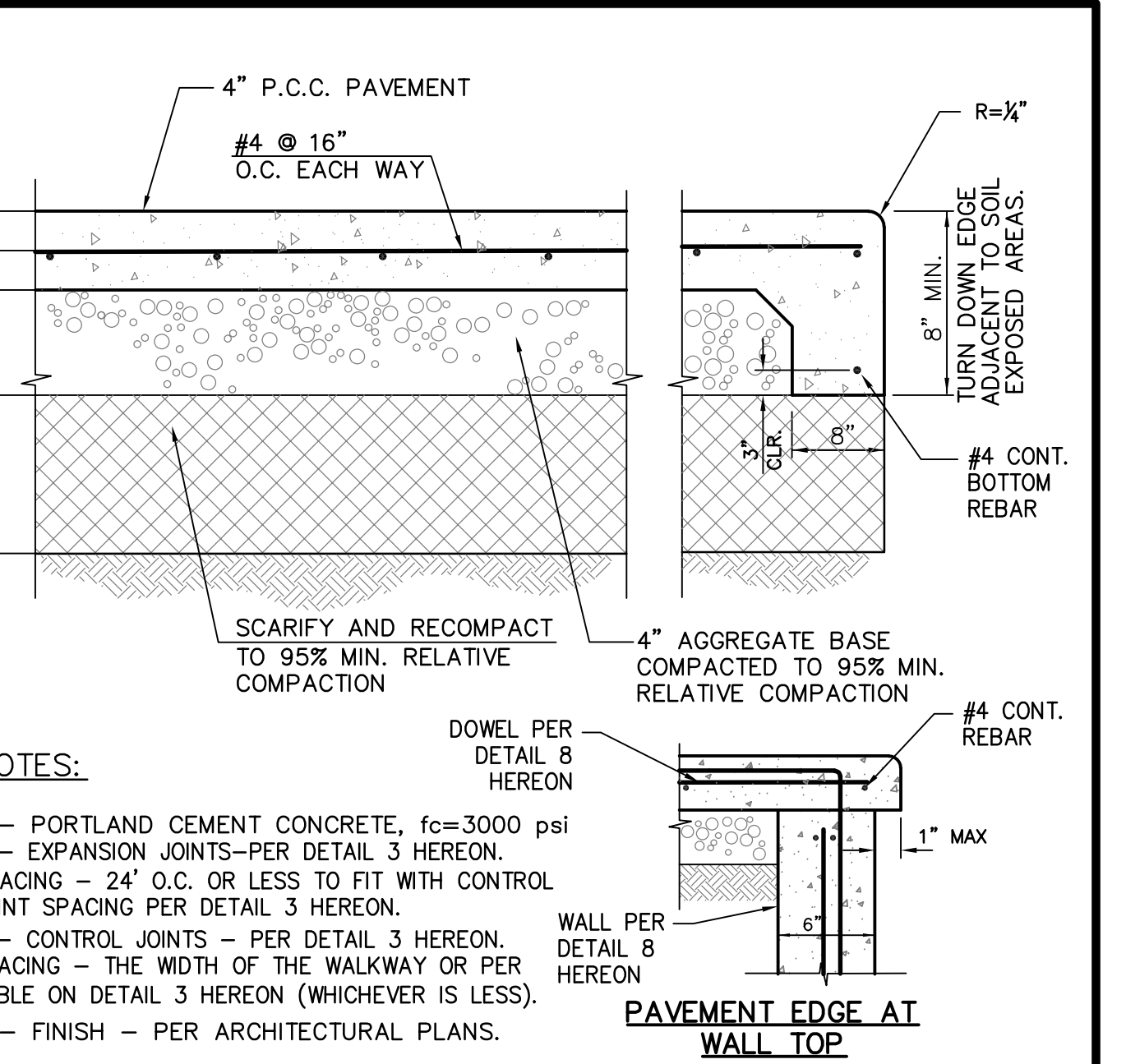
STEPS ON GRADE SCALE: NO SCALE 12



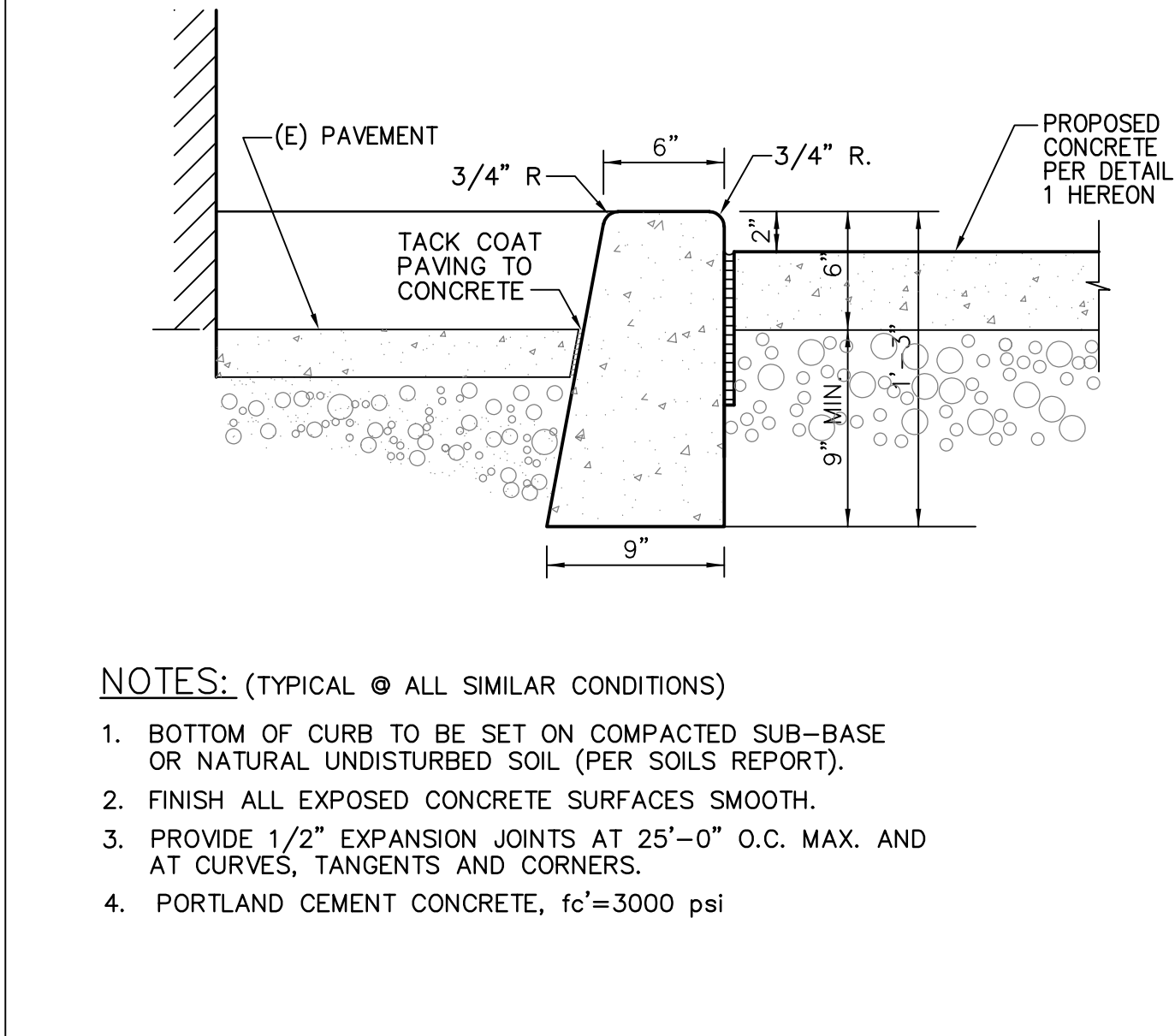
8" CONCRETE WALL (CURVED RAMP) SCALE: NO SCALE 8



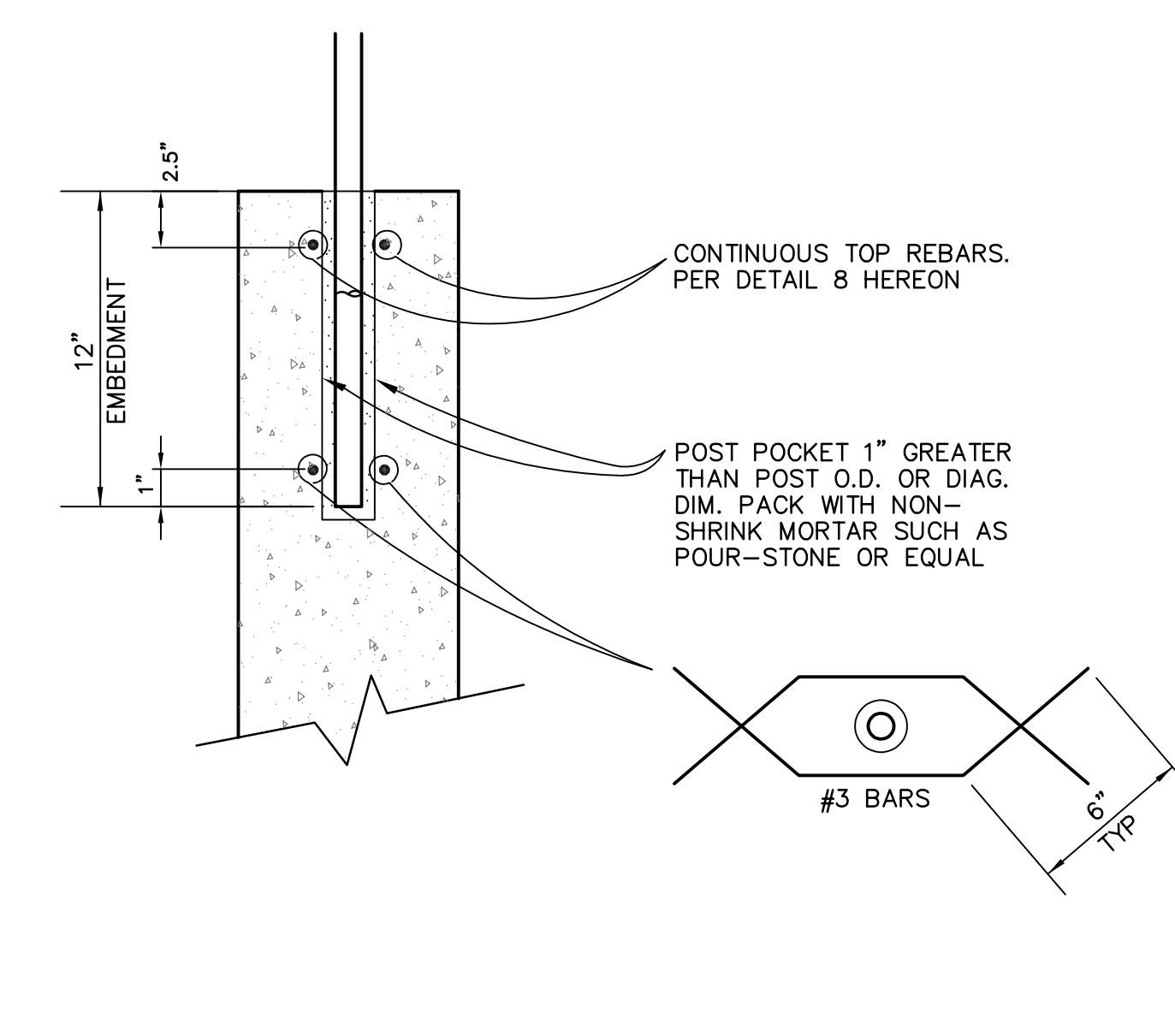
AC PAVEMENT DETAIL SCALE: NO SCALE 4



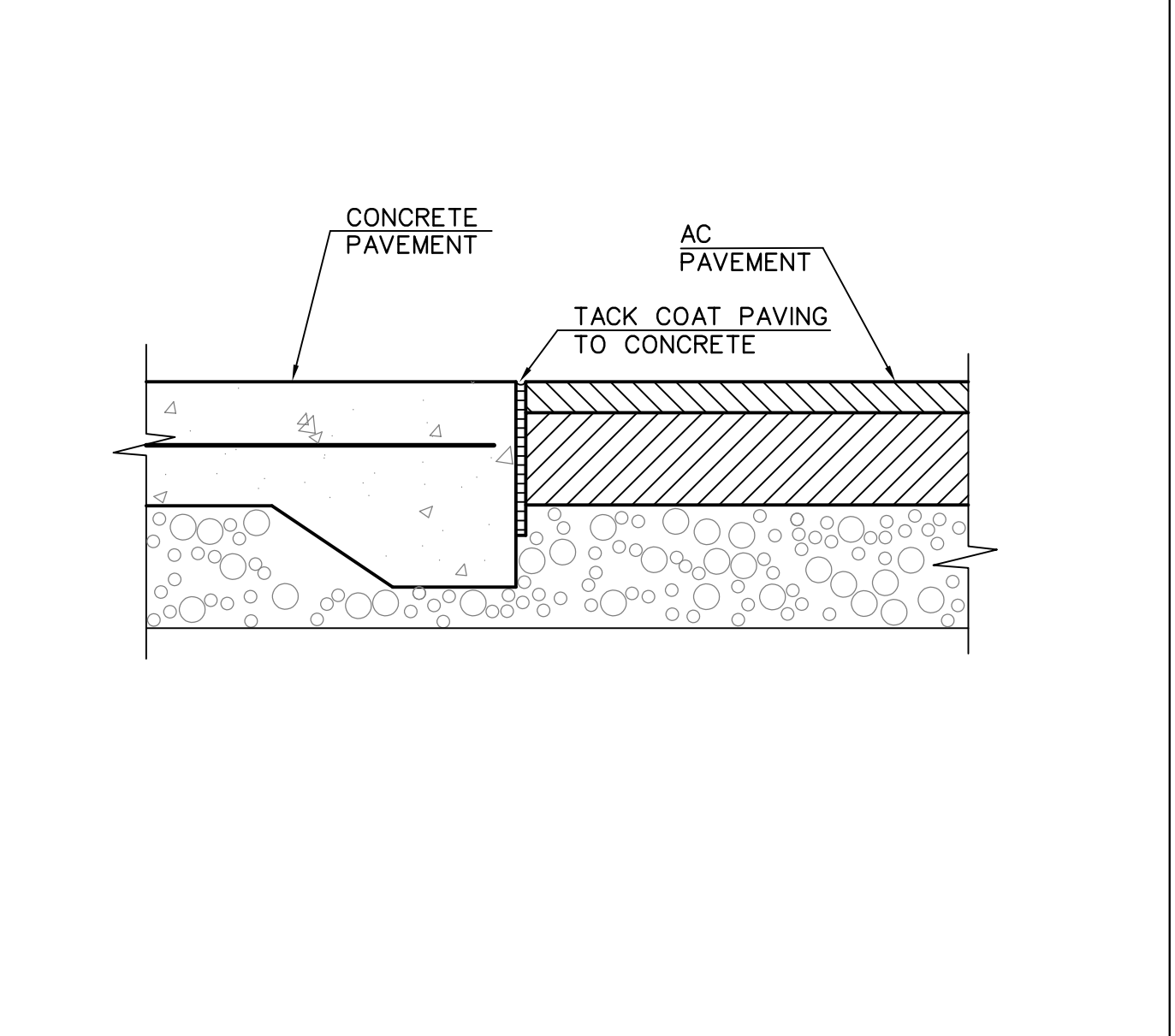
PEDESTRIAN CONCRETE WALKWAY SCALE: NO SCALE 1



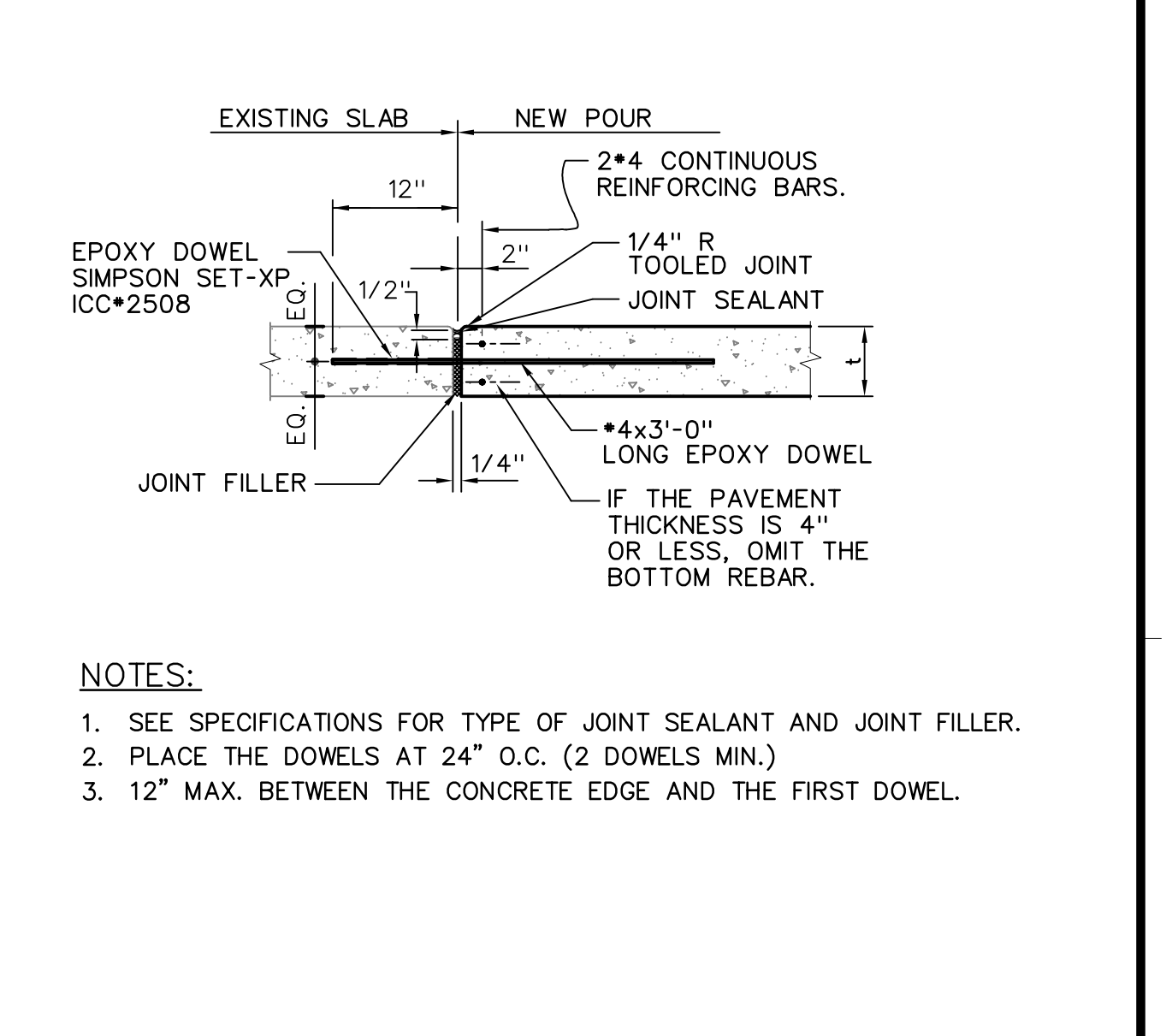
CONCRETE CURB DETAIL (APWA 120-1) SCALE: NO SCALE 13



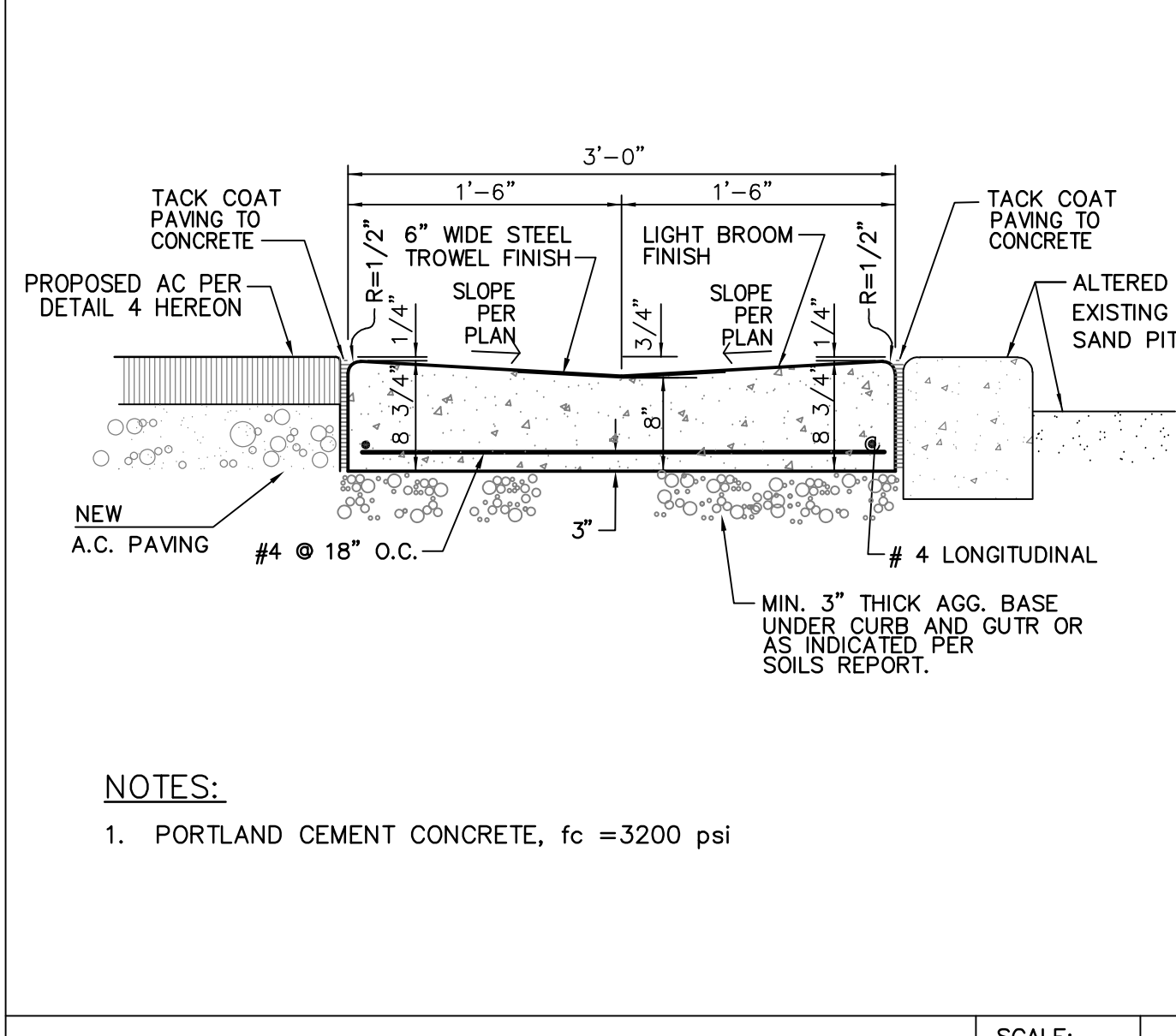
POST POCKET DETAIL SCALE: NO SCALE 9



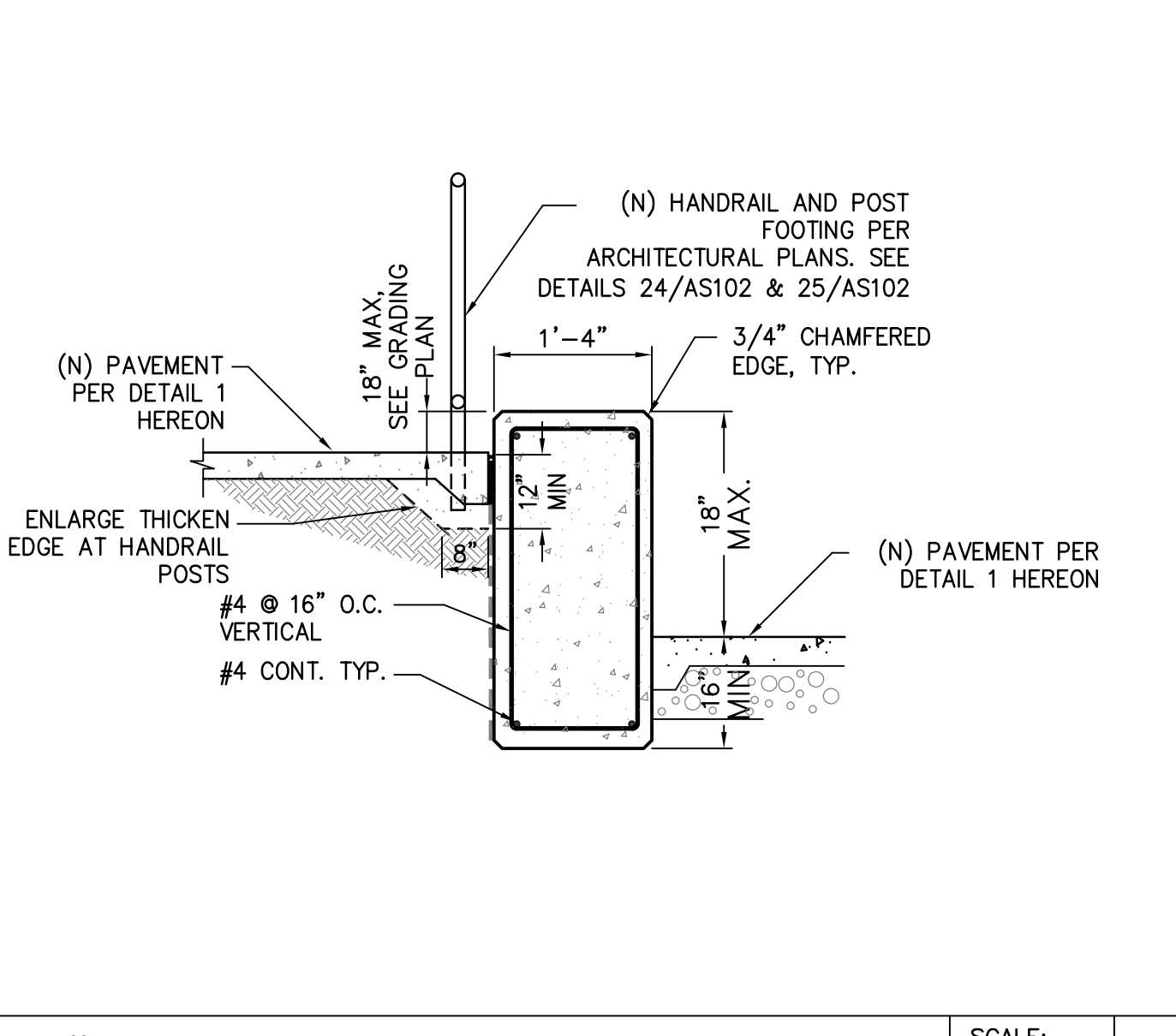
AC TO CONCRETE PAVEMENT TRANSITION SCALE: NO SCALE 5



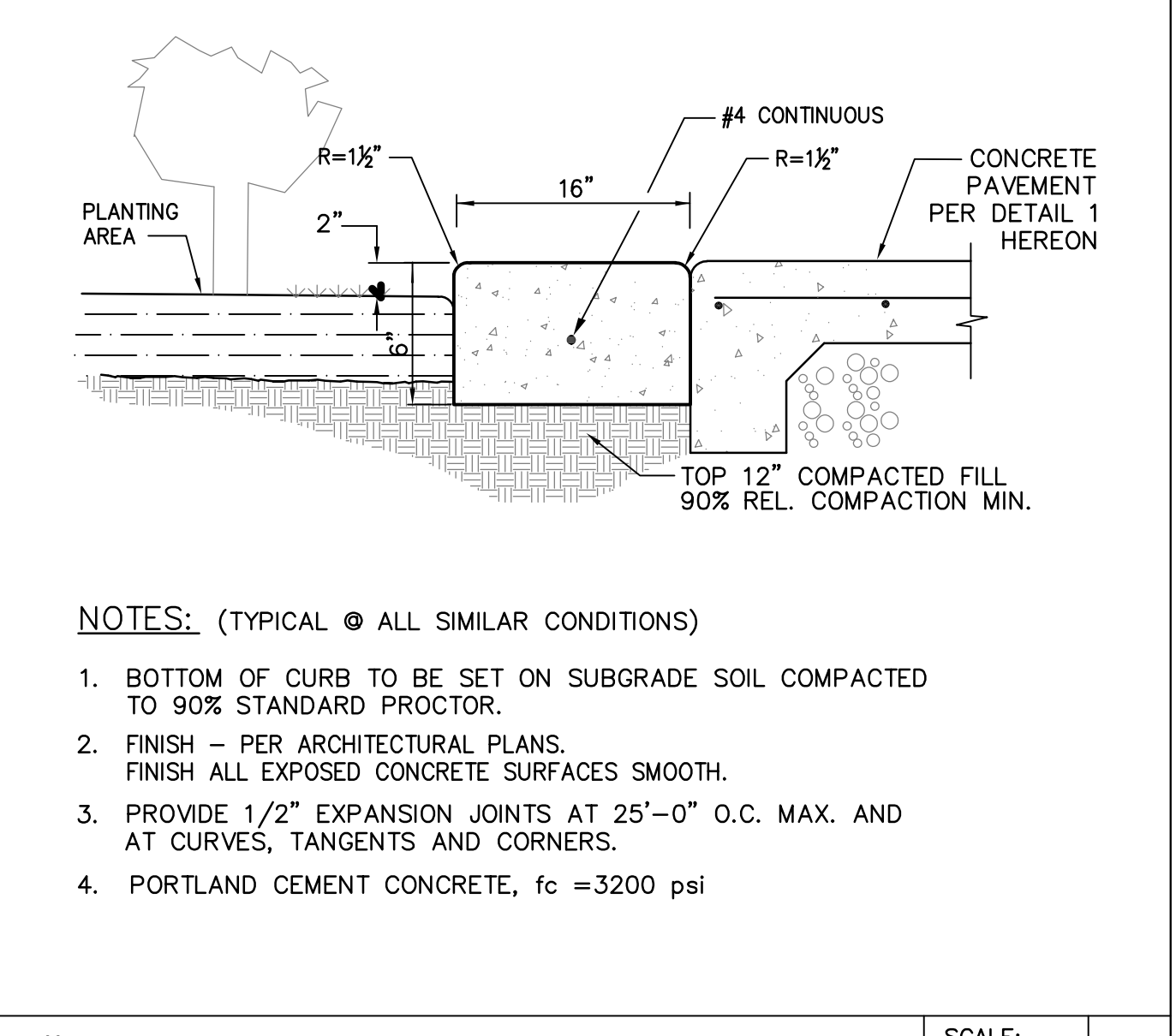
CONSTRUCTION JOINT AT (E) CONC. SCALE: NO SCALE 2



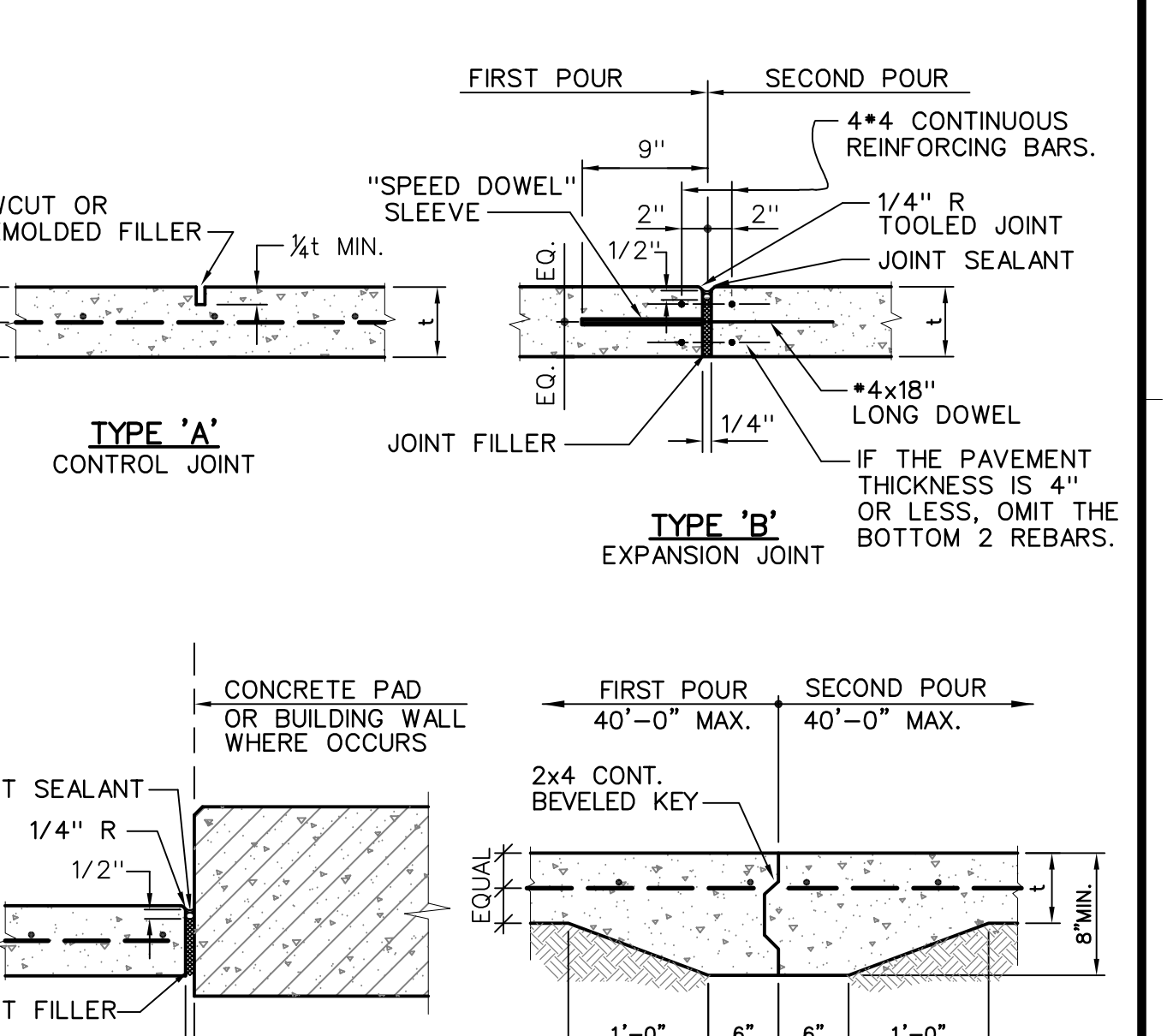
LONGITUDINAL CONCRETE GUTTER SCALE: NO SCALE 14



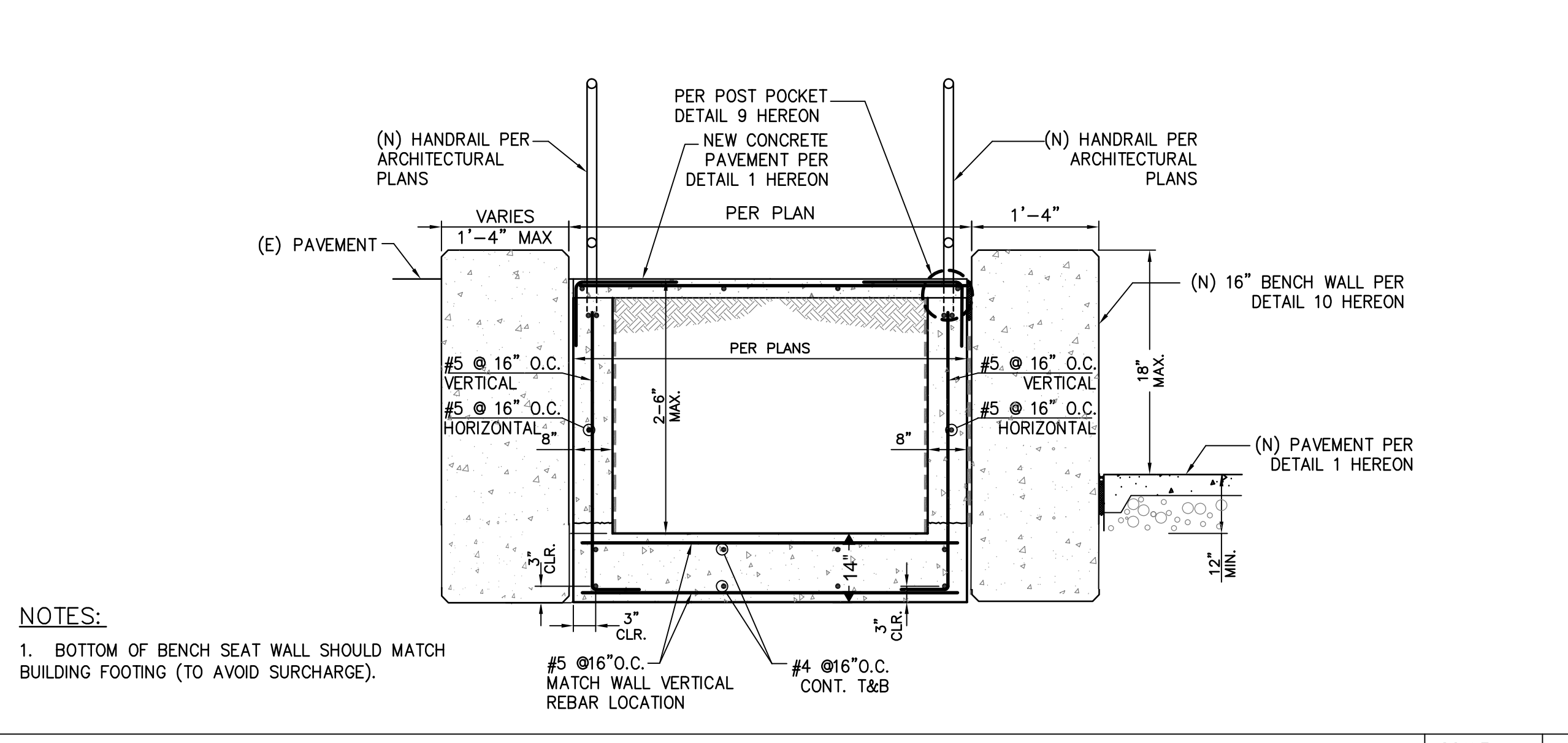
16" CONCRETE BENCH WALL SCALE: NO SCALE 10



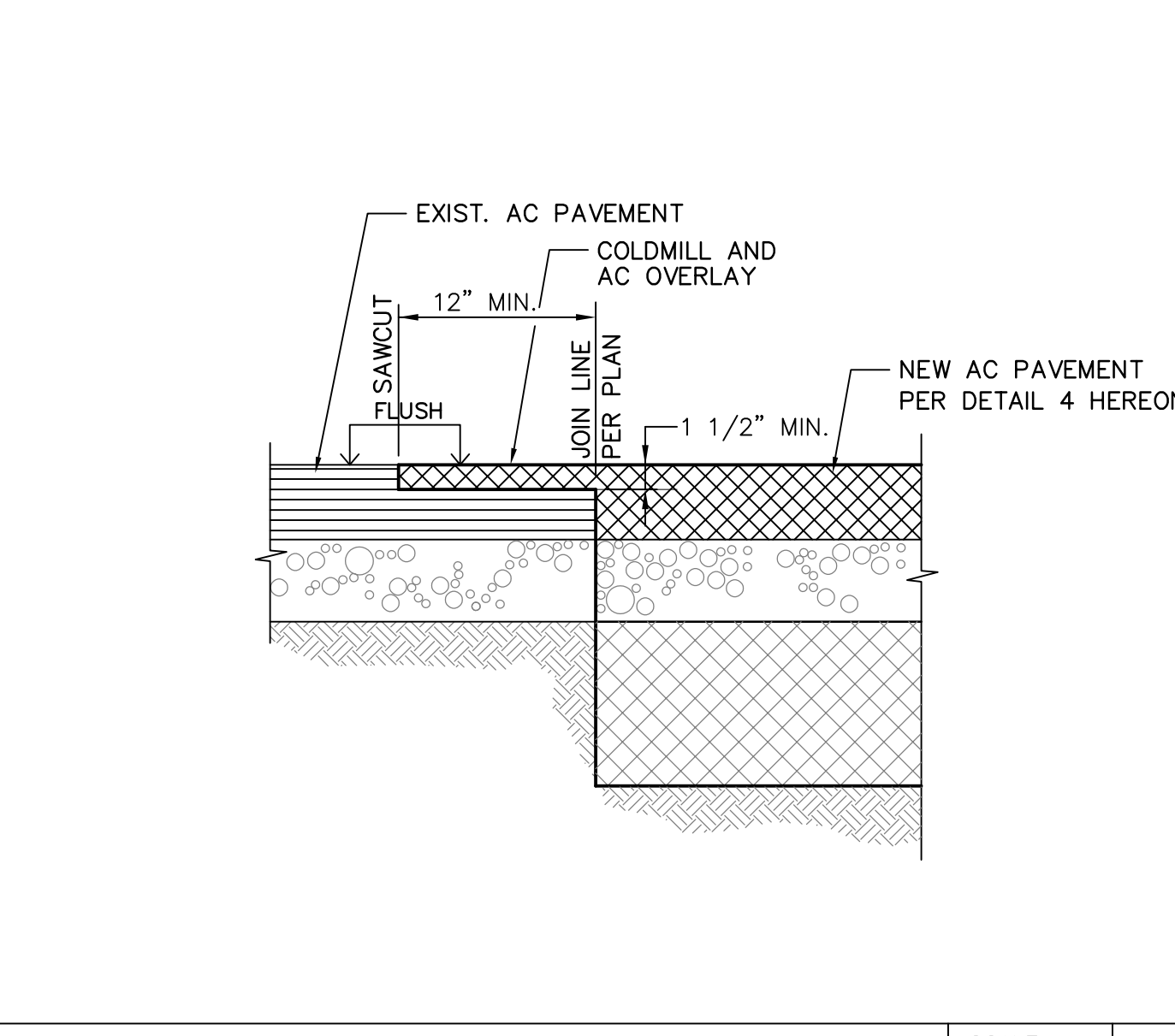
16" CONCRETE HEADER SCALE: NO SCALE 6



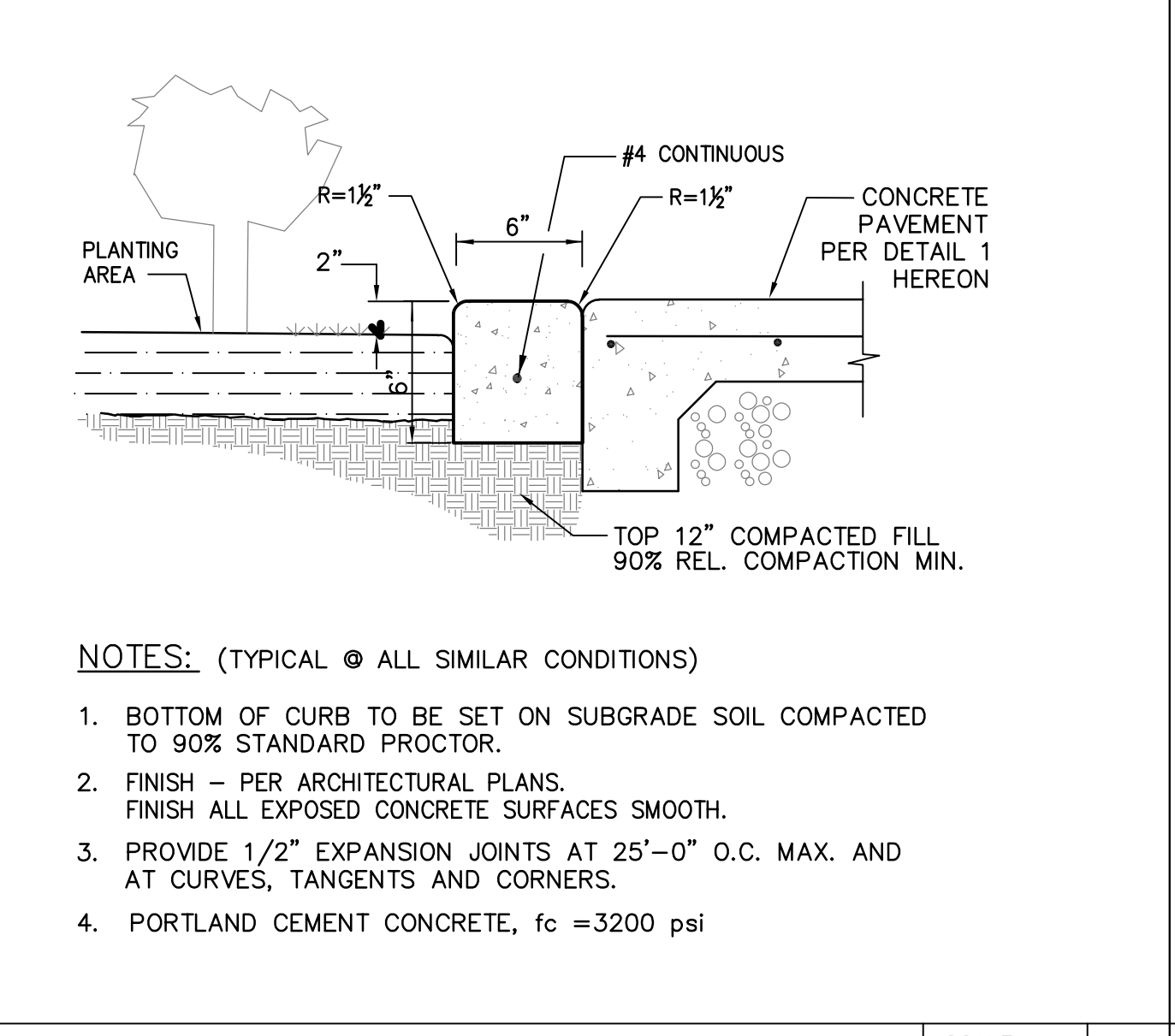
CONSTRUCTION JOINTS SCALE: NO SCALE 3



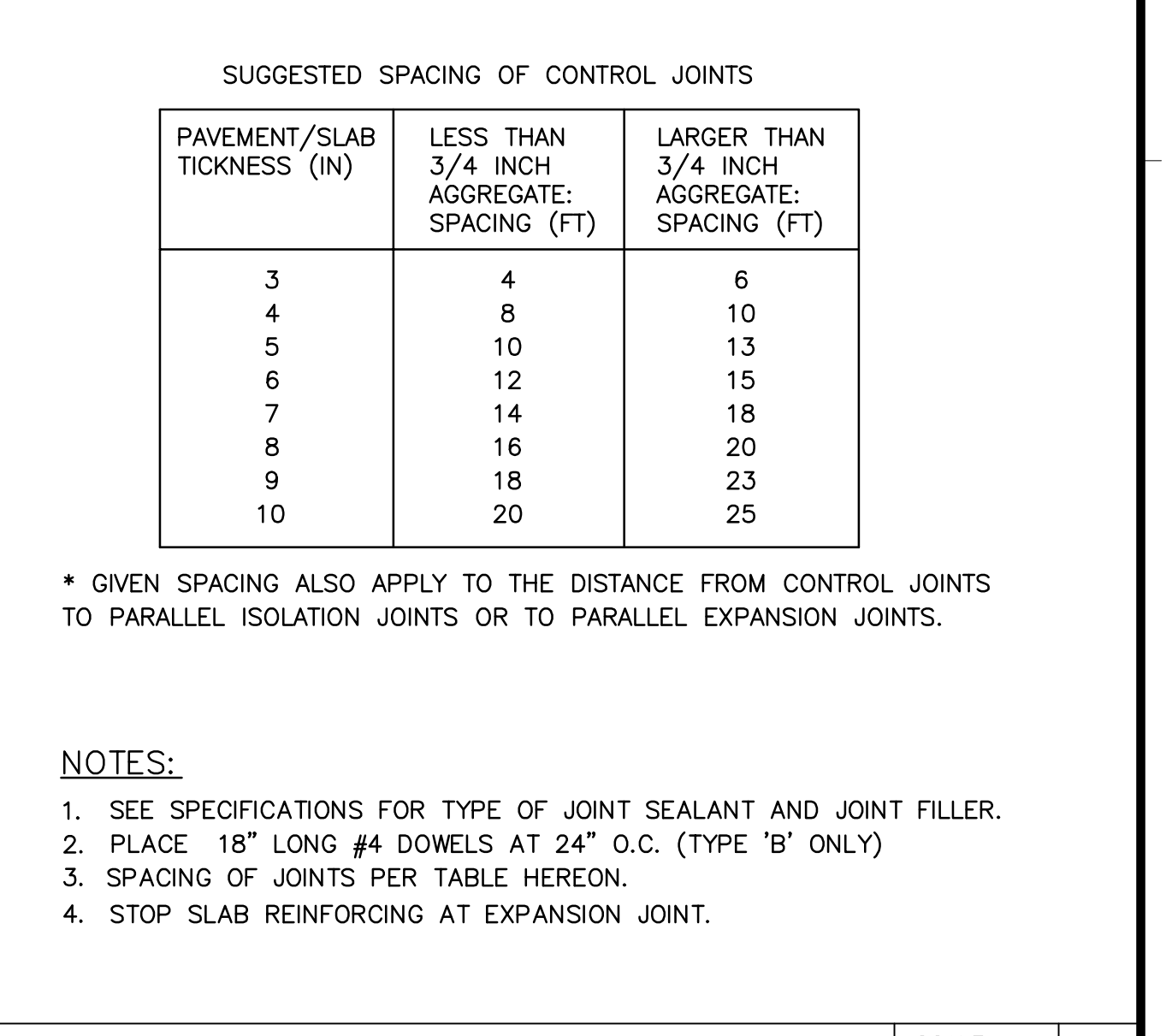
STRAIGHT RAMP CROSS SECTION SCALE: NO SCALE 16



AC PAVEMENT JOINT DETAIL SCALE: NO SCALE 11



6" CONCRETE HEADER SCALE: NO SCALE 7



CONSTRUCTION JOINTS SCALE: NO SCALE 3

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 03-119485 INC.
REVIEWED FOR
SS □ FLS □ ACS □
DATE: 8/14/2019

CANNONDESIGN
155 S. Fair Oaks, 2nd Floor,
Pasadena California 91105
1 626.666.6906
1 626.666.3940
www.cannondesign.com

REGISTERED ARCHITECT
JAVAN NABILI
No. C24035
REN: 73121
STATE OF CALIFORNIA

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INGLEWOOD UNIFIED SCHOOL DISTRICT

CORDOBA CORPORATION
1400 W. 10TH STREET, SUITE 100, LOS ANGELES, CA 90015
TEL: 213.480.4000 WWW.CORDOBA.COM

CONSULTANT NAME OR LOGO

REGISTERED PROFESSIONAL ENGINEER
No. C80534
STATE OF CALIFORNIA

BRANDOW & JOHNSTON
STRUCTURAL ENGINEERS (S.E. INC.)
700 S. FLOWER ST. #100, LOS ANGELES, CA 90017
(213) 686-4000 WWW.BRJ.COM
EST. 1947

SOUND MITIGATION PROGRAM

OAK STREET ELEMENTARY SCHOOL
633 South Oak Street

A PROJECT FOR:
INGLEWOOD UNIFIED SCHOOL DISTRICT

PROJECT NUMBER:
C18-0041

DRAWN: V. TANTCHEVA
CHECKED: ED MELO

ISSUE REVISION:

DATE	DESCRIPTION	PERCENTAGE
08/21/2018	30% - SCHEMATIC DESIGN	
10/10/2018	50% - CD-SUBMITTAL	
11/15/2018	100% - CD-DSA SUBMITTAL	
03/15/2019	DSA APPROVAL	

TYPICAL DETAILS

C201

H:\C18-0041 - 06K - Oak Street ES\Engineering\Drawings\C201.dwg Printed On: Jun 21, 2019 - 10:08am by vstantcheva

ELM AVE.

LIMITS OF DEMOLITION

OAK ST.

MATCH LINE - SEE SHEET C302

EX. BUILDING B TO REMAIN

EX. BUILDING A TO REMAIN

LIMITS OF DEMOLITION

EX. COURTYARD

LIMITS OF DEMOLITION

EX. BUILDING A TO REMAIN

LIMITS OF DEMOLITION

LIMITS OF DEMOLITION

LIMITS OF DEMOLITION

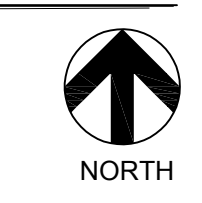
EX. BUILDING A TO REMAIN

LIMITS OF DEMOLITION

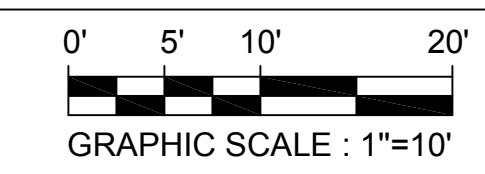
LIMITS OF DEMOLITION

LIMITS OF DEMOLITION

SPRUCE AVE.



SITE DEMOLITION PLAN



DEMOLITION NOTES:

- 1 REMOVE EXISTING ASPHALT PAVEMENT.
- 2 REMOVE EXISTING CONCRETE CURB.
- 3 REMOVE EXISTING CONCRETE WALL.
- 4 REMOVE EXISTING CONCRETE STAIRS AND HANDRAIL.
- 5 REMOVE EXISTING CONCRETE GUTTER.
- 6 REMOVE EXISTING CONCRETE PAVEMENT.
- 7 REMOVE EXISTING CONCRETE RAMP.
- 8 REMOVE EXISTING LANDSCAPED AREA.
- 9 REMOVE EXISTING BICYCLE RACK AND STORE FOR RE-INSTALLATION. COORDINATE STORAGE AND NEW LOCATION WITH SCHOOL DISTRICT.
- 10 REMOVE EXISTING CHAIN LINK FENCE.
- 11 REMOVE EXISTING CHAIN LINK GATE.
- 12 REMOVE EXISTING BUILDING VENT CURB.
- 13 REMOVE EXISTING POST.

SALVAGE NOTES:

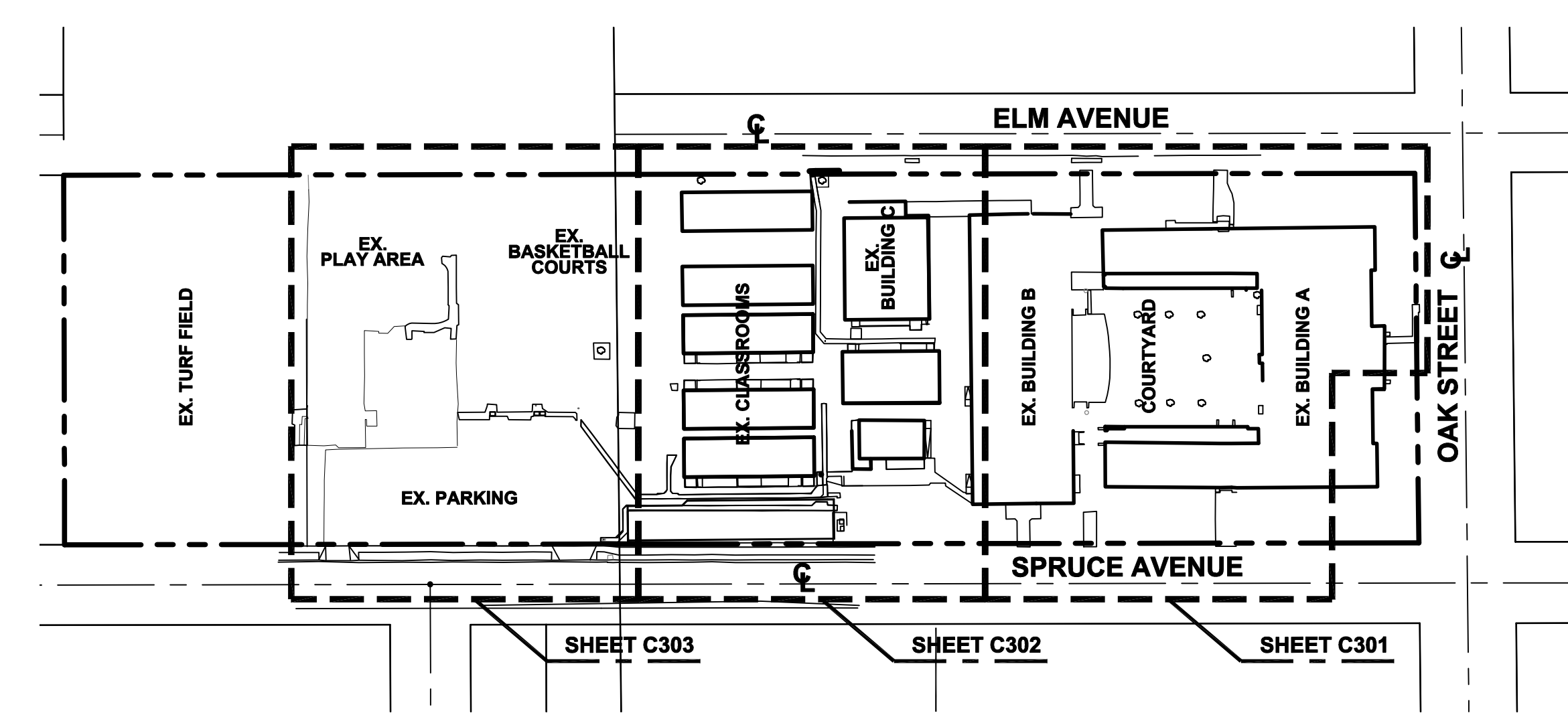
- A PROTECT EXISTING BUILDING.
- B PROTECT IN PLACE EXISTING CONCRETE PAVEMENT.
- C PROTECT IN PLACE EXISTING ASPHALT PAVEMENT.
- D PROTECT EXISTING CONCRETE CURB AROUND EXISTING BASEMENT STAIRS.
- E PROTECT IN PLACE EXISTING PIPE.
- F PROTECT IN PLACE EXISTING UTILITY BOX/VAULT/CABINET. ADJUST TO GRADE IF NEEDED.
- G PROTECT IN PLACE EXISTING TREE.
- H PROTECT IN PLACE EXISTING STAIRS.
- I PROTECT IN PLACE EXISTING WALL.
- J PROTECT IN PLACE EXISTING BASEMENT STAIRS AND ENCLOSURE.
- K PROTECT EXISTING LANDSCAPED AREA.
- L PROTECT IN PLACE EXISTING CONCRETE GUTTER.
- M PROTECT IN PLACE EXISTING STORM DRAIN INLET.
- N PROTECT IN PLACE EXISTING CHAIN LINK FENCE/GATE AND POSTS.
- O PROTECT IN PLACE EXISTING PILASTER.
- P PROTECT IN PLACE EXISTING ALTERED SAND PIT.
- Q PROTECT IN PLACE EXISTING CONCRETE RAMP.

UTILITY DEMOLITION NOTES:

- 1 CONTRACTOR TO ABANDON EXISTING HOSE BIBB.
- 2 CONTRACTOR TO REMOVE EXISTING CATCH BASIN.

LEGEND:

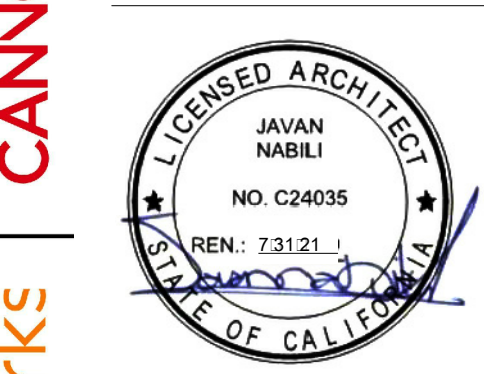
- LIMITS OF DEMOLITION
- EXISTING BUILDING OUTLINE
- PROPERTY LINE
- CENTER LINE
- SAWCUT LINE



KEY MAP SCALE: 1"=80'

IDENTIFICATION STAMP
 DIV. OF THE STATE ARCHITECT
 APP. 03-119485 INC.
 REVIEWED FOR
 SS FLS ACS
 DATE: 8/14/2019

155 S. Fair Oaks, 2nd Floor,
 Pasadena California 91105
 626.666.8906
 626.666.3940
 www.cannondesign.com



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CONSULTANT NAME OR LOGO



FOR BRANDON R. JOHNSON
 BRANDON R. JOHNSON
 STRUCTURAL-CIVIL ENGINEER (RAJ, INC.)
 700 S. FLOWER ST #180, LOS ANGELES, CA 90017
 (213) 688-4000 WWW.BRBJ.COM
 EST. 1942

SOUND MITIGATION PROGRAM

OAK STREET ELEMENTARY SCHOOL

INGLEWOOD UNIFIED SCHOOL DISTRICT

PROJECT NUMBER: C18-0041

DRAWN: V. TANTOCHEVA

CHECKED: ED MELO

ISSUE/REVISION:

08/21/2018	30% - SCHEMATIC DESIGN
10/10/2018	50% - CD SUBMITTAL
11/15/2018	100% - CD-DSA SUBMITTAL
03/15/2019	DSA APPROVAL

SITE DEMOLITION PLAN

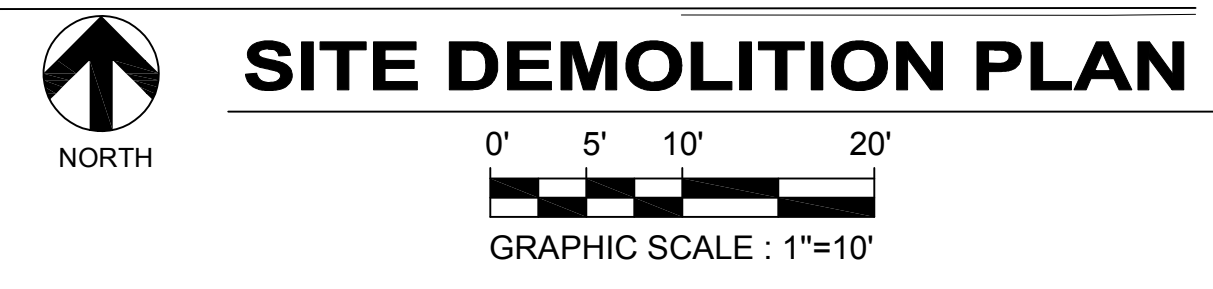
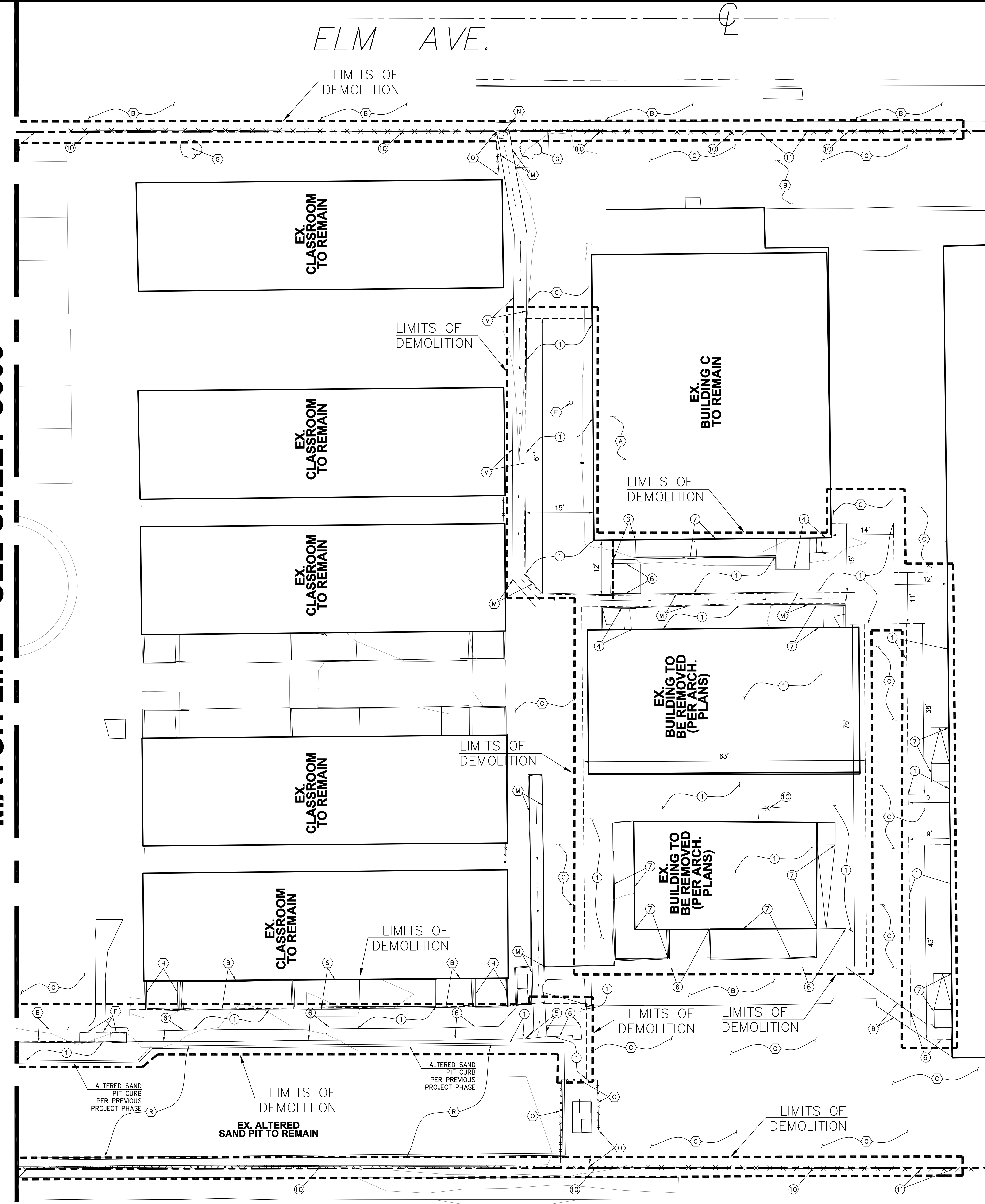
C301

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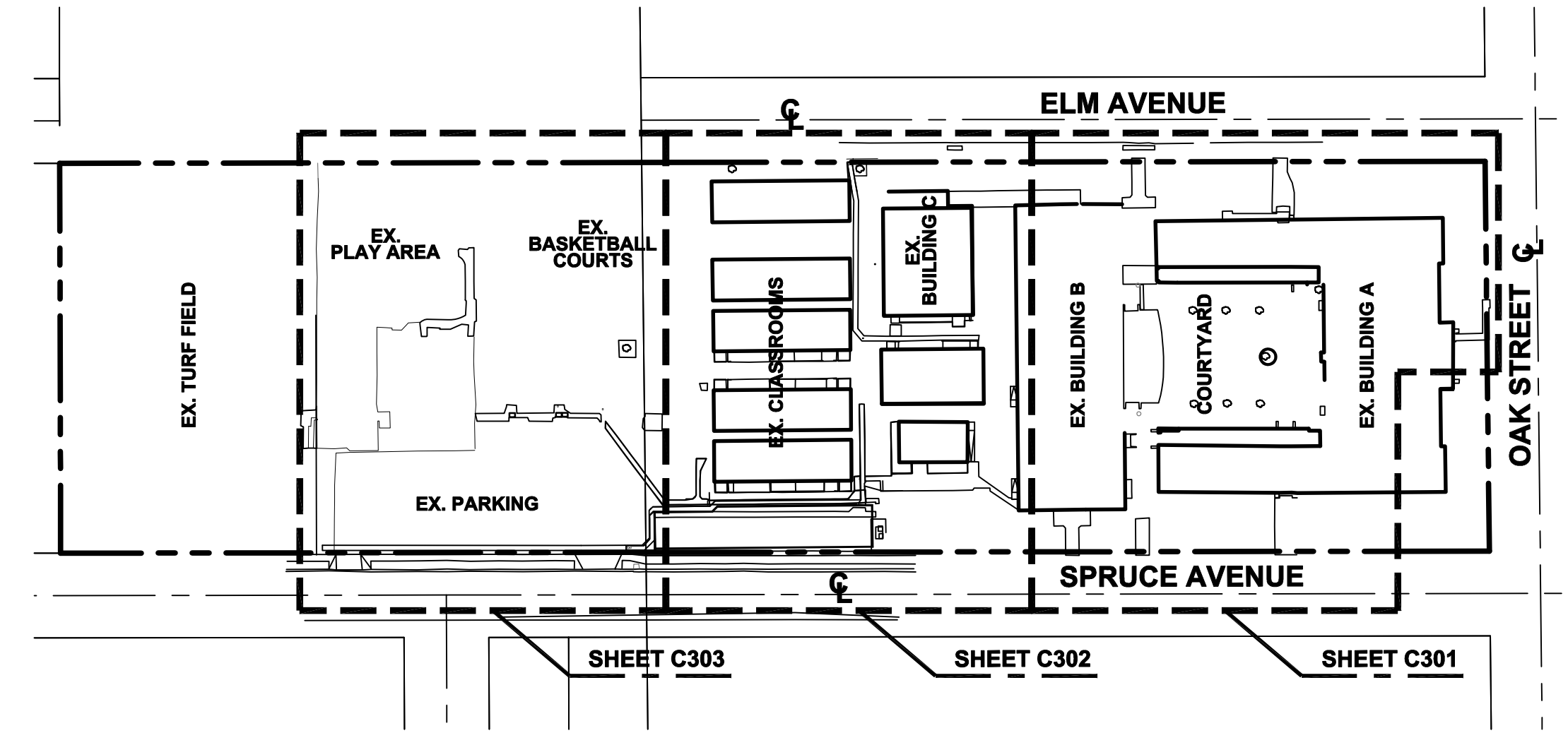
HA-C18-0041 - GKK - Oak Street ES Engineering\Drawings\C302.dwg Plotted On Jun 24, 2019 - 6:43pm by viancheva

MATCH LINE - SEE SHEET C303

MATCH LINE - SEE SHEET C301



SITE DEMOLITION PLAN



KEY MAP
SCALE: 1"=80'

DEMOLITION NOTES:

- ① REMOVE EXISTING ASPHALT PAVEMENT.
- ② REMOVE EXISTING CONCRETE CURB.
- ③ REMOVE EXISTING CONCRETE WALL.
- ④ REMOVE EXISTING CONCRETE STAIRS AND HANDRAIL.
- ⑤ REMOVE EXISTING CONCRETE GUTTER.
- ⑥ REMOVE EXISTING CONCRETE PAVEMENT.
- ⑦ REMOVE EXISTING CONCRETE RAMP.
- ⑧ REMOVE EXISTING LANDSCAPED AREA.
- ⑨ REMOVE EXISTING BICYCLE RACK AND STORE FOR RE-INSTALLATION COORDINATE STORAGE AND NEW LOCATION WITH SCHOOL DISTRICT.
- ⑩ REMOVE EXISTING CHAIN LINK FENCE.
- ⑪ REMOVE EXISTING CHAIN LINK GATE.
- ⑫ REMOVE EXISTING BUILDING VENT CURB.
- ⑬ REMOVE EXISTING POST.

SALVAGE NOTES:

- Ⓐ PROTECT EXISTING BUILDING.
- Ⓑ PROTECT IN PLACE EXISTING CONCRETE PAVEMENT.
- Ⓒ PROTECT IN PLACE EXISTING ASPHALT PAVEMENT.
- Ⓓ PROTECT EXISTING CONCRETE CURB AROUND EXISTING BASEMENT STAIRS.
- Ⓔ PROTECT IN PLACE EXISTING PIPE.
- Ⓕ PROTECT IN PLACE EXISTING UTILITY BOX/Vault/CABINET. ADJUST TO GRADE IF NEEDED.
- Ⓖ PROTECT IN PLACE EXISTING TREE.
- Ⓗ PROTECT IN PLACE EXISTING STAIRS.
- Ⓙ PROTECT IN PLACE EXISTING WALL.
- Ⓚ PROTECT IN PLACE EXISTING BASEMENT STAIRS AND ENCLOSURE.
- Ⓛ PROTECT EXISTING LANDSCAPED AREA.
- Ⓜ PROTECT IN PLACE EXISTING CONCRETE GUTTER.
- Ⓝ PROTECT IN PLACE EXISTING STORM DRAIN INLET.
- Ⓟ PROTECT IN PLACE EXISTING CHAIN LINK FENCE/GATE AND POSTS.
- Ⓠ PROTECT IN PLACE EXISTING PILASTER.
- Ⓡ PROTECT IN PLACE EXISTING ALTERED SAND PIT.
- Ⓢ PROTECT IN PLACE EXISTING CONCRETE RAMP.

UTILITY DEMOLITION NOTES:

- ① CONTRACTOR TO ABANDON EXISTING HOSE BIBB.
- ② CONTRACTOR TO REMOVE EXISTING CATCH BASIN.

LEGEND:

- LIMITS OF DEMOLITION
- EXISTING BUILDING OUTLINE
- PROPERTY LINE
- CENTER LINE
- SAWCUT LINE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 03-119485 INC.
REVIEWED FOR
SS FLS ACS
DATE: 8/14/2019

CANNONDESIGN
155 S. Fair Oaks, 2nd Floor,
Pasadena California 91105
1 626.666.6906
1 626.666.3940
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3445 BRANFLOM AVENUE, SUITE 100, PASADENA, CA 91107
TEL: 626.799.4000 WWW.CORDOBA.COM

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FOR BRANDON & JOHNSTON
BRANDON & JOHNSTON
STRUCTURAL-CIVIL ENGINEERS (B&J-H&K, INC.)
700 S FLOWER ST FLOOR 10 LOS ANGELES, CA 90017
T: 213.989.4900 WWW.B&JCO.COM
EST. 1945

SOUND MITIGATION PROGRAM

OAK STREET ELEMENTARY SCHOOL
633 South Oak Street
A-PROJECT FOR:

INGLEWOOD UNIFIED SCHOOL DISTRICT

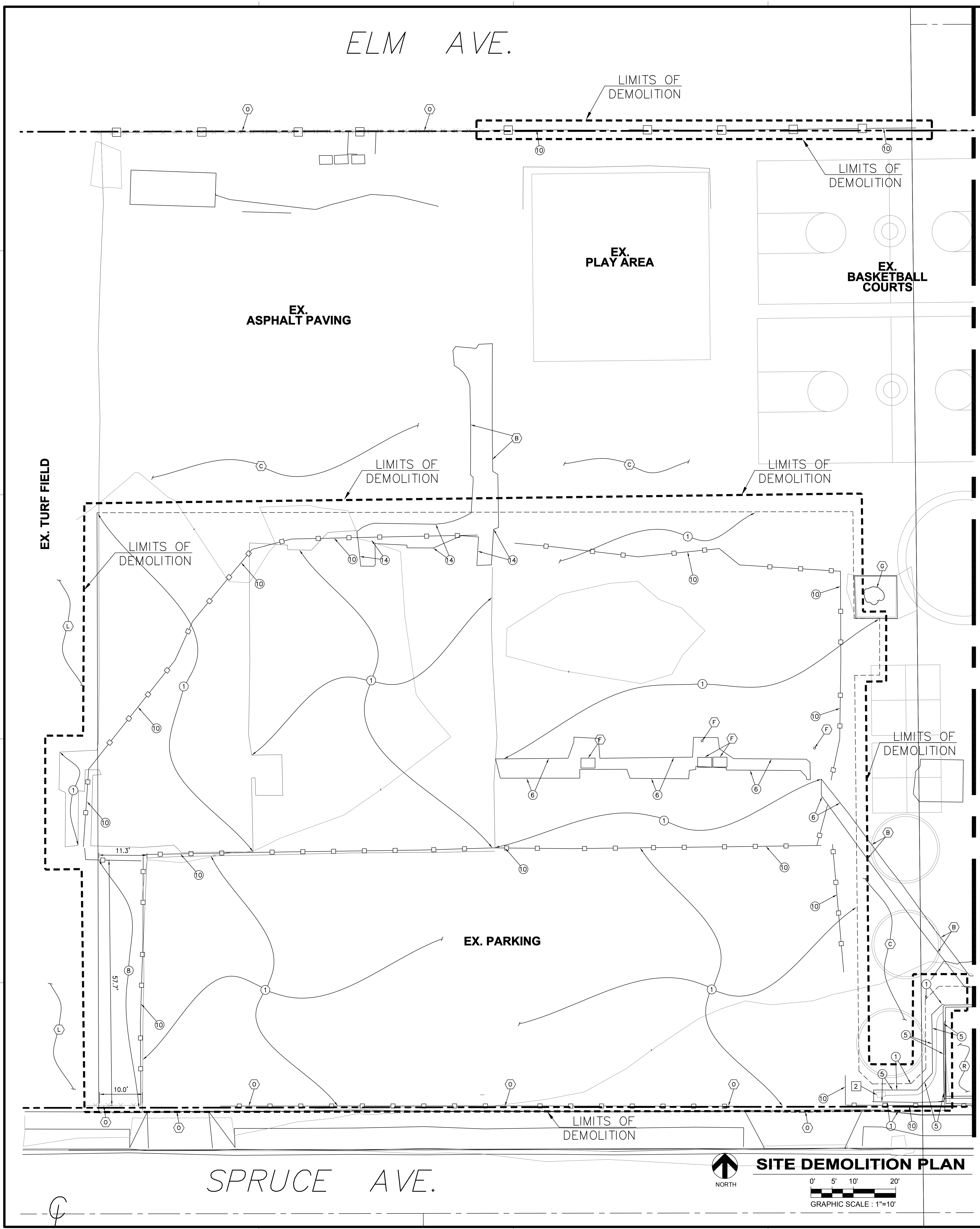
PROJECT NUMBER: **C18-0041**

DRAWN:	V. TANTCHEVA
CHECKED:	ED MELO
ISSUE/REVISION:	
08/21/2018	30% - SCHEMATIC DESIGN
10/10/2018	50% - CD SUBMITTAL
11/15/2018	100% - CD-DSA SUBMITTAL
03/15/2019	DSA APPROVAL

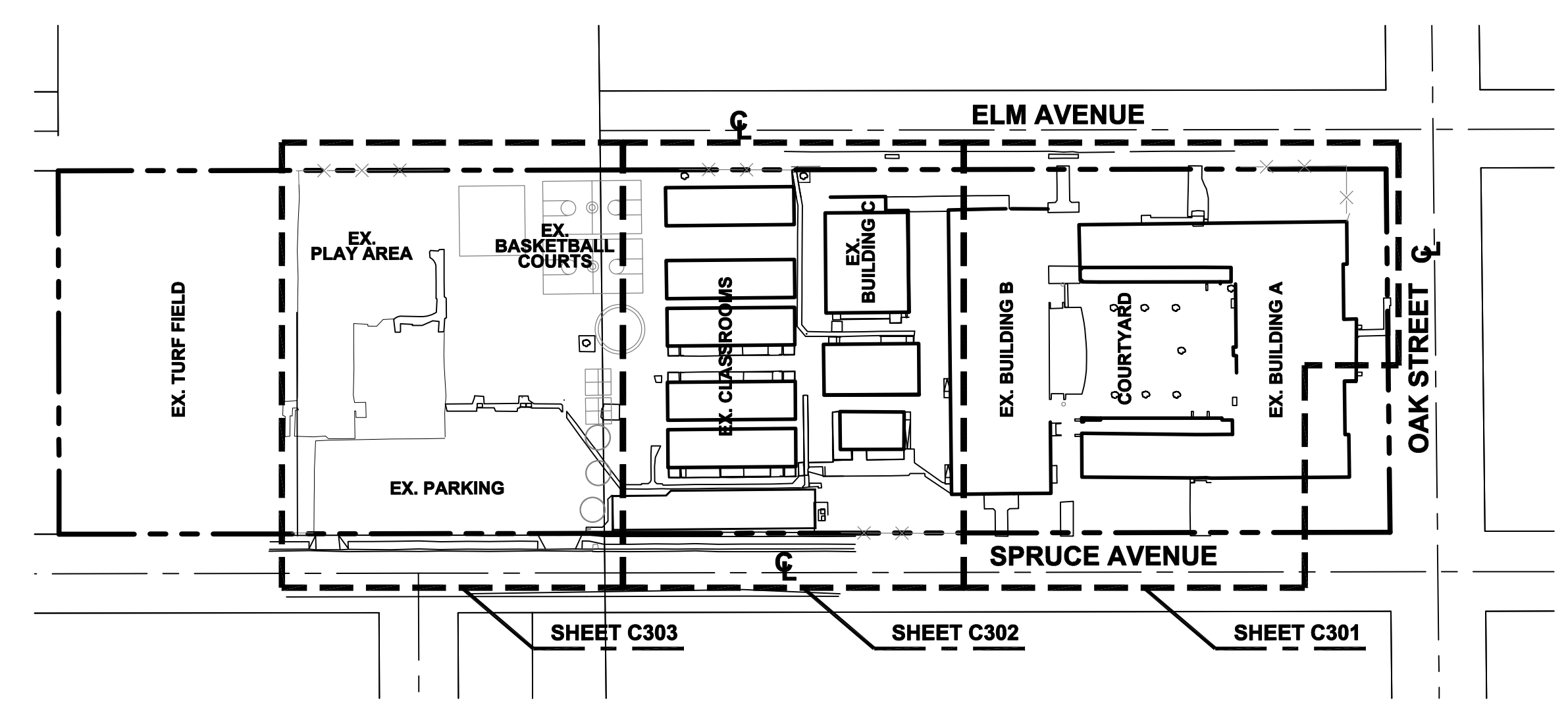
SITE DEMOLITION PLAN

C302

H:\C18-0041 - GKK - Oak Street ES\Engineering\Drawings\C303.dwg Plotted On Jun 24, 2019 - 5:35pm by vtanicheva



MATCH LINE - SEE SHEET C302



DEMOLITION NOTES:

- ① REMOVE EXISTING ASPHALT PAVEMENT.
- ② REMOVE EXISTING CONCRETE CURB.
- ③ REMOVE EXISTING CONCRETE WALL.
- ④ REMOVE EXISTING CONCRETE STAIRS AND HANDRAIL.
- ⑤ REMOVE EXISTING CONCRETE GUTTER.
- ⑥ REMOVE EXISTING CONCRETE PAVEMENT.
- ⑦ REMOVE EXISTING CONCRETE RAMP.
- ⑧ REMOVE EXISTING LANDSCAPED AREA.
- ⑨ REMOVE EXISTING BICYCLE RACK AND STORE FOR RE-INSTALLATION COORDINATE STORAGE AND NEW LOCATION WITH SCHOOL DISTRICT.
- ⑩ REMOVE EXISTING CHAIN LINK FENCE.
- ⑪ REMOVE EXISTING CHAIN LINK GATE.
- ⑫ REMOVE EXISTING BUILDING VENT CURB.
- ⑬ REMOVE EXISTING POST.

SALVAGE NOTES:

- Ⓐ PROTECT EXISTING BUILDING.
- Ⓑ PROTECT IN PLACE EXISTING CONCRETE PAVEMENT.
- Ⓒ PROTECT IN PLACE EXISTING ASPHALT PAVEMENT.
- Ⓓ PROTECT EXISTING CONCRETE CURB AROUND EXISTING BASEMENT STAIRS.
- Ⓔ PROTECT IN PLACE EXISTING PIPE.
- Ⓕ PROTECT IN PLACE EXISTING UTILITY BOX/VAULT/CABINET. ADJUST TO GRADE IF NEEDED.
- Ⓖ PROTECT IN PLACE EXISTING TREE.
- Ⓖ PROTECT IN PLACE EXISTING STAIRS AND HANDRAILS.
- Ⓗ PROTECT IN PLACE EXISTING WALL.
- Ⓘ PROTECT IN PLACE EXISTING BASEMENT STAIRS AND ENCLOSURE.
- Ⓛ PROTECT EXISTING LANDSCAPED AREA.
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- Ⓢ PROTECT IN PLACE EXISTING CONCRETE RAMP.

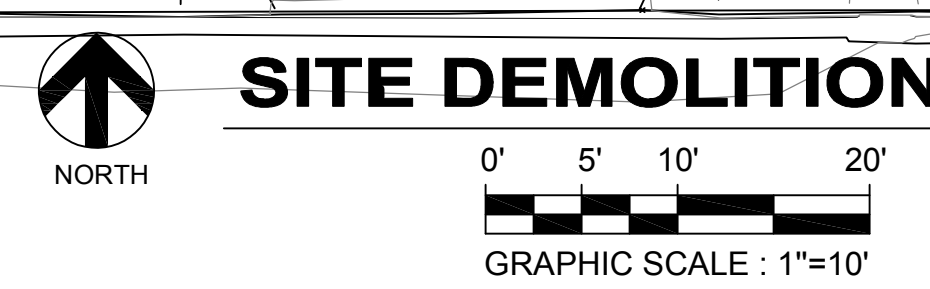
UTILITY DEMOLITION NOTES:

- 1 CONTRACTOR TO ABANDON EXISTING HOSE BIBB.
- 2 CONTRACTOR TO REMOVE EXISTING CATCH BASIN.

LEGEND:

- LIMITS OF DEMOLITION
- EXISTING BUILDING OUTLINE
- PROPERTY LINE
- CENTER LINE
- SAWCUT LINE

SITE DEMOLITION PLAN



KEY MAP
SCALE: 1"=80'

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 03-119485 INC.
REVIEWED FOR
SS FLS ACS
DATE: 8/14/2019

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LICENSED ARCHITECT
JAVAN NABILI
NO. C24035
REN: 73121
STATE OF CALIFORNIA

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CORDOBA CORPORATION
AN ARCHITECT & ENGINEERING FIRM SINCE 1938
CONSULTANT NAME OR LOGO

BRANDON A. JOHNSON
REGISTERED PROFESSIONAL ENGINEER
No. C200534
STATE OF CALIFORNIA

BRANDON A. JOHNSON
BRANDON & JOHNSON
STRUCTURAL-CIVIL ENGINEERS (SCE) INC.
700 S FLOWER ST #100, LOS ANGELES, CA 90017
T: 213-988-8500 WWW.BJCE.COM
EST. 1948

SOUND MITIGATION PROGRAM

OAK STREET ELEMENTARY SCHOOL
633 South Oak Street
A PROJECT FOR:
INGLEWOOD UNIFIED SCHOOL DISTRICT

PROJECT NUMBER:

C18-0041

DRAWN: V. TANTCHEVA

CHECKED: ED MELO

ISSUE/REVISION:

08/21/2018	30% - SCHEMATIC DESIGN
10/10/2018	50% - CD-SUBMITTAL
11/15/2018	100% - CD-DSA SUBMITTAL
03/15/2019	DSA APPROVAL

SITE DEMOLITION PLAN

C303

ELM AVE.

SPRUCE AVE.

MATCH LINE - SEE SHEET C403

MATCH LINE - SEE SHEET C401

LEGEND:

- EXISTING BUILDING OUTLINE
- PROPERTY LINE
- CENTER LINE
- SAWCUT LINE
- PATH OF DRAINAGE
- PROP. CONTOUR
- EXIST. CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- PROPOSED WALL
- NEW CONCRETE PAVEMENT
- NEW ASPHALT CONCRETE PAVEMENT
- NEW LANDSCAPED AREA
- NEW UTILITY TRENCHING
- PATH OF TRAVEL

CONSTRUCTION NOTES:

- CONSTRUCT PEDESTRIAN CONCRETE PAVEMENT PER DETAIL 1 ON SHEET C201.
- JOIN EXISTING TO NEW CONCRETE PAVEMENT PER DETAIL 2 ON SHEET C201.
- CONSTRUCT ASPHALT TO CONCRETE PAVEMENT TRANSITION PER DETAIL 5 ON SHEET C201.
- CONSTRUCT ASPHALT CONCRETE PAVEMENT PER DETAIL 4 ON SHEET C201.
- JOIN EXISTING TO NEW ASPHALT PAVEMENT PER DETAIL 11 ON SHEET C201.
- CONSTRUCT 6" CONCRETE HEADER PER DETAIL 7 ON SHEET C201.
- CONSTRUCT 16" CONCRETE HEADER PER DETAIL 6 ON SHEET C201.
- CONSTRUCT 24" WIDE SITTING WALL PER ARCHITECTURAL DETAIL 28 ON SHEET AS102.
- CONSTRUCT 16" WIDE SITTING WALL PER ARCHITECTURAL PLANS. REFER TO DETAIL 10 ON SHEET C201 FOR WALL REINFORCEMENT.
- CONSTRUCT CONCRETE RAMP PER ARCHITECTURAL DETAIL 6 ON SHEET AS106. REFER TO DETAIL 8 ON SHEET C201 FOR RAMP WALL & FOOTING. REFER TO DETAIL 16 ON SHEET C201 FOR RAMP CROSS SECTION.
- CONSTRUCT CONCRETE RAMP PER ARCHITECTURAL DETAIL 1 ON SHEET AS105. REFER TO DETAIL 8 ON SHEET C201 FOR RAMP WALL & FOOTING.
- CONSTRUCT CONCRETE CURB AROUND EXISTING BUILDING VENT WELL. REFER TO DETAIL 13 ON SHEET C201.
- CONSTRUCT CONCRETE STAIRS PER DETAIL 12 ON SHEET C201.
- PROTECT IN PLACE EXISTING STORM DRAIN PIPES. MAINTAIN CLEAN OF CONSTRUCTION DEBRIS.
- INSTALL BACK SALVAGED BICYCLE RACK TO OLD LOCATION PER ARCHITECTURAL PLANS.
- INSTALL 48" NDS 900 CATCH BASIN WITH NDS 900FF FILTER NDS 930B GRATE (SEE DETAIL 6 ON SHEET C202) OR APPROVED EQUAL. USE NDS 916 RISERS IF NECESSARY TO ACHIEVE INVERTS AS SHOWN.
- INSTALL 24"x24" GRATED INLET PER BROOKS PRODUCT 2424GB OR APPROVED EQUAL. INSTALL TRITON CATCH BASIN INSERT TR24SR OR APPROVED EQUAL. REFER TO DETAILS 4 AND 5 ON SHEET C202.
- CONSTRUCT CLEANOUT PER DETAIL 1 ON SHEET C202.
- CONSTRUCT OVERFLOW CATCH BASIN PER DETAIL 2 ON SHEET C202. INSTALL TRITON CATCH BASIN INSERT TR24SR OR APPROVED EQUAL PER DETAIL 5 ON SHEET C202.
- INSTALL PVC SDR35 STORM DRAIN PIPE W/PUSH ON JOINTS. SIZE AND LENGTH PER PLAN. SEE DETAIL 3 ON SHEET C202 FOR TRENCHING.
- NEW LANDSCAPED AREA. PROTECT EXISTING TREE.
- PROTECT IN PLACE EXISTING UTILITY PULL BOX, VAULT OR MANHOLE. ADJUST LID TO GRADE IF NEEDED.
- NEW WROUGHT FENCE PER DETAILS 1 AND 11 ON SHEET AS106. FENCE POST FOOTING PER DETAIL 21 ON SHEET AS106.
- NEW WROUGHT GATE PER DETAILS 1 AND 11 ON SHEET AS106. GATE POST FOOTING PER DETAIL 21 ON SHEET AS106.
- NEW CHAIN LINK FENCE PER DETAILS 3 ON SHEET AS106. FENCE POST FOOTING PER DETAIL 21 ON SHEET AS106.
- NEW CHAIN LINK GATE PER DETAILS 3, 13 & 18 ON SHEET AS106. GATE POST FOOTING PER DETAIL 21 ON SHEET AS106.
- NEW CMU PILASTER PER ARCHITECTURAL PLANS. REFER TO DETAIL 1 ON SHEET AS106.
- NEW PARKING STRIPING PER ARCHITECTURAL DETAIL 1 ON SHEET AS102.
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- NEW TOW AWAY SIGN PER ARCHITECTURAL DETAIL 16 ON SHEET AS102.
- PROTECT IN PLACE EXISTING STAIRS ENCLOSURE.
- NEW DETECTABLE WARNINGS PER ARCHITECTURAL DETAIL 22 ON SHEET AS102.
- PROTECT IN PLACE EXISTING STAIRS.
- CONSTRUCT REDWOOD HEADER PER DETAIL 16 ON SHEET C201.
- CONSTRUCT CONCRETE GUTTER PER DETAIL 14 ON SHEET C201.
- NEW TURF TO MATCH EXISTING.
- ADJUST EX. UTILITY BOX/VAULT LID. ELEVATIONS PER PLAN.
- INSTALL CAST IRON STORM DRAIN PIPE PER SEPARATE PERMIT. SIZE, SLOPE AND LENGTH PER PLAN.
- GUARDRAILS PER ARCHITECTURAL PLANS.

IDENTIFICATION STAMP
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 APP. 03-119485 INC.
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 SS FLS ACS
 DATE: 8/14/2019

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SOUND MITIGATION PROGRAM

OAK STREET ELEMENTARY SCHOOL

INGLEWOOD UNIFIED SCHOOL DISTRICT

PROJECT NUMBER: C18-0041

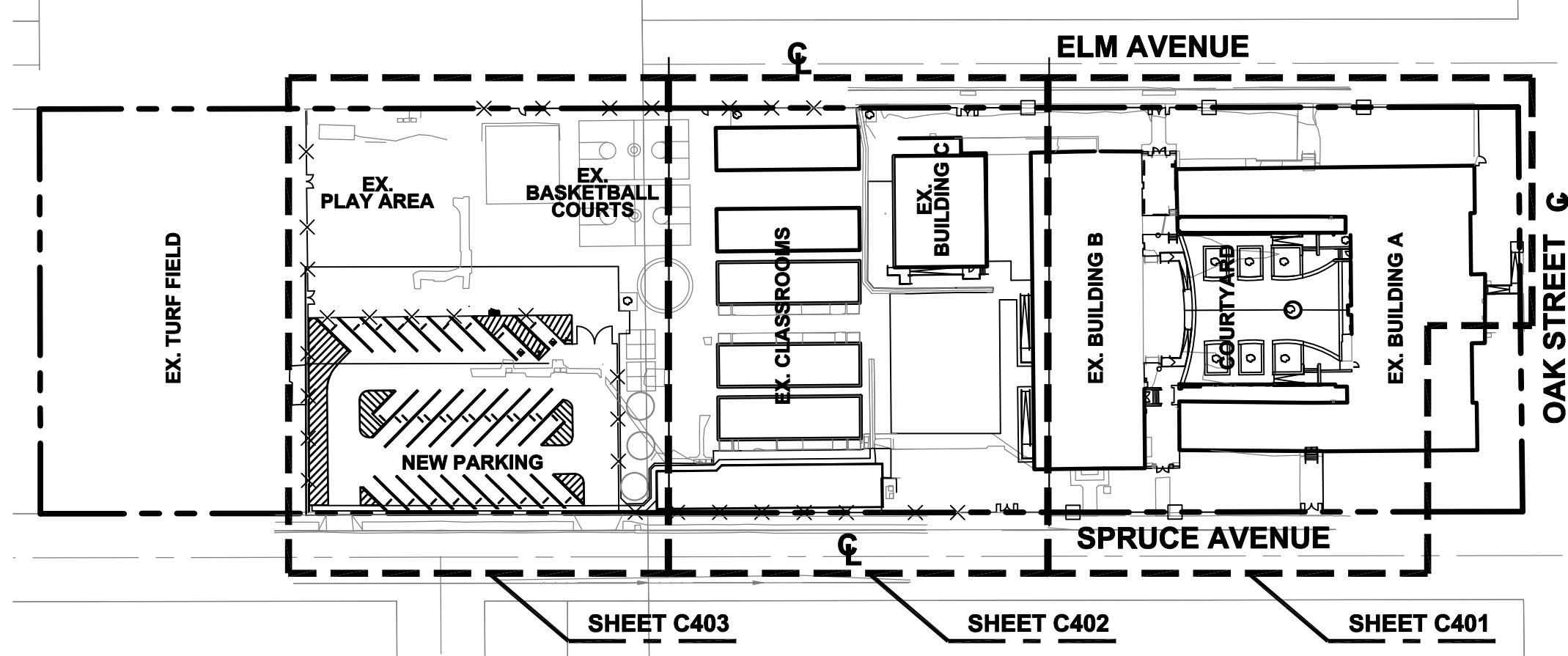
DRAWN: V. TANTCHEVA

CHECKED: ED MELO

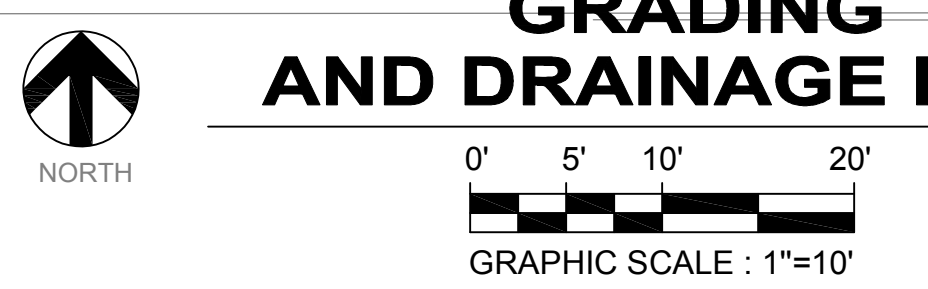
ISSUE/REVISION	DATE	DESCRIPTION
08/21/2019	30%	SCHEMATIC DESIGN
10/10/2019	50%	CD-SUBMITTAL
11/15/2019	100%	CD-DSA SUBMITTAL
03/15/2020		DSA APPROVAL

GRADING AND DRAINAGE PLAN

C402



GRADING AND DRAINAGE PLAN



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ELM AVE.



LEGEND:

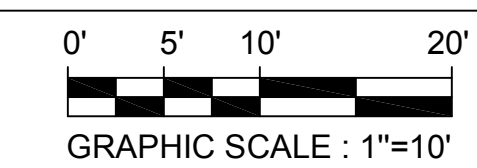
- EXISTING BUILDING OUTLINE
- PROPERTY LINE
- CENTER LINE
- SAWCUT LINE
- PATH OF DRAINAGE
- PROP. CONTOUR
- EXIST. CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- PROPOSED WALL
- NEW CONCRETE PAVEMENT
- NEW ASPHALT CONCRETE PAVEMENT
- NEW LANDSCAPED AREA
- NEW UTILITY TRENCHING
- PATH OF TRAVEL

CONSTRUCTION NOTES:

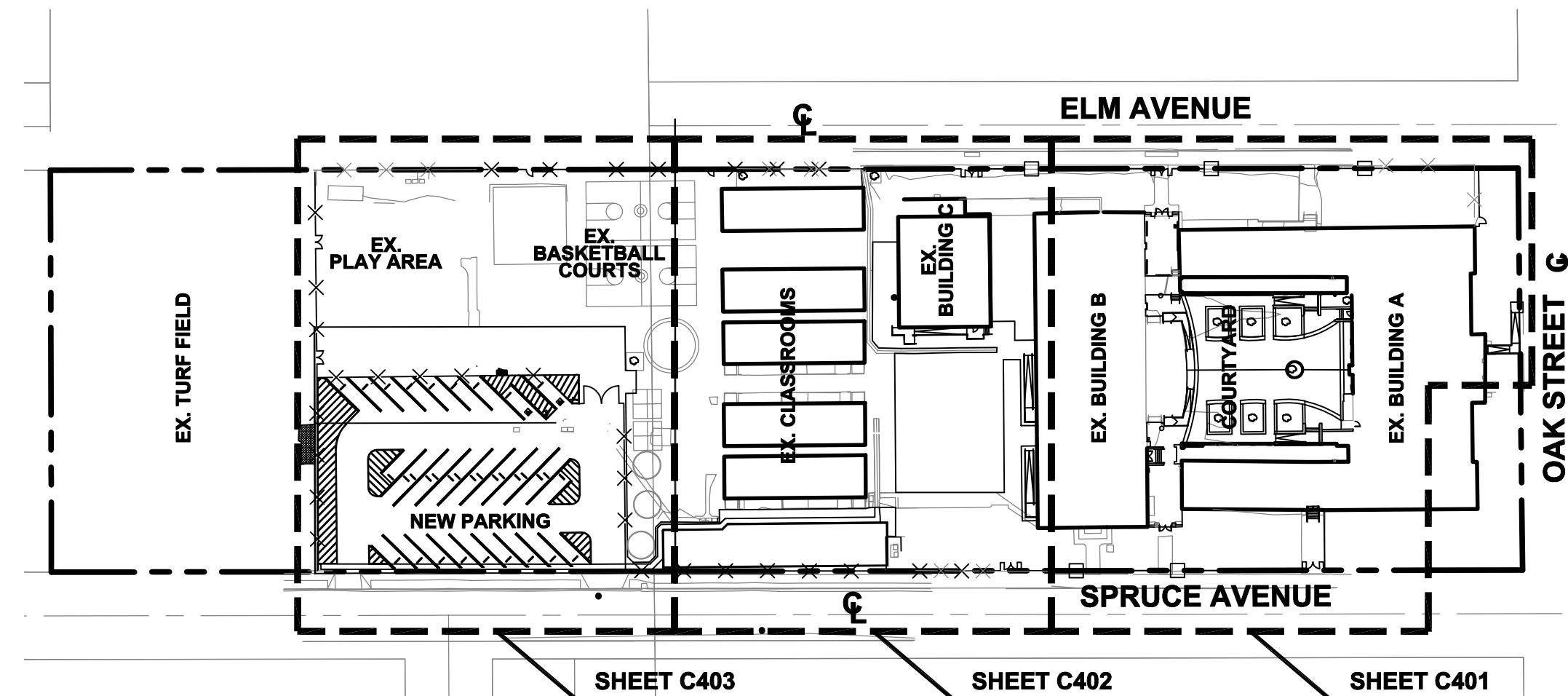
1. CONSTRUCT PEDESTRIAN CONCRETE PAVEMENT PER DETAIL 1 ON SHEET C201.
2. JOIN EXISTING TO NEW CONCRETE PAVEMENT PER DETAIL 2 ON SHEET C201.
3. CONSTRUCT ASPHALT TO CONCRETE PAVEMENT TRANSITION PER DETAIL 5 ON SHEET C201.
4. CONSTRUCT ASPHALT CONCRETE PAVEMENT PER DETAIL 4 ON SHEET C201.
5. JOIN EXISTING TO NEW ASPHALT PAVEMENT PER DETAIL 11 ON SHEET C201.
6. CONSTRUCT 6" CONCRETE HEADER PER DETAIL 7 ON SHEET C201.
7. CONSTRUCT 16" CONCRETE HEADER PER DETAIL 6 ON SHEET C201.
8. CONSTRUCT 24" WIDE SITTING WALL PER ARCHITECTURAL DETAIL 28 ON SHEET AS102.
9. CONSTRUCT 16" WIDE SITTING WALL PER ARCHITECTURAL PLANS. REFER TO DETAIL 10 ON SHEET C201 FOR WALL REINFORCEMENT.
10. CONSTRUCT CONCRETE RAMP PER ARCHITECTURAL DETAIL 8 ON SHEET AS105. REFER TO DETAIL 8 ON SHEET C201 FOR RAMP WALL & FOOTING. REFER TO DETAIL 16 ON SHEET C201 FOR RAMP CROSS SECTION.
11. CONSTRUCT CONCRETE RAMP PER ARCHITECTURAL DETAIL 1 ON SHEET AS105. REFER TO DETAIL 8 ON SHEET C201 FOR RAMP WALL & FOOTING.
12. CONSTRUCT CONCRETE CURB AROUND EXISTING BUILDING VENT WELLS. REFER TO DETAIL 13 ON SHEET C201.
13. CONSTRUCT CONCRETE STAIRS PER DETAIL 12 ON SHEET C201.
14. PROTECT IN PLACE EXISTING STORM DRAIN PIPES. MAINTAIN CLEAN OF CONSTRUCTION DEBRIS.
15. INSTALL BACK SALVAGED BICYCLE RACK TO OLD LOCATION PER ARCHITECTURAL PLANS.
16. INSTALL 48" NDS 900 GATCH BASIN WITH NDS 900FF FILTER NDS 930B CRATE (SEE DETAIL 6 ON SHEET C202) OR APPROVED EQUAL. USE NDS 916 RISERS IF NECESSARY TO ACHIEVE INVERTS AS SHOWN.
17. INSTALL 24"x24" CRATED INLET PER BROOKS PRODUCT 2424GB OR APPROVED EQUAL. INSTALL TRITON CATCH BASIN INSERT TR24SR OR APPROVED EQUAL. REFER TO DETAILS 4 AND 5 ON SHEET C202.
18. CONSTRUCT CLEANOUT PER DETAIL 1 ON SHEET C202.
19. CONSTRUCT OVERFLOW CATCH BASIN PER DETAIL 2 ON SHEET C202. INSTALL TRITON CATCH BASIN INSERT TR24SR OR APPROVED EQUAL PER DETAIL 5 ON SHEET C202.
20. INSTALL PVC SDR35 STORM DRAIN PIPE W/PUSH ON JOINTS. SIZE AND LENGTH PER PLAN. SEE DETAIL 3 ON SHEET C202 FOR TRENCHING.
21. NEW LANDSCAPED AREA. PROTECT EXISTING TREE.
22. PROTECT IN PLACE EXISTING UTILITY PULL BOX, VAULT OR MANHOLE. ADJUST LID TO GRADE IF NEEDED.
23. NEW WROUGHT FENCE PER DETAILS 1 AND 11 ON SHEET AS106. FENCE POST FOOTING PER DETAIL 21 ON SHEET AS106.
24. NEW WROUGHT GATE PER DETAILS 1 AND 11 ON SHEET AS106. GATE POST FOOTING PER DETAIL 21 ON SHEET AS106.
25. NEW CHAIN LINK FENCE PER DETAILS 3 ON SHEET AS106. FENCE POST FOOTING PER DETAIL 21 ON SHEET AS106.
26. NEW CHAIN LINK GATE PER DETAILS 3, 13 & 18 ON SHEET AS106. GATE POST FOOTING PER DETAIL 21 ON SHEET AS106.
27. NEW CMU PILASTER PER ARCHITECTURAL PLANS. REFER TO DETAIL 1 ON SHEET AS106.
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30. NEW ACCESSABILITY SIGN PER ARCHITECTURAL DETAIL 17 ON SHEET AS102.
31. NEW WHEEL STOP PER ARCHITECTURAL DETAIL 21 ON SHEET AS102.
32. NEW TOW AWAY SIGN PER ARCHITECTURAL DETAIL 16 ON SHEET AS102.
33. PROTECT IN PLACE EXISTING STAIRS ENCLOSURE.
34. NEW DETECTABLE WARNINGS PER ARCHITECTURAL DETAIL 22 ON SHEET AS102.
35. PROTECT IN PLACE EXISTING STAIRS.
36. CONSTRUCT REDWOOD HEADER PER DETAIL 15 ON SHEET C201.
37. CONSTRUCT CONCRETE GUTTER PER DETAIL 14 ON SHEET C201.
38. NEW TURF TO MATCH EXISTING.
39. ADJUST EX. UTILITY BOX/VAULT LID. ELEVATIONS PER PLAN.
40. INSTALL CAST IRON STORM DRAIN PIPE PER SEPARATE PERMIT. SIZE, SLOPE AND LENGTH PER PLAN.
41. GUARDRAILS PER ARCHITECTURAL PLANS.

MATCH LINE - SEE SHEET C402

GRADING AND DRAINAGE PLAN



NORTH



KEY MAP
SCALE: 1"=80'

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APP. 03-119485 INC.
REVIEWED FOR
SS FLS ACS
DATE: 8/14/2019

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PROFESSIONAL ENGINEER
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STATE OF CALIFORNIA

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155 S. FAIR OAKS, 2ND FLOOR, PASADENA, CA 91105

CONSULTANT NAME OR LOGO

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EXPIRES: 7/31/21
STATE OF CALIFORNIA

FOR BRANDON & JOHNSTON
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STRUCTURAL ENGINEERS (AIA) INC.
706 S. FLOWER ST #1800, LOS ANGELES, CA 90017
(213) 688-4600 WWW.BJSE.COM

SOUND MITIGATION PROGRAM

OAK STREET ELEMENTARY SCHOOL
633 South Oak Street
A PROJECT FOR:
INGLEWOOD UNIFIED SCHOOL DISTRICT

PROJECT NUMBER: C18-0041

DRAWN: V. TANTCHEVA

CHECKED: ED MELO

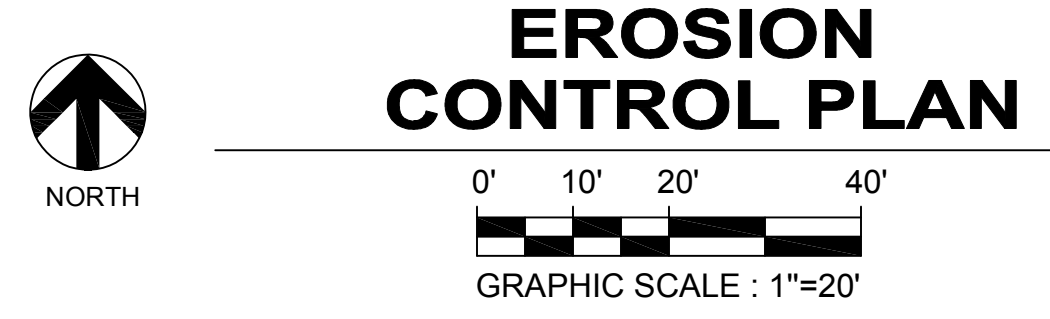
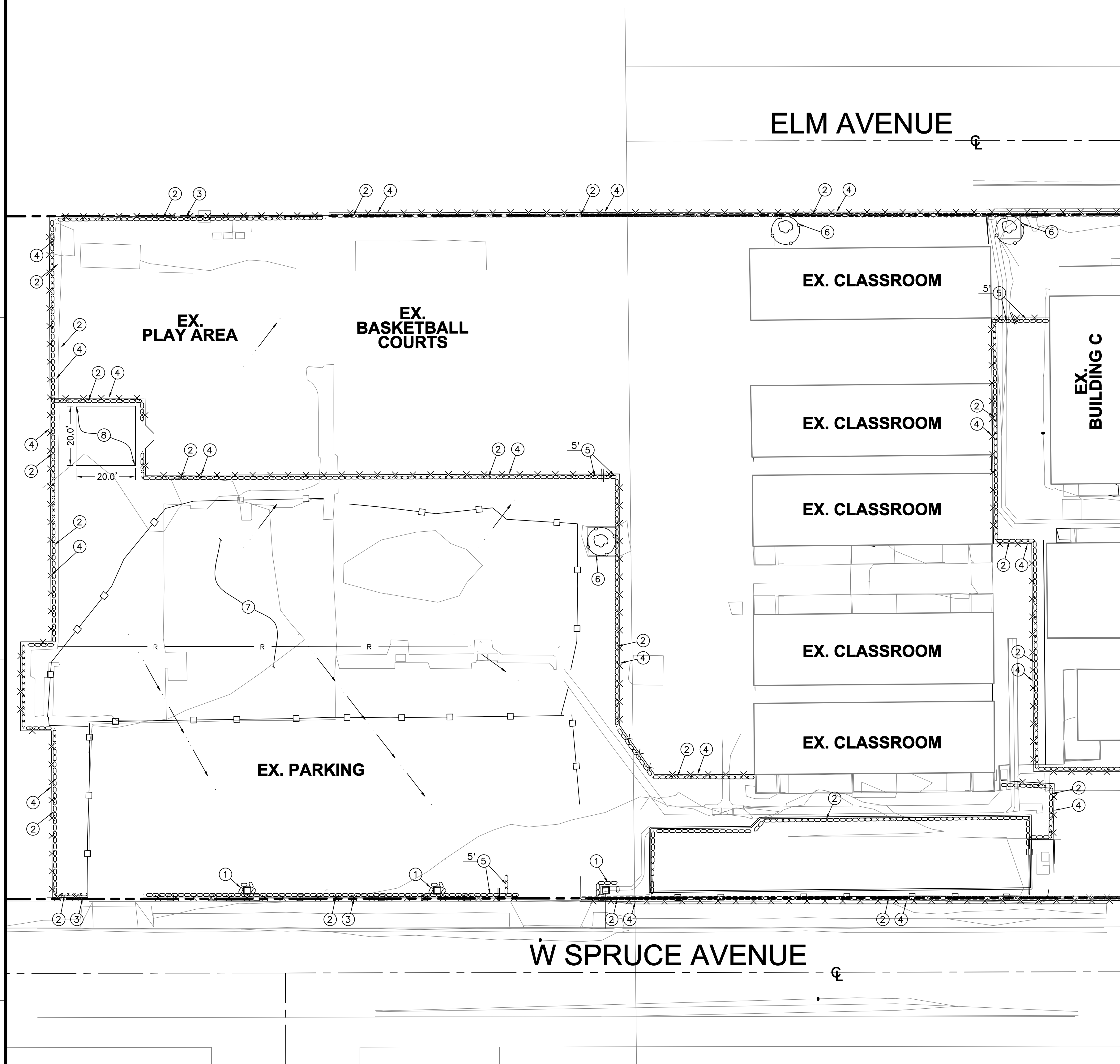
ISSUE/REVISION	DATE	DESCRIPTION
08/21/2018	30% - SCHEMATIC DESIGN	
10/10/2018	50% - CD-SUBMITTAL	
11/15/2018	100% - CD-DSA SUBMITTAL	
03/15/2019	DSA APPROVAL	

DATE	REVISION

GRADING AND DRAINAGE PLAN

C403

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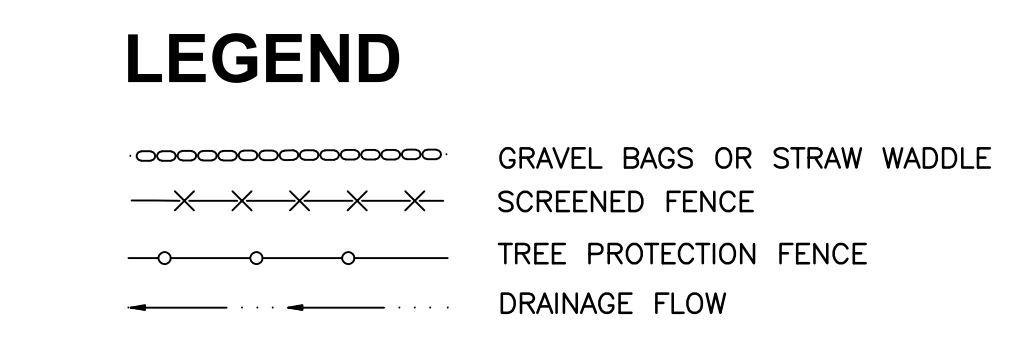


BEST MANAGEMENT PRACTICES FOR CONSTRUCTION ACTIVITIES

- DETAILED IN THE CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICES HANDBOOK - CONSTRUCTION, JULY 2012
- EROSION CONTROL
 - EC-1 SCHEDULING
 - SEDIMENT CONTROL
 - SE-8 SANDBAGS BARRIER
 - SE-10 STORM DRAIN INLET PROTECTION
 - NON-STORM WATER CONTROL
 - NS-3 PAVING AND GRINDING OPERATIONS
 - WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL
 - WM-1 MATERIAL DELIVERY AND STORAGE
 - WM-2 MATERIAL USE
- SECTION 2 OF THE CASQA BMP CONSTRUCTION HANDBOOK, JULY 2012, IS PART OF THESE EROSION CONTROL PLANS, INCLUDING BUT NOT LIMITED TO:
- MINIMUM REQUIREMENTS
 - GOOD HOUSEKEEPING PRACTICES
 - STAFF TRAINING
 - SITE INSPECTIONS
 - BMP MONITORING AND MAINTENANCE
 - STORMWATER POLLUTION CONTROL DOCUMENTATION

EROSION CONTROL KEY NOTES

- 1 COVER CATCH BASIN INLET WITH PERMEABLE FILTER PER DETAIL 2 (REFER TO SE-10 OF CASQA BMP MANUAL OR ON SHEET C503).
- 2 SINGLE ROW GRAVEL BAGS - 2 BAGS HIGH (PER SE-8 OF CASQA BMP MANUAL OR ON SHEET C503).
- 3 INSTALL TEMPORARY WIND SCREEN TO EXISTING FENCE AND GATES.
- 4 INSTALL TEMPORARY CONSTRUCTION FENCE WITH WIND SCREEN.
- 5 SEDIMENT TRAP OUTLET PER DETAIL 1 HEREON.
- 6 PROTECT EXISTING TREES DURING CONSTRUCTION. REFER TO LANDSCAPE PLANS.
- 7 PREVENT OR REDUCE DISCHARGE OF POLLUTANTS FROM PAVING OPERATIONS PER NS-3 OF CASQA BMP MANUAL OR ON SHEET C503.
- 8 MATERIAL STORAGE AREA.
- 9 PREVENT, REDUCE OR ELIMINATE DISCHARGE OF POLLUTANTS TO STORMDRAIN SYSTEM FROM MATERIAL DELIVERY AND STORAGE PER WM-1 OF CASQA BMP MANUAL OR ON SHEET C504.
- 10 PREVENT OR REDUCE DISCHARGE OF POLLUTANTS TO STORMDRAIN SYSTEM FROM MATERIAL USE PER WM-1 OF CASQA BMP MANUAL OR ON SHEET C504.

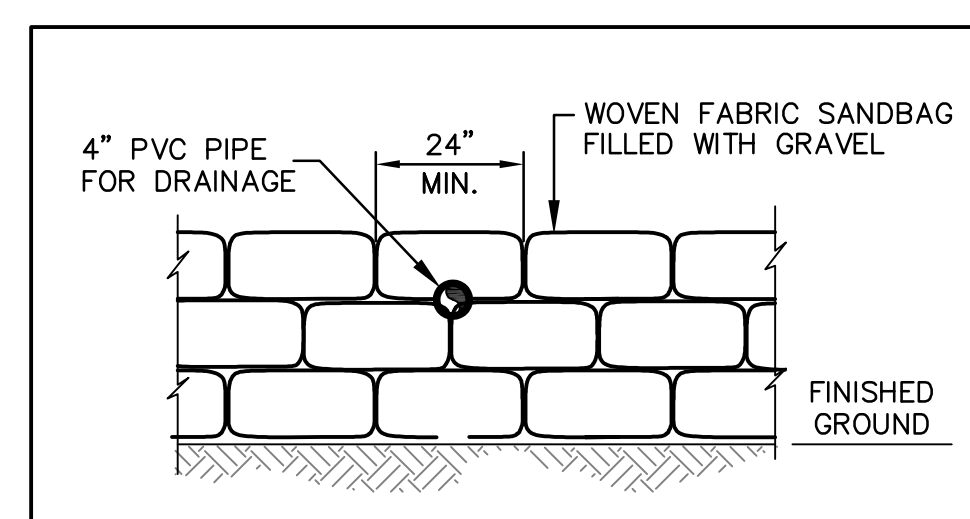


TYPICAL DEMOLITION DEBRIS NOTES

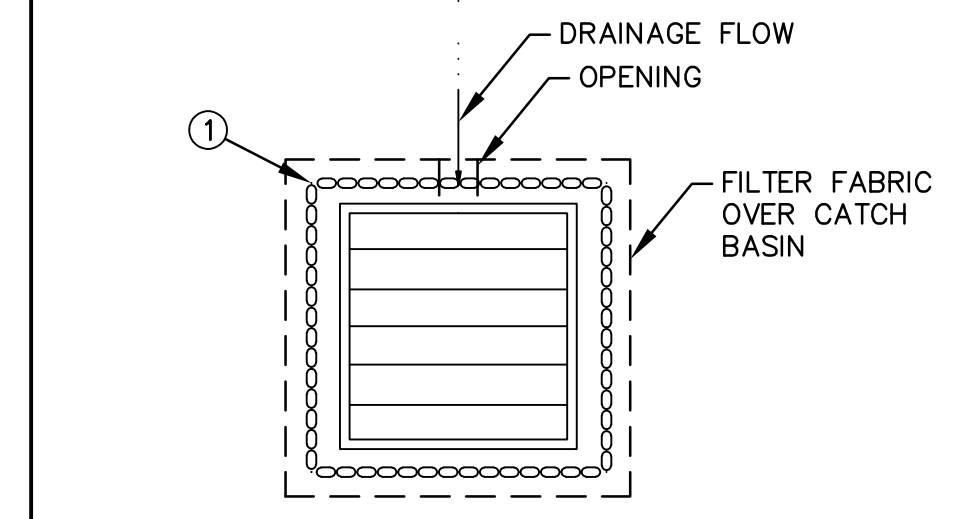
1. EROSION CONTROL DEVICES SHOWN ON THE PLAN MAY BE REMOVED WHEN APPROVED BY THE PROJECT INSPECTOR IF THE DEMOLITION OPERATION HAS PROCEEDED TO THE POINT WHERE THEY ARE NO LONGER REQUIRED.
2. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.
3. A GUARD SHALL BE POSTED ON THE SITE WHENEVER THE DEPTH OF WATER IN ANY DEVICE EXCEEDS TWO FEET. THE DEVICE SHALL BE DRAINED OR PUMPED WITHIN 24 HOURS AFTER EACH RAINSTORM. PUMPING AND DRAINING OF ALL BASINS AND DRAINAGE DEVICES MUST COMPLY WITH THE APPROPRIATE BMP FOR DEWATERING OPERATIONS.
4. STORM WATER POLLUTION DEVICES ARE TO BE MODIFIED, AS NEEDED, AS THE PROJECT PROGRESSES, THE DESIGN AND PLACEMENT OF THESE DEVICES IS THE RESPONSIBILITY OF THE CONTRACTOR. PLANS REPRESENTING CHANGES MUST BE SUBMITTED FOR APPROVAL IF REQUESTED BY THE PROJECT INSPECTOR.
5. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORM WATER FROM THE PROJECT SITE AT ALL TIMES.
6. POLLUTANTS MUST BE RETAINED ON-SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA PUMPS, SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
7. CONTRACTORS ARE RESPONSIBLE TO INSPECT THAT ALL BMPs ARE INSTALLED AND FUNCTIONING PROPERLY IF THERE IS A 40% CHANCE OF 0.25 INCHES OR GREATER OF PREDICTED PRECIPITATION, AND AFTER ACTUAL PRECIPITATION. A CONSTRUCTION SITE INSPECTION CHECKLIST AND INSPECTION LOG SHALL BE MAINTAINED AT THE PROJECT SITE AT ALL TIMES AND AVAILABLE FOR REVIEW BY THE BUILDING OFFICIAL.
8. MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY, ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
9. A STAND-BY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (NOVEMBER 1 TO APRIL 15). NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.

STORM WATER POLLUTION CONTROL

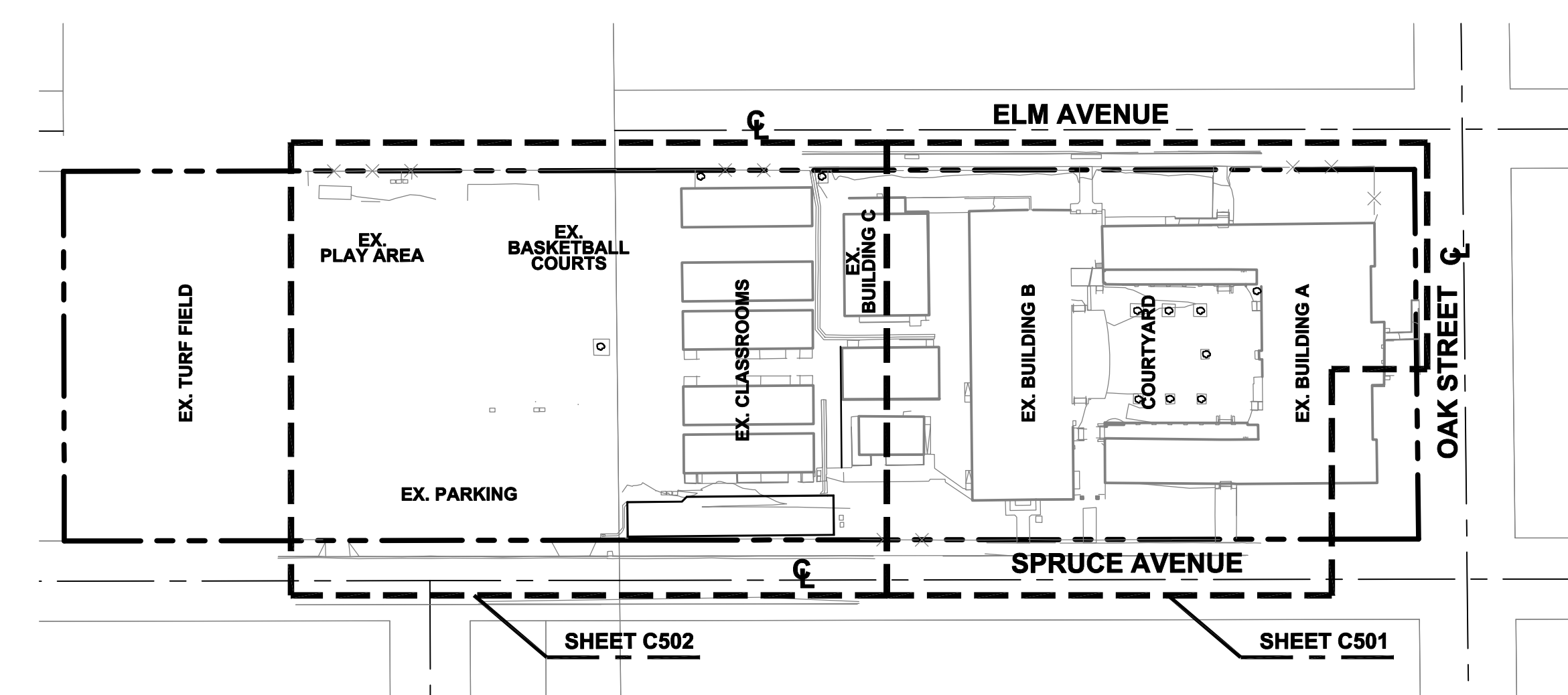
- CONSTRUCTION MEANS CONSTRUCTING, CLEARING, GRADING OR EXCAVATION THAT RESULT IN SOIL DISTURBANCE. CONSTRUCTION INCLUDES STRUCTURE TEARDOWN (DEMOLITION), IT DOES NOT INCLUDE ROUTINE MAINTENANCE TO MAINTAIN ORIGINAL LINE AND GRADE, HYDRAULIC CAPACITY, OR ORIGINAL PURPOSE OF FACILITY; EMERGENCY CONSTRUCTION ACTIVITIES REQUIRED TO IMMEDIATELY PROTECT PUBLIC HEALTH AND SAFETY; INTERIOR REMODELING WITH NO OUTSIDE EXPOSURE OF CONSTRUCTION MATERIAL OR CONSTRUCTION WASTE TO STORM WATER; MECHANICAL PERMIT WORK; OR SIGN PERMIT WORK. (ORDER NO. 01-182, NPDES PERMIT NO. CAS004001 - PART 5: DEFINITIONS)
1. ERODED SEDIMENTS AND POLLUTANTS SHALL BE RETAINED ON SITE AND SHALL NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE OR WIND.
 2. STOCKPILES OF EARTH AND OTHER CONSTRUCTION-RELATED MATERIALS SHALL BE COVERED AND/OR PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY WIND OR WATER.
 3. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND SHALL NOT CONTAMINATE THE SOIL NOR THE SURFACE WATERS. ALL APPROVED TOXIC STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF PROPERLY AND SHALL NOT BE WASHED INTO THE DRAINAGE SYSTEM.
 4. NON-STORM WATER RUNOFF FROM EQUIPMENT AND VEHICLE WASHING AND ANY OTHER ACTIVITY SHALL BE CONTAINED ON THE PROJECT SITE.
 5. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTE ON-SITE UNTIL IT CAN BE APPROPRIATELY DISPOSED OF OR RECYCLED.
 6. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF STORM WATER AND DISPERSAL BY WIND.
 7. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE STREET/PUBLIC WAYS. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR BY ANY OTHER MEANS.
 8. RETENTION BASINS OF SUFFICIENT SIZE SHALL BE PROVIDED TO RETAIN STORM WATER RUNOFF ON-SITE AND SHALL BE PROPERLY LOCATED TO COLLECT ALL TRIBUTARY SITE RUNOFF.
 9. WHERE RETENTION OF STORM WATER RUNOFF ON-SITE IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, RUNOFF MAY BE CONVEYED TO THE STREET AND THE STORM DRAIN SYSTEM PROVIDED THAT AN APPROVED FILTERING SYSTEM IS INSTALLED AND MAINTAINED ON-SITE DURING THE CONSTRUCTION DURATION.



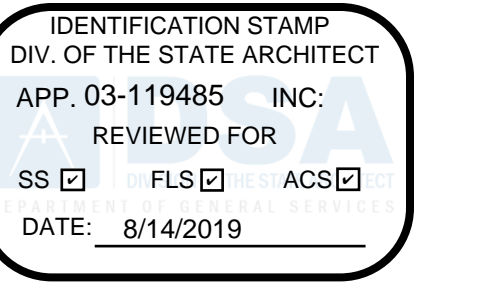
GRAVEL BAG SEDIMENT TRAP
NOT TO SCALE 1



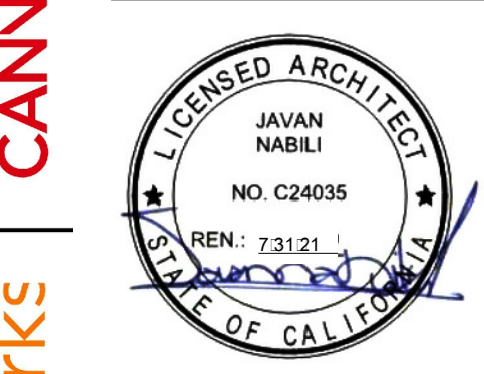
CATCH BASIN INLET WITH PERMEABLE FILTER FABRIC
NOT TO SCALE 2



KEY MAP
SCALE: 1"=80'



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SOUND MITIGATION PROGRAM

OAK STREET ELEMENTARY SCHOOL
633 South Oak Street

INGLEWOOD UNIFIED SCHOOL DISTRICT
A PROJECT FOR:

PROJECT NUMBER: **C18-0041**

DRAWN: V. TANTCHEVA

CHECKED: ED MELO

ISSUE/REVISION:

08/21/2018	30% - SCHEMATIC DESIGN
10/10/2018	50% - CD-SUBMITTAL
11/15/2018	100% - CD-DSA SUBMITTAL
03/15/2019	DSA APPROVAL

EROSION CONTROL PLAN

C502

Sandbag Barrier SE-8

Fill Material: All sandbag fill material should be non-cohesive, Class 3 (Caltrans Standard Specification, Section 202) or similar permeable material free from clay and deleterious material, such as recycled concrete or asphalt.

Costs
Empty sandbags cost \$0.25 - \$0.75. Average cost of fill material is \$8 per yd³. Additional labor is required to fill the bags. Pre-filled sandbags are more expensive at \$1.60 - \$2.00 per bag. These costs are based upon vendor research.

Inspection and Maintenance
• BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.

- Sandbags exposed to sunlight will need to be replaced every two to three months due to degradation of the bags.
- Reshape or replace sandbags as needed.
- Repair washouts or other damage as needed.

• Sediment that accumulates behind the BMP should be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when the sediment accumulation reaches one-third of the barrier height.

• Remove sandbags when no longer needed and recycle sand fill whenever possible and properly dispose of bag material. Remove sediment accumulation, and clean, re-grade, and stabilize the area.

References
Standard Specifications for Construction of Local Streets and Roads, California Department of Transportation (Caltrans), July 2002.
Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.
Erosion and Sediment Control Manual, Oregon Department of Environmental Quality, February 2005.

July 2012 California Stormwater BMP Handbook Construction 4 of 8

Sandbag Barrier SE-8

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July 2012 California Stormwater BMP Handbook Construction 4 of 8

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- Repair washouts or other damage as needed.

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• Remove sandbags when no longer needed and recycle sand fill whenever possible and properly dispose of bag material. Remove sediment accumulation, and clean, re-grade, and stabilize the area.

References
Standard Specifications for Construction of Local Streets and Roads, California Department of Transportation (Caltrans), July 2002.
Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.
Erosion and Sediment Control Manual, Oregon Department of Environmental Quality, February 2005.

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Sandbag Barrier SE-8

Fill Material: All sandbag fill material should be non-cohesive, Class 3 (Caltrans Standard Specification, Section 202) or similar permeable material free from clay and deleterious material, such as recycled concrete or asphalt.

Costs
Empty sandbags cost \$0.25 - \$0.75. Average cost of fill material is \$8 per yd³. Additional labor is required to fill the bags. Pre-filled sandbags are more expensive at \$1.60 - \$2.00 per bag. These costs are based upon vendor research.

Inspection and Maintenance
• BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.

- Sandbags exposed to sunlight will need to be replaced every two to three months due to degradation of the bags.
- Reshape or replace sandbags as needed.
- Repair washouts or other damage as needed.

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Storm Drain Inlet Protection SE-10

- Clean and regulate area around the inlet and clean the inside of the storm drain inlet, as it should be free of sediment and debris at the time of final inspection.

References
Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.
Stormwater Management Manual for the Puget Sound Basin, Washington State Department of Ecology, Public Review Draft, 1999.

Erosion and Sediment Control Manual, Oregon Department of Environmental Quality, February 2005.

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Storm Drain Inlet Protection SE-10

- DI Protection Type 6 - Blotter bags - Blotter bags may be used as a substitute for gravel bags in low-flow situations. Blotter bags should conform to specifications detailed in 5-14. Blotter bags:

1. Construct in a gently sloping area.
2. Blotter bags should be placed around inlets to intercept runoff flows.
3. All bag joints should overlap by 6 in.
4. Leave room upstream for water to pond and for sediment to settle out.
5. Stake bags to the ground as described in the following detail. Stakes may be omitted if bags are placed on a paved surface.

Costs
• Average annual cost for installation and maintenance of DI Type 6 is \$200 per year.

• Temporary geotextile inserts are proprietary and cost varies by region. These inserts can often be reused and may have greater than 1 year of use if maintained and kept undamaged. Average cost per insert ranges from \$30-\$75 plus installation, but costs can exceed \$100. This cost does not include maintenance.

Inspection and Maintenance
• BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.

• Silt Fences: If the fabric becomes clogged, torn, or degraded, it should be replaced. Make sure the stakes are securely driven in the ground and are in good shape (i.e., not bent, cracked, or splintered), and are reasonably perpendicular to the ground. Replace damaged stakes. At a minimum, remove the sediment behind the fabric when accumulation reaches one-third the height of the fence barrier height.

• Gravel Filters: If the gravel becomes clogged with sediment, it should be carefully removed from the inlet and either cleaned or replaced. Since cleaning gravel at a construction site may be difficult, consider using the sediment siltation stone as fill material and get fresh stone around the inlet. Impact bags for rocks, gabions, and mats, and replace bags as needed. Check gabions for proper arrangement and displacement.

• Sediment that accumulates in the BMP should be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when the sediment accumulation reaches one-third of the barrier height.

• Impact and maintain temporary geotextile insert devices according to manufacturer's specifications. Sediment should be removed when the sediment accumulation reaches one-third of the barrier height.

• Remove storm drain inlet protection once the drainage area is stabilized.

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Storm Drain Inlet Protection SE-10

- Backfill the trench with gravel or compacted earth all the way around.

DI Protection Type 2 - Excavated Drop Inlet Sediment Trap - Install filter fabric fence in accordance with DI Protection Type 1. Use excavated trap to provide a minimum storage capacity calculated at one (1) inch of drainage area. See typical Type 2 installation details at the end of this fact sheet.

DI Protection Type 3 - Gravel Bag - Flow from a severe storm should not overflow the curb. In areas of high clay and silt, use filter fabric and gravel as additional filter media. Construct gravel bags in accordance with SE-6, Gravel Bag Berms. Gravel bags should be used in areas of high permeability. See typical Type 3 installation details at the end of this fact sheet.

DI Protection Type 4 - Block and Gravel Filter - Block and gravel filters are suitable for curb inlets commonly used in residential, commercial, and industrial construction. See typical Type 4 installation details at the end of this fact sheet.

1. Place hardware cloth or comparable wire mesh with 6 x 6 in. openings over the drop inlet so that the wire extends a maximum of 1 ft beyond each side of the inlet structure. If more than one strip is necessary, overlap the strips. Place woven geotextile over the wire mesh.

2. Place concrete blocks lengthwise on their sides in a single row around the perimeter of the inlet, so that the open ends face outward, not upward. The ends of adjacent blocks should meet. The height of the barrier can be varied, depending on design needs, by stacking combinations of blocks that are 4 in., 8 in., and 12 in. wide. The row of blocks should be at least 12 in. but not greater than 24 in. in length.

3. Place wire mesh over the outside vertical face (open end) of the concrete blocks to prevent stone from being washed through the blocks. Use hardware cloth or comparable wire mesh with 6 x 6 in. openings.

4. Fill washed stone against the wire mesh to the top of the blocks. Use 0.75 to 3 to 6.

DI Protection Type 5 - Temporary Geotextile Insert (proprietary) - Many types of temporary inserts are available. Most inserts fit underneath the grate of a drop inlet or inside of a curb inlet and are fastened by the side rails of the grate or curb. These inserts are removable and many can be cleaned and reused. Installation of these inserts differs between manufacturers. Please refer to manufacturer instructions for installation of proprietary devices.

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Storm Drain Inlet Protection SE-10

- Silt types of inlet protection are presented below. However, it is recognized that other effective methods and proprietary devices may be selected.

• Silt Fence: Appropriate for drainage basins with less than 5 slope, sheet flows, and flows under 0.5 cfs.

• Excavated Drop Inlet Sediment Trap: An excavated area around the inlet to trap sediment (SE-3).

• Gravel bag barrier: Used to create a small sediment trap upstream of inlets on sloped, gravel streets. Appropriate for sheet flow or when concentrated flow may exceed 0.5 cfs, and where overtopping is required to prevent flooding.

• Block and Gravel Filter: Appropriate for flows greater than 0.5 cfs.

• Temporary Geotextile Storm Drain Inserts: Different products provide different features. Refer to manufacturer details for targeted pollutants and additional features.

• Blotter Bag Barrier: Used to create a small retention area upstream of inlets and can be located on pavement as well. Blotter bags slowly filter runoff allowing sediment to settle out. Appropriate for flows under 0.5 cfs.

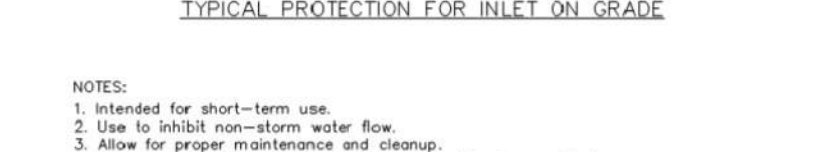
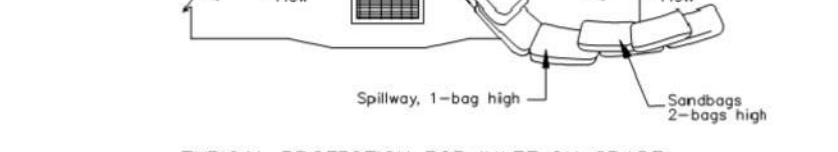
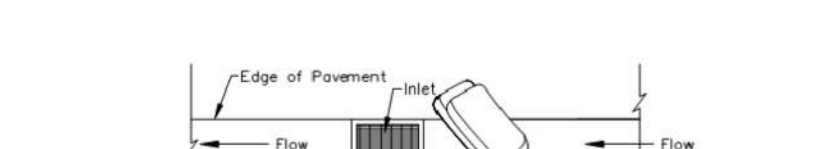
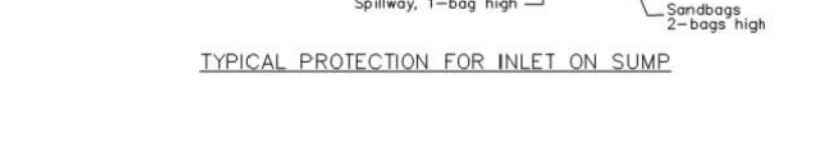
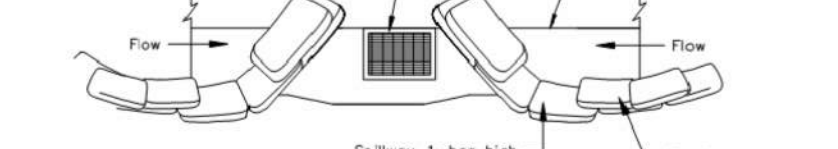
• Select the appropriate type of inlet protection and design as referred to or described in this fact sheet.

• Provide area around all inlet for water to pond without flooding structures and property.

• Grates and spaces around all inlets should be sealed to prevent seepage of sediment-laden water.

Storm Drain Inlet Protection SE-10

DI Protection Type 1 - NOT TO SCALE



NOTES:
1. Intended for short-term use.
2. Use to install stormwater water flow.
3. Allow for proper maintenance and cleanup.
4. Edge must be covered either upstream or downstream if installation is completed.
5. Not applicable in areas with steep slopes or high water velocity.

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Storm Drain Inlet Protection SE-10

- Sediment removal may be inadequate to prevent sediment discharges in high flow conditions or if runoff is heavily sediment laden. If high flow conditions are expected, use other erosion sediment trapping devices in conjunction with silt fences.

• Frequent maintenance is required.

• Limit drainage area to 500 maximum. For drainage areas larger than 500, runoff should be routed to a sediment-trapping device designed for larger flows. See BMPs SE-2, Sediment Basin, and SE-3, Sediment Trap.

• Excavated drop inlet sediment traps are appropriate when relatively heavy flows are expected, and overflow capability is needed.

Implementation
General
• Inlet protection measures presented in this handbook should not be used for inlets draining more than one acre. Runoff from larger distributed areas should be first routed through SE-2, Sediment Basin or SE-3, Sediment Trap and/or used in conjunction with other drainage control, erosion control, and sediment control BMPs to protect the site. Different types of inlet protection are appropriate for different situations depending on the conditions and the type of inlet. Alternative methods are available in addition to the methods described/shown herein such as perforated inlet inlets, boxes, or other protection devices.

Design and Layout
Identify existing and planned storm drain inlets that have the potential to receive sediment-laden surface runoff. Determine if storm drain inlet protection is needed and which method to use.

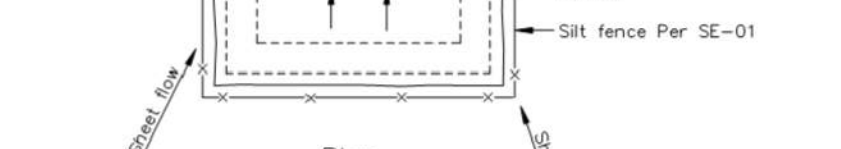
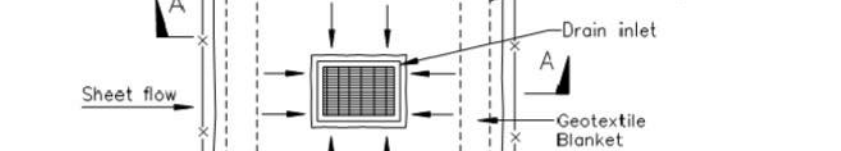
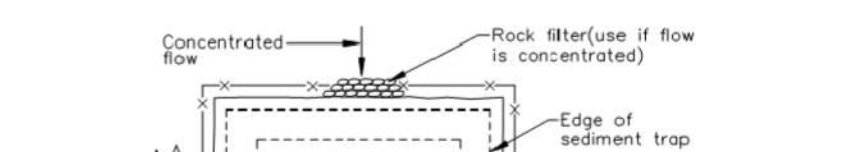
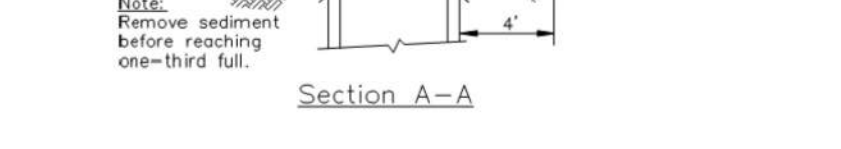
• The key to successful and safe use of storm drain inlet protection devices is to know where runoff that is directed toward the inlet to the protection device is needed and which method to use.

• Determine the acceptable location and extent of ponding in the vicinity of the drain inlet. The acceptable location and extent of ponding will influence the type and design of the storm drain inlet protection device.

• Determine the extent of potential runoff diversion caused by the storm drain inlet protection device. Runoff ponded by inlet protection devices may flow around the device and towards the rest of the storm drain inlet. In some cases, this is acceptable; in other cases, surface erosion or downstream property damage can be caused by these diversions. The location and extent of ponding will influence whether or not storm drain inlet protection is suitable, and, if suitable, the type and design of the device.

• The location and extent of ponding, and the extent of diversion, can usually be controlled through appropriate placement of the inlet protection device. In some cases, moving the inlet protection device a short distance upstream of the actual inlet can provide more efficient sediment control, limit ponding to desired areas, and prevent or control diversions.

Storm Drain Inlet Protection SE-10



NOTES:
1. For use in cleared and grubbed and in graded areas.
2. Stage basin so that longest inflow area flows longest length of trap towards direction of flow.
3. Not applicable with concentrated flows.

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Storm Drain Inlet Protection SE-10

- Every storm drain inlet receiving runoff from unestablished or otherwise active work areas should be protected. Inlet protection should be used in conjunction with other erosion and sediment controls to prevent sediment-laden stormwater and non-stormwater discharges from entering the storm drain system.

• Disturbing areas should not exceed 500.

• In general straw bales should not be used as inlet protection.

• Provide an adequate area for water to pond without encroaching into portions of the roadway subject to traffic.

Implementation
General
• Inlet protection measures presented in this handbook should not be used for inlets draining more than one acre. Runoff from larger distributed areas should be first routed through SE-2, Sediment Basin or SE-3, Sediment Trap and/or used in conjunction with other drainage control, erosion control, and sediment control BMPs to protect the site. Different types of inlet protection are appropriate for different situations depending on the conditions and the type of inlet. Alternative methods are available in addition to the methods described/shown herein such as perforated inlet inlets, boxes, or other protection devices.

Design and Layout
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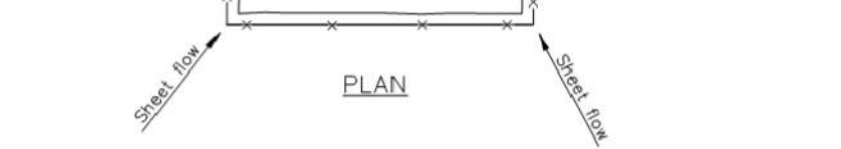
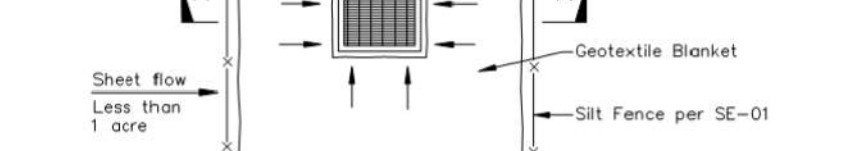
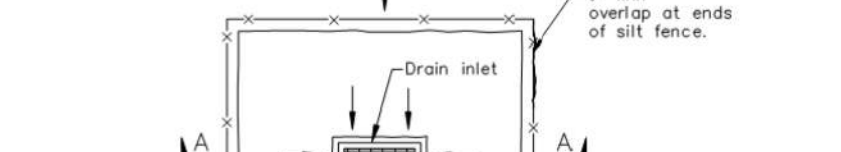
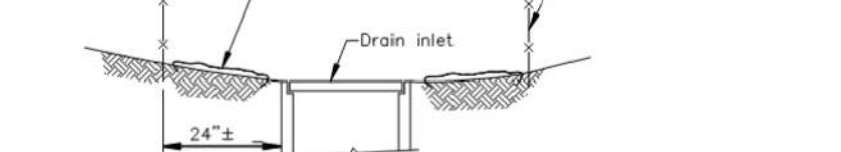
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Storm Drain Inlet Protection SE-10



NOTES:
1. For use in areas where grading has been completed and final soil stabilization and seeding or revegetation has been completed.
2. Not applicable in paved areas.
3. Not applicable with concentrated flows.

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Paving and Grinding Operations NS-3

Hot Mix Asphalt Paving Handbook AC 150/2370-14, Appendix I, U.S. Army Corps of Engineers, July 1999.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

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Scheduling EC-1

Inspection and Maintenance
Verify that work is progressing in accordance with the schedule. If progress deviates, take corrective actions.
Amend the schedule when changes are warranted.
Amend the schedule prior to the rainy season to show updated information on the deployment and implementation of construction site BMPs.

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Scheduling EC-1

of construction. Clearly show how the rainy season relates to soil disturbing and re-stabilization activities. Incorporate the construction schedule into the SWPPP.
Include on the schedule, details on the rainy season implementation and deployment of:
- Erosion control BMPs
- Sediment control BMPs
- Tracking control BMPs
- Non-stormwater BMPs
- Stormwater BMPs
- Waste management and materials pollution control BMPs

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Scheduling EC-1

Calendar grid for January showing construction activities. Includes a table with columns for days of the week and rows for dates. A legend on the right lists categories like Erosion Control, Sediment Control, etc.

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Material Delivery and Storage WM-1

Repair or replace perimeter controls, containment structures, covers, and liners as needed to maintain proper function.
References:
Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities, Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.
Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidelines, Working Group Working Paper, USEPA, April 1992.
Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.
Stormwater Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-005, U.S. Environmental Protection Agency, Office of Water, September 1992.

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Material Delivery and Storage WM-1

Hazardous materials storage outside should be minimized.
Hazardous materials should be handled as infrequently as possible.
Keep ample spill cleanup supplies appropriate for the materials being stored. Ensure that cleanup supplies are in a conspicuous, labeled area.
Employees and subcontractors should be trained on the proper material delivery and storage practices.
Employees trained in emergency spill cleanup procedures must be present when dangerous materials or liquid chemicals are unloaded.

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Material Delivery and Storage WM-1

Asphalt and concrete components
Hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds
Concrete compounds
Other materials that may be detrimental if released to the environment

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Material Delivery and Storage WM-1

Diagram showing material delivery and storage methods. Includes a table with categories like Erosion Control, Sediment Control, etc. and a legend.

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Material Use WM-2

Provide containment for material use areas such as masons' areas or paint mixing/preparation areas to prevent materials/pollutants from entering stormwater.
Costs:
All of the above are low cost measures.
Inspection and Maintenance:
Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities.
BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.

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Material Use WM-2

application (if different than the contractor). If notice is provided to the contractor or the person commissioning the application, then they are responsible under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to ensure that:
1) if the concrete slab cannot be poured over the treated soil within a 4-hour application, the treated soil is covered with a waterproof covering such as polyethylene sheeting, and 2) the treated soil is covered if precipitation is predicted to occur before the concrete slab is scheduled to be poured.
Do not over-apply fertilizers, herbicides, and pesticides. Prepare only the amount needed. Follow the recommended usage instructions. Over-application is expensive and environmentally harmful.
Use one drop steps. All fertilizers into the soil rather than hydraulic application. Apply surface dressings in several smaller applications, as opposed to one large application, to allow time for infiltration and to avoid excess material being carried offsite by runoff. Do not apply these chemicals before predicted rainfall.

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Material Use WM-2

Suber alternative building and construction products may not be available or suitable in every instance.
Implementation:
The following steps should be taken to minimize risk:
- Minimize use of hazardous materials onsite.
- Follow manufacturer instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals.
- Train personnel who use pesticides. The California Department of Pesticide Regulation and county agricultural commissioners license pesticide dealers, certify pesticide applicators, and conduct onsite inspections.

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Material Use WM-2

Diagram showing material use containment methods. Includes a table with categories like Erosion Control, Sediment Control, etc. and a legend.

November 2009 California Stormwater BMP Handbook Construction www.casqa.org 1 of 4

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP. 03-119485 INC. REVIEWED FOR DATE: 8/14/2019

CANNONDESIGN LICENSED ARCHITECT JAVAN NABILI NO. C24035

BRANDOW & JOHNSTON STRUCTURAL-ON ENGINEERS (INC.) 705 S. FLOWER ST #100, LOS ANGELES, CA 90017

SOUND MITIGATION PROGRAM PROJECT NUMBER: C18-0041 DRAWN: V. TANTCHEVA CHECKED: ED MELO

EROSION CONTROL PLAN C504