

THE TOWN OF BELMONT

PLAN AND PROFILE OF

ROADWAY IMPROVEMENTS

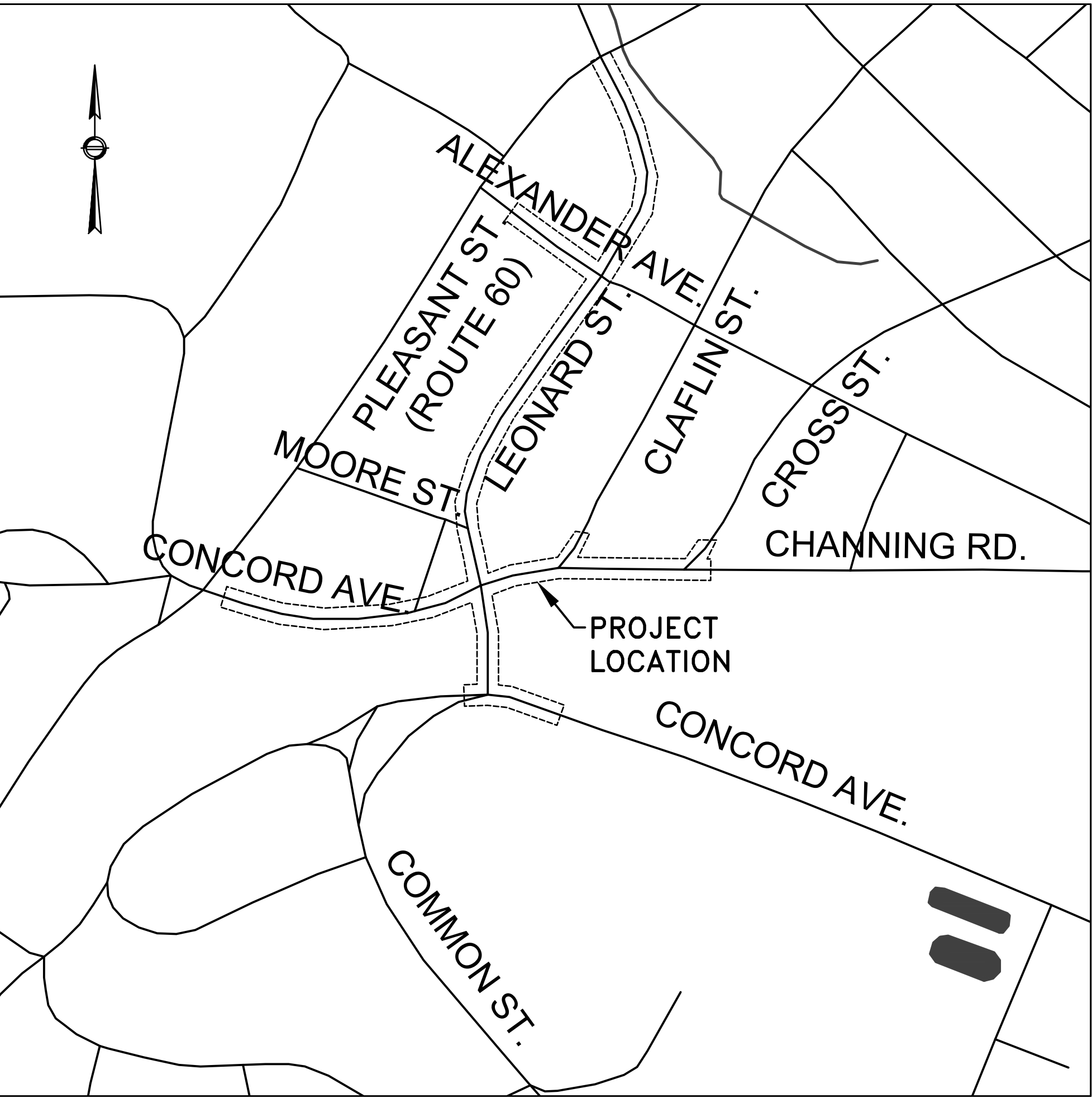
IN THE TOWN OF

BELMONT MIDDLESEX COUNTY

ALL WORK DONE UNDER THIS CONTRACT SHALL BE IN CONFORMANCE WITH THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 1988, THE SUPPLEMENTAL SPECIFICATIONS DATED JUNE 15, 2012, AND THE INTERIM SUPPLEMENTAL SPECIFICATIONS; THE 2012 CONSTRUCTION STANDARD DETAILS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS; THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH MASSACHUSETTS AMENDMENTS AND THE STANDARD MUNICIPAL TRAFFIC CODE; THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING; THE LATEST EDITION OF AMERICAN STANDARD FOR NURSERY STOCK; THE PLANS AND SPECIAL PROVISIONS.

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LOCATION MAP
1" = 250'

LENGTH OF PROJECT = 3,687± - 0.69± MILES

CONVENTIONAL SIGNS

COUNTY, CITY, OR TOWN BOUNDARY	
COUNTY, CITY, OR TOWN SIDE LINE	
FENCE LINE	
BASE LINE OR SURVEY LINE	
RIGHT OF WAY LINE	
CULVERT	
ELEVATIONS	
UTILITY POLE	

SEMI-FINAL DESIGN

SUBMISSION DATE
SEPTEMBER 2013

 **BSC GROUP**
15 ELKINS STREET
BOSTON, MASSACHUSETTS 02127
(617) 896-4300
www.bscgroup.com

LEGEND

EXISTING PROPOSED DESCRIPTION

UTILITIES

		CATCH BASIN (OR GUTTER INLET)
		CATCH BASIN WITH CURB INLET
		12" R.C.P. DRAIN PIPE
		DMH DRAINAGE MANHOLE
		12" P.V.C. ELEC. ELECTRIC DUCT
		EMH ELECTRIC MANHOLE
		GG GAS GATE
		12" P.V.C. GAS GAS MAIN
		12" P.V.C. SEWER SEWER MAIN
		SMH SEWER MANHOLE
		8" SD SUBDRAIN
		12" P.V.C. TELE. TELEPHONE DUCT
		TMH TELEPHONE MANHOLE
		UTILITY PLUG
		WG WATER GATE
		WMH WATER MANHOLE
		12" P.V.C. WATER WATER MAIN

SURFACE DETAILS/TOPO

		BASE/SURVEY LINE
		CITY, TOWN OR COUNTY BOUNDARY
		CURB (OR BERM) – TYPE NOTED
		EDGE OF ROAD
		CHANGE IN P.V.M'T TYPE
		EASEMENT
		FENCE (SIZE AND TYPE NOTED)
		HIGHWAY GUARD (TYPE NOTED)
		HIGHWAY/PROPERTY BOUND (TYPE NOTED)
		PROPERTY LINE
		STATE BOUNDARY
		STATE HIGHWAY LAYOUT LINE
		TOWN HIGHWAY LAYOUT LINE
		TREE (SIZE AND TYPE NOTED)
		WHEEL CHAIR RAMP

MISCELLANEOUS

		BORING
		FIRE ALARM BOX
		HYDRANT
		MAILBOX – COMMERCIAL
		MAILBOX – RESIDENTIAL
		PROBE
		STREET LIGHT
		TEST PIT
		WOODEN POLE

EXISTING PROPOSED DESCRIPTION

TRAFFIC, PAVEMENT MARKINGS & SIGNING

		CONDUIT
		CONTROL CABINET – GROUND MOUNTED
		CONTROL CABINET – POLE MOUNTED
		CONTROLLER PHASE
		CROSSWALK
		DIRECTION OF FLOW
		ELECTRIC HANDHOLE
		EMERGENCY CONFIRMATION BEACON
		FLASHING BEACON (ALPHA–NUMERIC DESIGNATION NOTED)
		INTERCONNECT CABLE
		INDUCTIVE LOOP DETECTOR
		LIMIT OF VISIBILITY OF OPTICALLY PROGRAMMED SIGNAL HEAD
		MAGNETIC DETECTOR
		MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		OPTICAL EMERGENCY DETECTOR
		OVERHEAD CABLE
		PAVEMENT ARROW AND LEGEND
		PEDESTRIAN PUSH BUTTON
		PEDESTRIAN SIGNAL HEAD (ALPHA–NUMERIC DESIGNATION NOTED)
		PULL BOX 12" X 12"
		PULL BOX 8" X 23", 12" X 24"
		RAISED PAVEMENT MARKER: TWO–WAY YELLOW
		RAISED PAVEMENT MARKER: ONE–WAY WHITE
		RAISED PAVEMENT MARKER: YELLOW/RED
		SIGN AND POST
		SIGN LEGEND
		SIGNAL POST AND BASE
		VEHICULAR SIGNAL HEAD (ALPHA–NUMERIC DESIGNATION NOTED)
		VEHICULAR SIGNAL HEAD OPTICALLY PROGRAMMED (ALPHA–NUMERIC DESIGNATION NOTED)
		" X " DUCT (CONCRETE ENCASED)
		YAGI ANTENNA

GENERAL NOTES

1. ALL NEW GRANITE CURB SHALL BE TYPE VB UNLESS OTHERWISE NOTED.

2. ALL GRANITE CURB SHALL BE SET TO HAVE A 6" REVEAL ABOVE FINAL PAVEMENT GRADES (UNLESS OTHERWISE NOTED).

3. ALL BASELINE TIES FOR CURB CORNERS AND RADII ARE TO THE P.C.'S OR P.T.'S, UNLESS OTHERWISE NOTED. WHERE PROPOSED CURB MEETS EXISTING CURB, BERM, ROADWAY, AND/OR DRIVEWAY PAVEMENT EDGES, MINOR FIELD ADJUSTMENTS TO EITHER THE DESIGNATED RADIUS OR THE DESIGNATED STATION OF THE P.C. OR P.T. FOR THE PROPOSED CURB OR BERM MAY BE REQUIRED. THESE ADJUSTMENTS SHALL BE MADE IN THE FIELD BY THE CONTRACTOR AS DIRECTED BY THE RESIDENT ENGINEER.

4. ALL EXISTING MUNICIPAL UTILITY CASTINGS THAT ARE TO REMAIN WITHIN AREAS TO BE REPAVED SHALL BE ADJUSTED TO LINE AND GRADE BY THE CONTRACTOR UNLESS OTHERWISE NOTED. ALL PRIVATE TELEPHONE, GAS, AND ELECTRICAL CASTINGS SHALL BE ADJUSTED BY OTHERS.

5. CONTRACTOR MUST MAINTAIN EXISTING CLEARANCES UNDER ALL BRIDGES.
6. THE LOCATIONS OF EXISTING SUBSURFACE UTILITIES SHOWN ON THE PLANS WERE COMPILED FROM AVAILABLE RECORD DRAWINGS AND ARE NOT WARRANTED TO BE CORRECT. THE LOCATIONS ARE APPROXIMATE ONLY AND IN SOME CASES MAY BE INCOMPLETE. THE CONTRACTOR SHALL NOTIFY ALL AGENCIES REQUIRED AND VERIFY THE LOCATIONS OF ALL EXISTING SUBSURFACE UTILITIES PRIOR TO PERFORMING ANY WORK.

7. PRIOR TO THE INSTALLATION OF PROPOSED UTILITIES, THE CONTRACTOR SHALL EXCAVATE TEST PITS AT LOCATIONS OF UTILITY CROSSINGS TO VERIFY DEPTHS OF EXISTING PIPES, CONDUITS OR OTHER FACILITIES, AS DIRECTED BY ENGINEER.

8. THE CONTRACTOR SHALL ENSURE THAT ALL ROADWAY RUNOFF SHALL BE DIRECTED TO CATCH BASINS.

9. THE CONTRACTOR SHALL VERIFY ALL OUTLET GRADES OF DRAINAGE STRUCTURES PRIOR TO CONSTRUCTING THE DRAINAGE IMPROVEMENTS.

10. THE CONTRACTOR SHALL SAWCUT TO THE FULL PAVEMENT DEPTH AT BOUNDARIES BETWEEN FULL DEPTH CONSTRUCTION OR RECLAMATION AND EXISTING PAVEMENT.
11. EXCEPT AS NOTED, ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.

12. BASE MAPPING PREPARED BY THE BSC GROUP, INC.

13. ALL WHEELCHAIR RAMPS SHALL BE CONSTRUCTED TO COMPLY WITH THE LATEST MASSDOT STANDARDS.

14. ALL AREAS OUTSIDE OF THE LIMIT OF WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S OWN EXPENSE.

15. ALL EXISTING TREES TO REMAIN SHALL BE PROTECTED FROM DAMAGE CAUSED BY CONTRACTORS OPERATIONS.

ABBREVIATIONS

R	CIRCULAR RED
Y	CIRCULAR AMBER
G	CIRCULAR GREEN
FR	FLASHING CIRCULAR RED
FY	FLASHING CIRCULAR AMBER
RA	45° ARROW RED
YA	45° ARROW AMBER
RG	45° ARROW GREEN
RR	135° ARROW RED
RY	135° ARROW AMBER
RG	135° ARROW GREEN
RA	LEFT ARROW RED
YA	LEFT ARROW AMBER
RG	LEFT ARROW GREEN
RA	RIGHT ARROW RED
YA	RIGHT ARROW AMBER
RG	RIGHT ARROW GREEN
CA	VERTICAL ARROW GREEN
W	WALK – LUNAR WHITE
FO	FLASHING DON'T WALK – PORTLAND ORANGE
DO	DON'T WALK – PORTLAND ORANGE
ABAN.	ABANDON
ADJ.	ADJUST
B.O.	BY OTHERS
BOC	BEGINNING OF CURB
C.I.T.	CHANGE IN TYPE
D.I.P.	DUCTILE IRON PIPE
EOC	END OF CURB
F.E.	FLARED END
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
H.M.A.	HOT MIX ASPHALT
MA	MAST ARM
N.I.C.	NOT IN CONTRACT
P.B.S.	PAINTED BOTH SIDES
P.W.W.	PAVED WATERWAY
R.C.P.	REINFORCED CONCRETE PIPE
REM.	REMOVE
REMOD.	REMODEL
RET.	RETAIN
R&D	REMOVE & DISCARD
R&R	REMOVE & RESET
R&S	REMOVE & STACK
R&T	REMOVE & TRANSPORT
SGE	SLOPED GRANITE EDGING
VGC	VERTICAL GRANITE CURB
BWLL	BROKEN WHITE LANE LINE, 6" (10' MARK – 30' SKIP)
BYCL	BROKEN YELLOW CENTER LINE, 6" (10' MARK – 30' SKIP)
CW	CROSSWALK
DWLL	DOTTED WHITE LANE LINE, 6" (2' MARK – 4' SKIP)
DYCL	DOUBLE YELLOW CENTER LINE, 6"
SL	STOP LINE, 12", 4' BEHIND CW
SWCHL	SOLID WHITE CHANNELIZATION LINE, 12"
SWEL	SOLID WHITE EDGE LINE, 6"
SWLL	SOLID WHITE LANE LINE, 6"
SYCHL	SOLID YELLOW CHANNELIZATION LINE, 12"
SYEL	SOLID YELLOW EDGE LINE, 6"
WCL	WHITE CHEVRON LINE, 12" (SPACED 10' O.C. UNLESS OTHERWISE NOTED)
WTL	WHITE TRANSVERSE LINE, 12" (SPACED 10' O.C. UNLESS OTHERWISE NOTED)
YTL	YELLOW TRANSVERSE LINE, 12" (SPACED 10' O.C. UNLESS OTHERWISE NOTED)

					DRAWN BY: K. LEWIS	FILE NAME: 2826300 LN.dwg	 15 Elkins Street Boston, Massachusetts 02127 www.bscgroup.com 617 896 4300	PREPARED FOR: TOWN OF BELMONT 455 CONCORD AVENUE BELMONT, MASSACHUSETTS	SHEET TITLE: BELMONT CENTER IMPROVEMENTS BELMONT, MASSACHUSETTS LEGEND AND GENERAL NOTES	DATE: SEPTEMBER 9, 2013
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					CHECKED BY: P. BRIERE	JOB NO: xxxxxx.xx				
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VARIABLE DEPTH PAVEMENT MILLING AND OVERLAY (LEONARD ST.)

PAVEMENT MILLING AND OVERLAY (LEONARD ST.)

PAVEMENT REPLACEMENT (LEONARD ST.)

FOUNDATION: EXISTING SUB-BASE MATERIAL

FULL DEPTH PAVEMENT PATCH (LEONARD ST.)

FOUNDATION: 12" GRAVEL BORROW TYPE B***

PAVEMENT REMOVAL & REPLACEMENT (LEONARD ST., ALEXANDER AVE.)

FOUNDATION: EXISTING SUBBASE

PAVEMENT RECLAIM (CONCORD AVE. (WEST))

FOUNDATION: RECLAIM EXISTING PAVEMENT TO A DEPTH OF 15"
RETAIN 6" (MIN.) OF RECLAIMED MATERIAL

FULL DEPTH PAVEMENT WIDENING (CONCORD AVE. (WEST))

FOUNDATION: 12" RECLAIMED MATERIAL****

FULL DEPTH PAVEMENT PATCH (CONCORD AVE. (WEST))

FOUNDATION: 8" GRAVEL BORROW TYPE B***

CONTINUED ON SHEET 4



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CONTINUED FROM SHEET 3

PAVEMENT NOTES

PAVEMENT MILLING AND OVERLAY (CONCORD AVE. (EAST))

SURFACE: 1¾" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER
0.05 GAL/SY TACK COAT OVER
1¾" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER
0.07 GAL/SY TACK COAT OVER
3½" MICROMILLING

FULL DEPTH PAVEMENT PATCH (CONCORD AVE. (EAST))

SURFACE: 1¾" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER
0.05 GAL/SY TACK COAT OVER
1¾" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER
0.05 GAL/SY TACK COAT OVER
2½" SUPERPAVE BASE COURSE 19.0 (SBC-19.0) OVER
4" DENSE GRADED CRUSHED STONE

FOUNDATION: 8" GRAVEL BORROW TYPE B***

PAVEMENT MILLING AND OVERLAY (COMMON ST., MOORE ST., CLAFLIN ST., CROSS ST.)

SURFACE: 1¾" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER
0.07 GAL/SY TACK COAT OVER
1¾" MICROMILLING

PAVEMENT REPLACEMENT (ALEXANDER AVE.)

SURFACE: 1¾" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER
0.05 GAL/SY TACK COAT OVER
2½" SUPERPAVE BASE COURSE 19.0 (SBC-19.0)

FOUNDATION: EXISTING SUB-GRADE MATERIAL

VARIABLE DEPTH PAVEMENT MILLING AND OVERLAY (CHANNING RD.)

SURFACE: 1¾" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER
0.05 GAL/SY TACK COAT OVER
1¾" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER
0.07 GAL/SY TACK COAT OVER
1¾" MIN (AT GUTTER) TO 3" MAX (AT CL) MICROMILLING

FULL DEPTH PAVEMENT PATCH (CHANNING RD.)

SURFACE: 1¾" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER
0.05 GAL/SY TACK COAT OVER
1¾" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER
0.05 GAL/SY TACK COAT OVER
2½" SUPERPAVE BASE COURSE 19.0 (SBC-19.0) OVER

FOUNDATION: 12" GRAVEL BORROW TYPE B***

FULL DEPTH PAVEMENT WIDENING <4'

SURFACE: 1¾" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER
0.05 GAL/SY TACK COAT OVER
1¾" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER
0.05 GAL/SY TACK COAT OVER
6" CEMENT CONCRETE

FOUNDATION: 8" GRAVEL BORROW TYPE B***

CEMENT CONCRETE SIDEWALK /WALK /WCR

SURFACE: 4" CEMENT CONCRETE AIR ENTRAINED 4000 PSI, ¾", 610 LB/CY, OVER

FOUNDATION: 8" GRAVEL BORROW TYPE B***

CEMENT CONCRETE SIDEWALK AT DRIVEWAY

SURFACE: 6" CEMENT CONCRETE AIR ENTRAINED 4000 PSI, ¾", 610 LB/CY, OVER

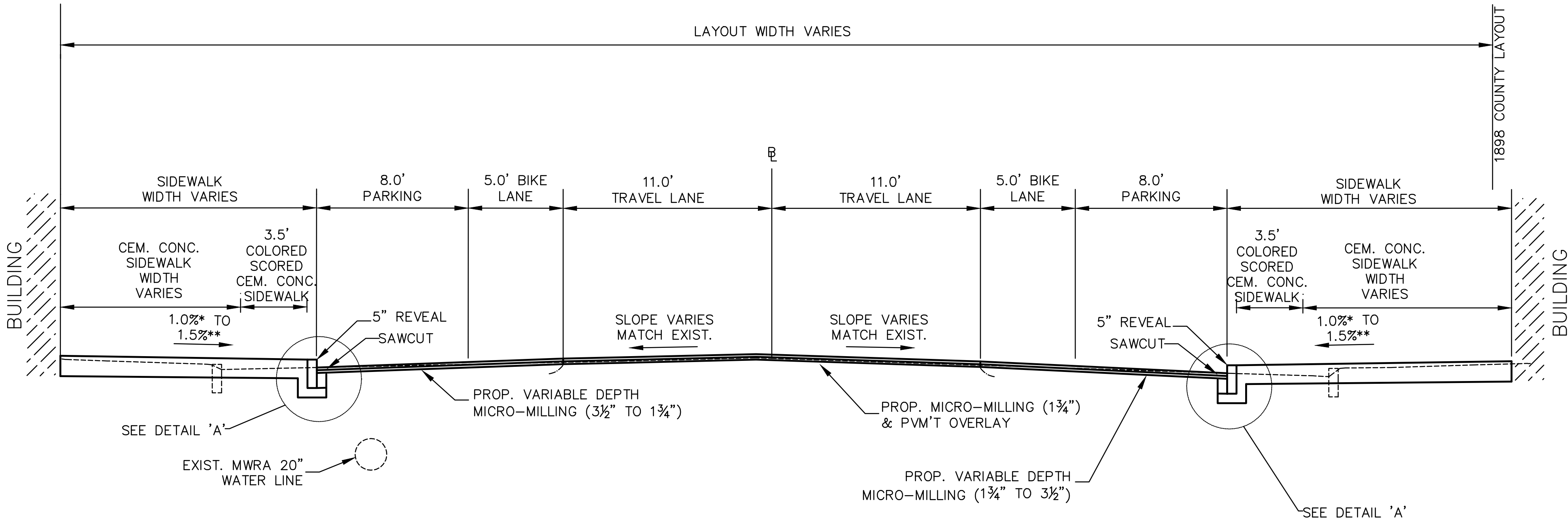
FOUNDATION: 8" GRAVEL BORROW TYPE B***

CEMENT CONCRETE ISLAND

SURFACE: 4" CEMENT CONCRETE AIR ENTRAINED 4000 PSI, ¾", 610 LB/CY, OVER

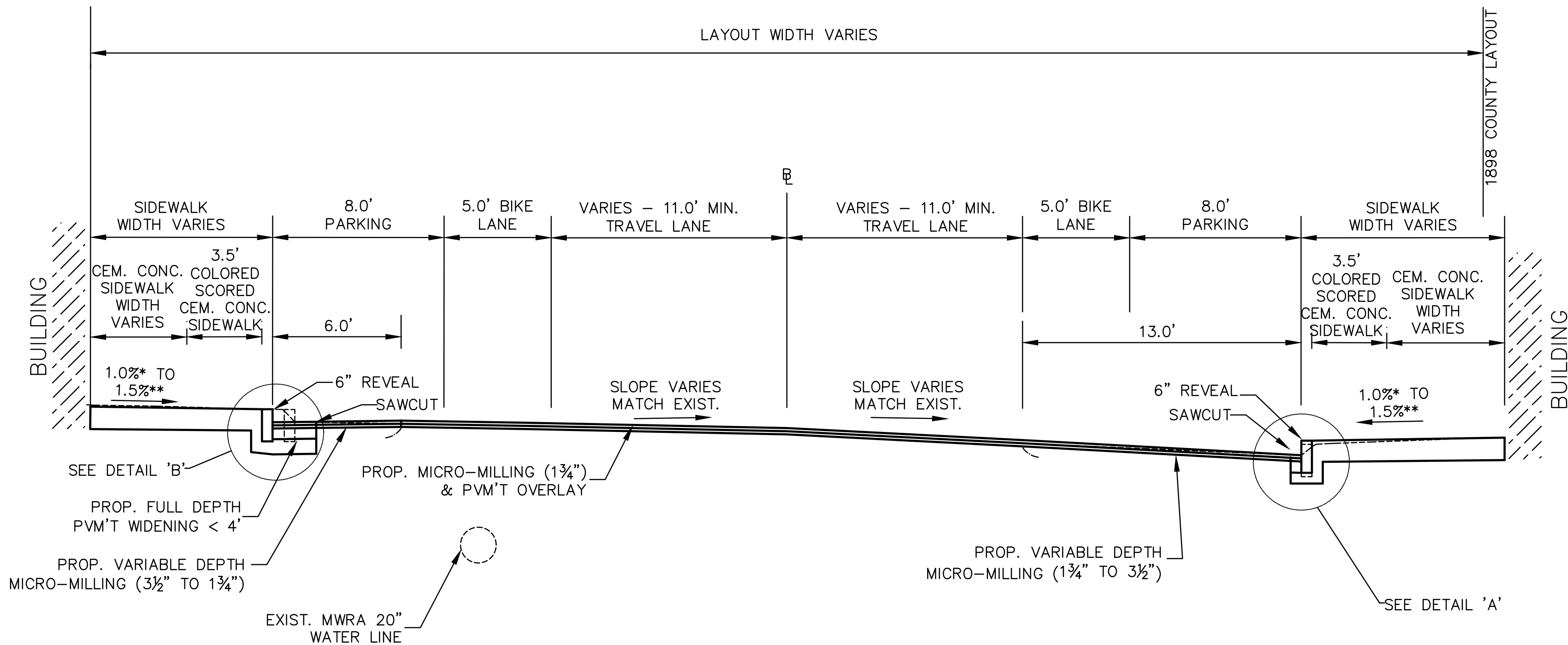
FOUNDATION: 8" GRAVEL BORROW TYPE B***

*.....1.5% PREFERRED
**.....CONSTRUCTION TOLERANCE ±0.5%
***.....NEW FOUNDATION TO BE PLACED ONLY WHERE EXISTING
SUBBASE MATERIAL FAILS TO MEET REQUIREMENTS
M1.03.0 TYPE b AND AS DIRECTED BY THE ENGINEER.



LEONARD STREET (STA 5+75 TO 7+40)

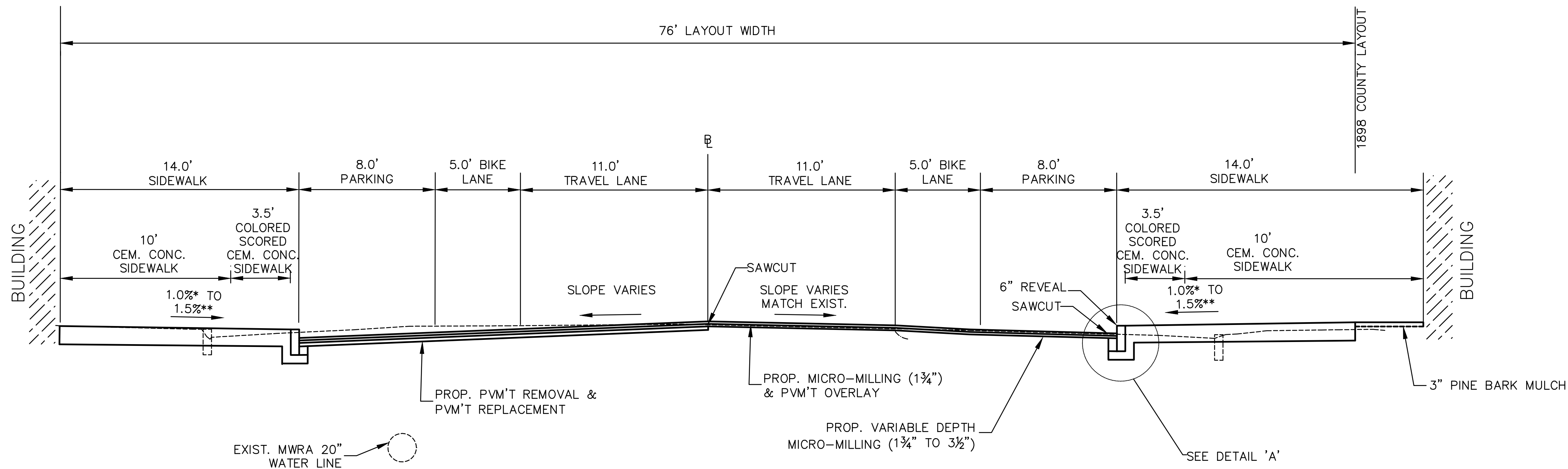
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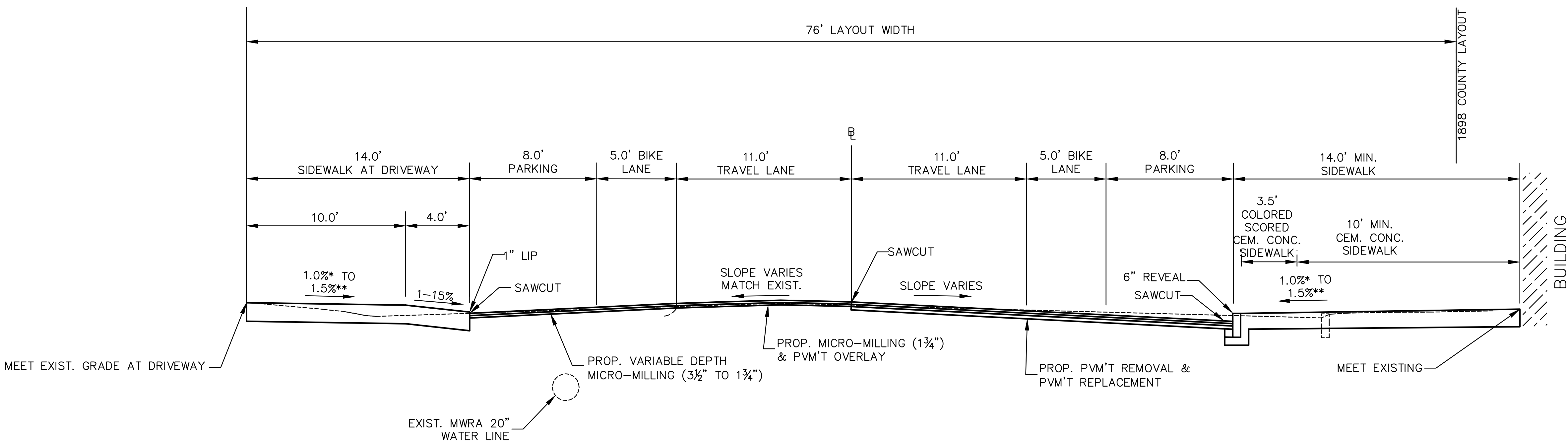
LEONARD STREET (STA 4+65 TO 5+50)

SCALE: 1" = 4'

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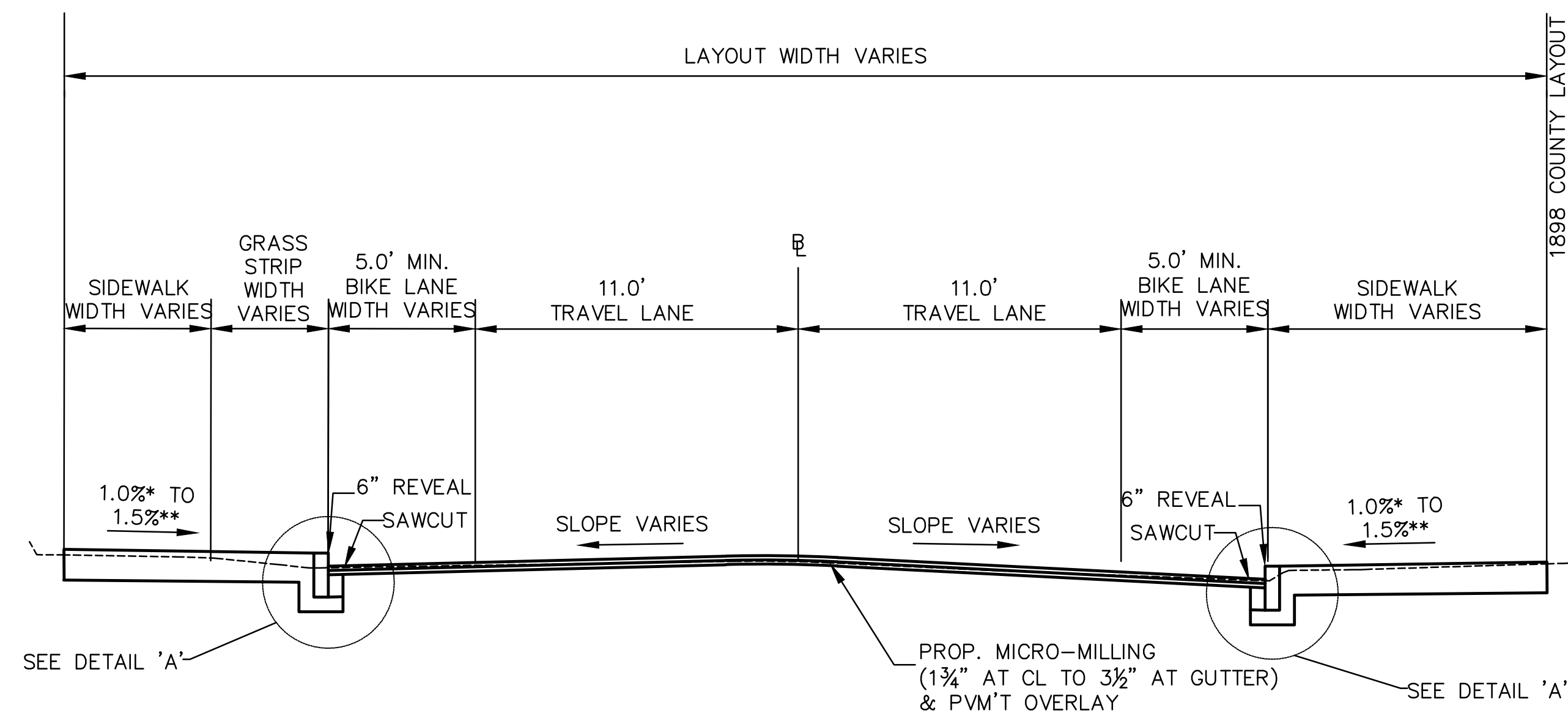
LEONARD STREET (STA 9+65 TO 10+40)
SCALE: 1" = 4'



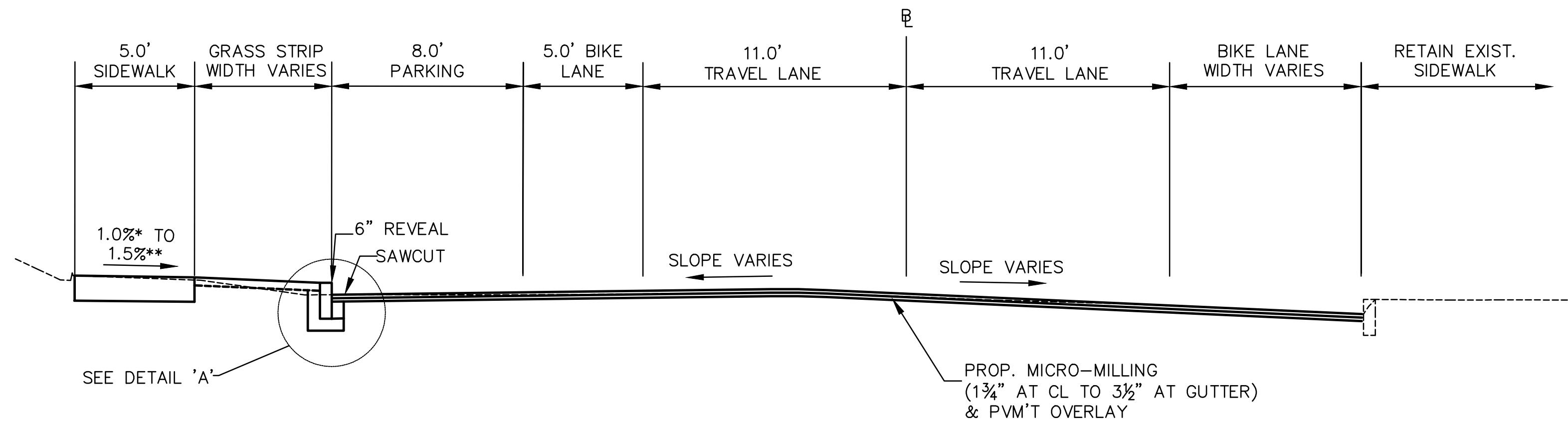
LEONARD STREET (STA 7+40 TO 9+40)
SCALE: 1" = 4'

*.....1.5% PREFERRED
**.....CONSTRUCTION TOLERANCE ±0.5%

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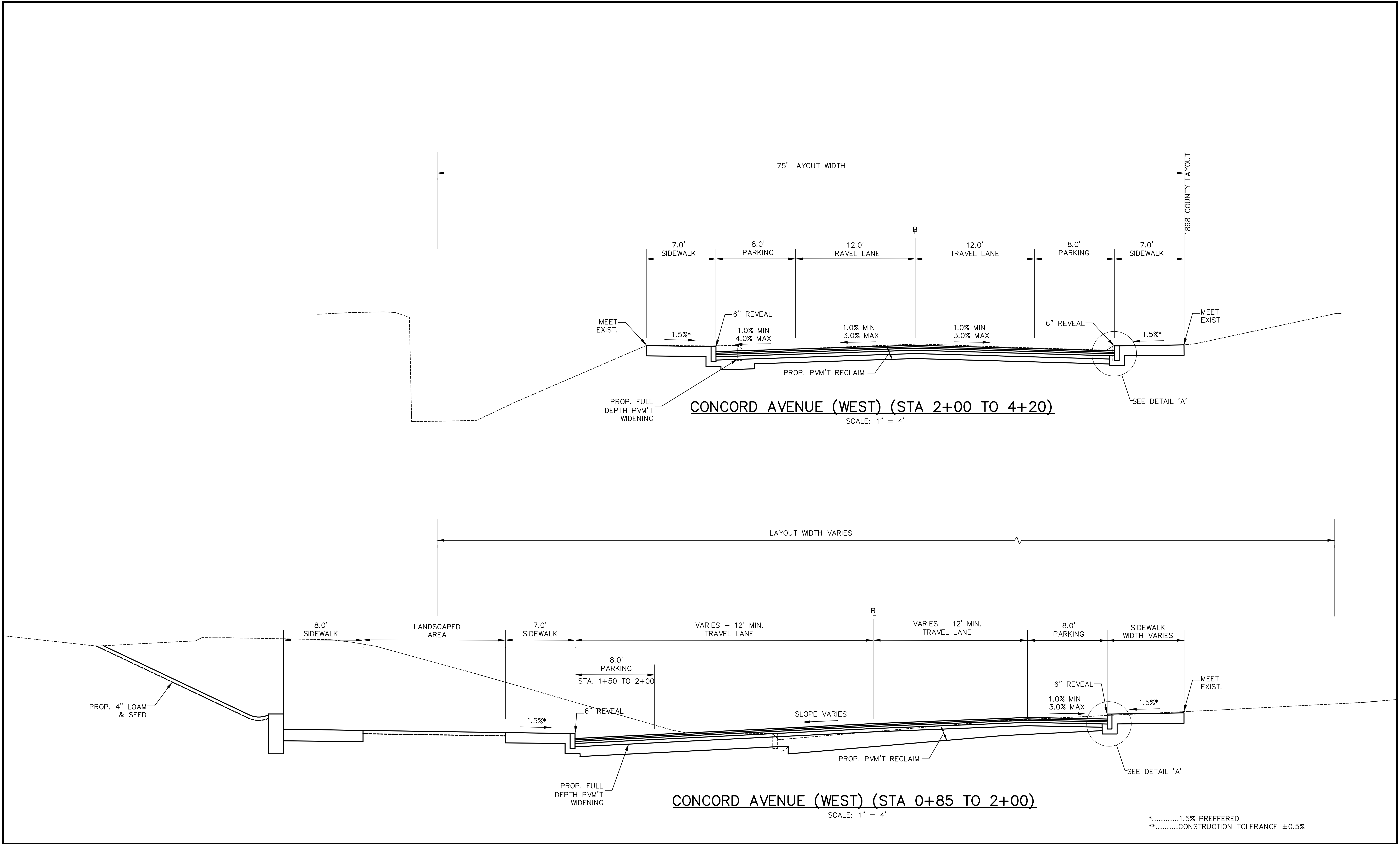
LEONARD STREET (STA 12+40 TO 15+62)
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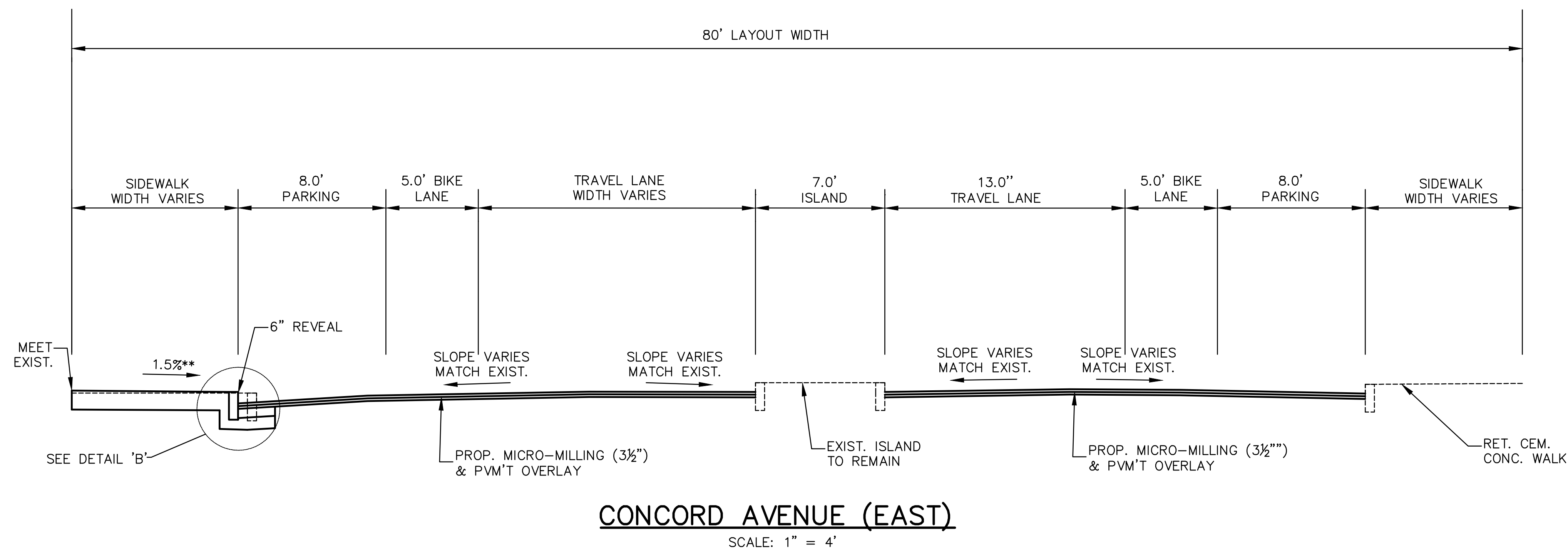
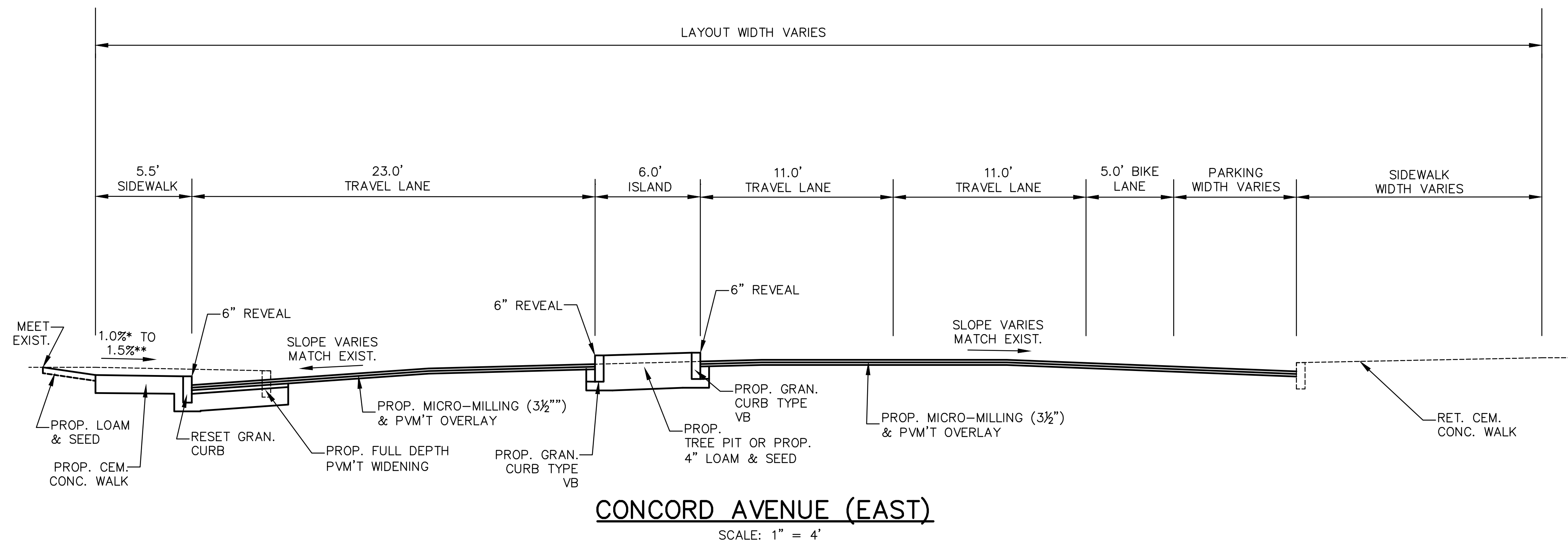
LEONARD STREET (STA 11+25 TO 12+00)
SCALE: 1" = 4'

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**.....CONSTRUCTION TOLERANCE ±0.5%

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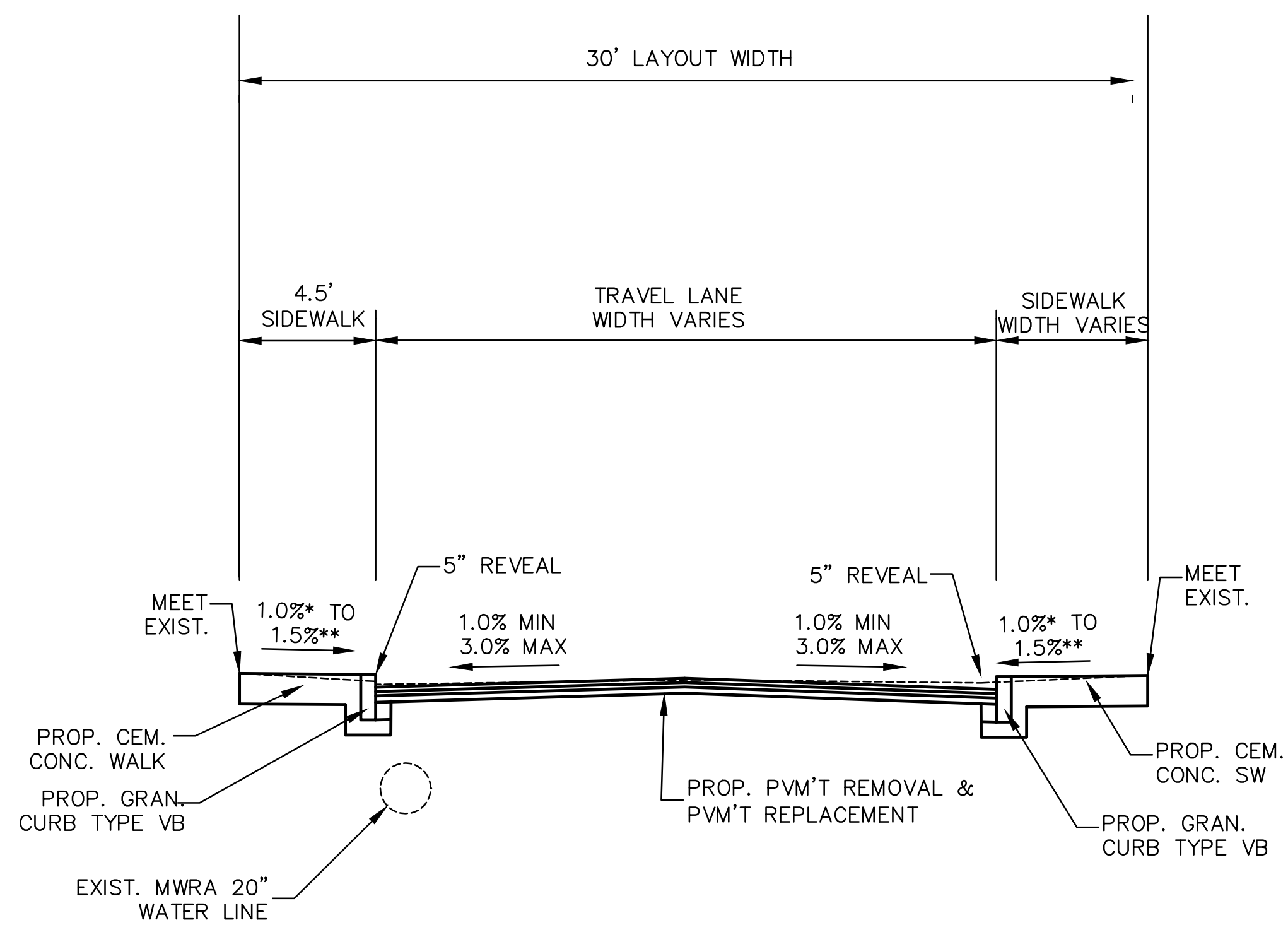


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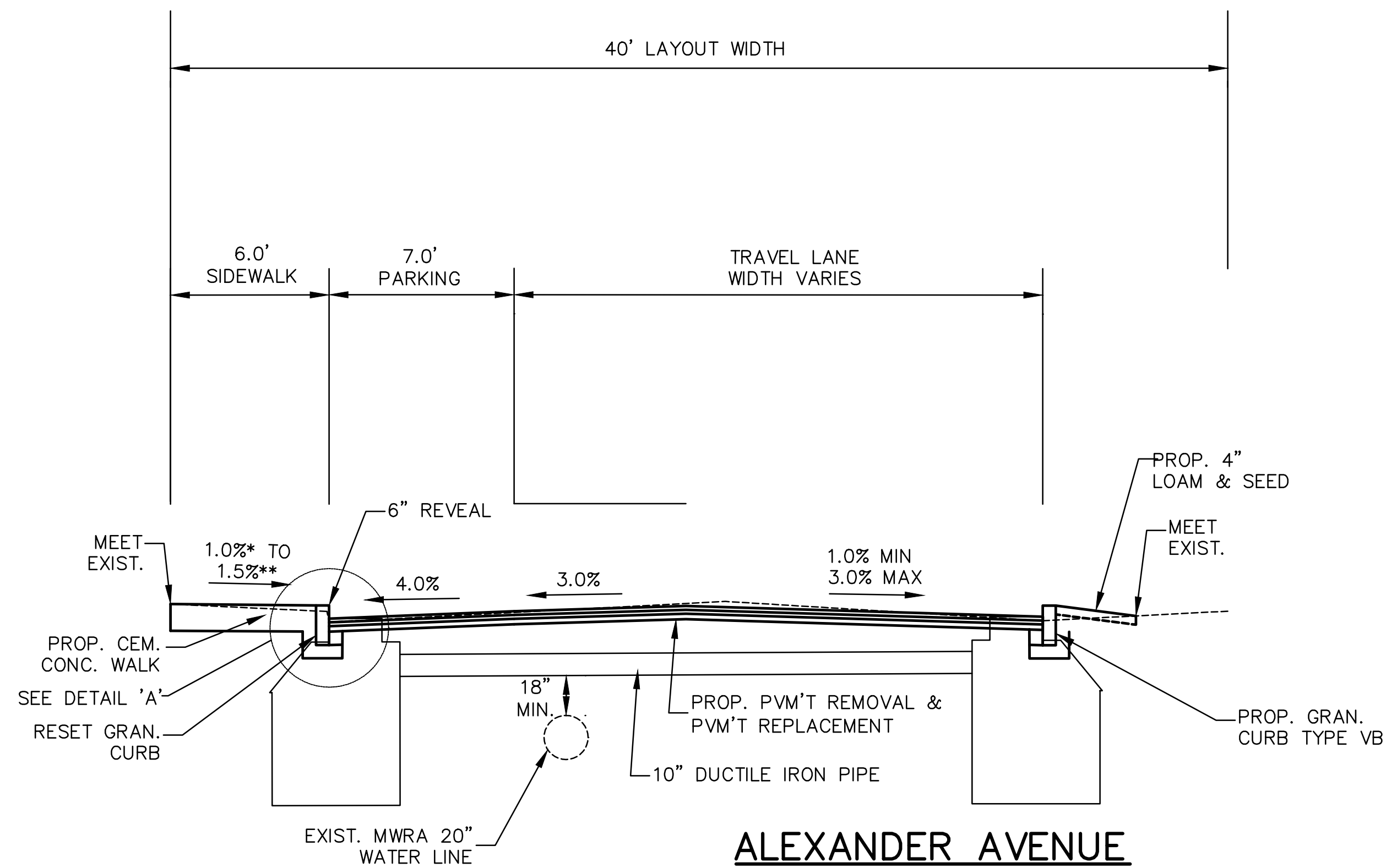


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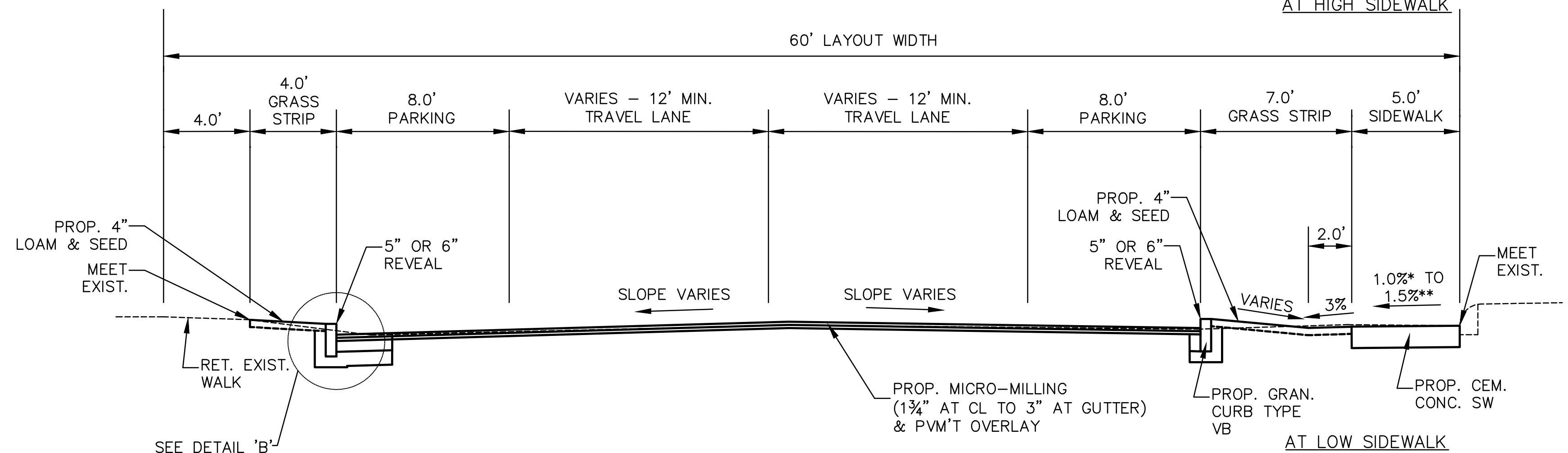
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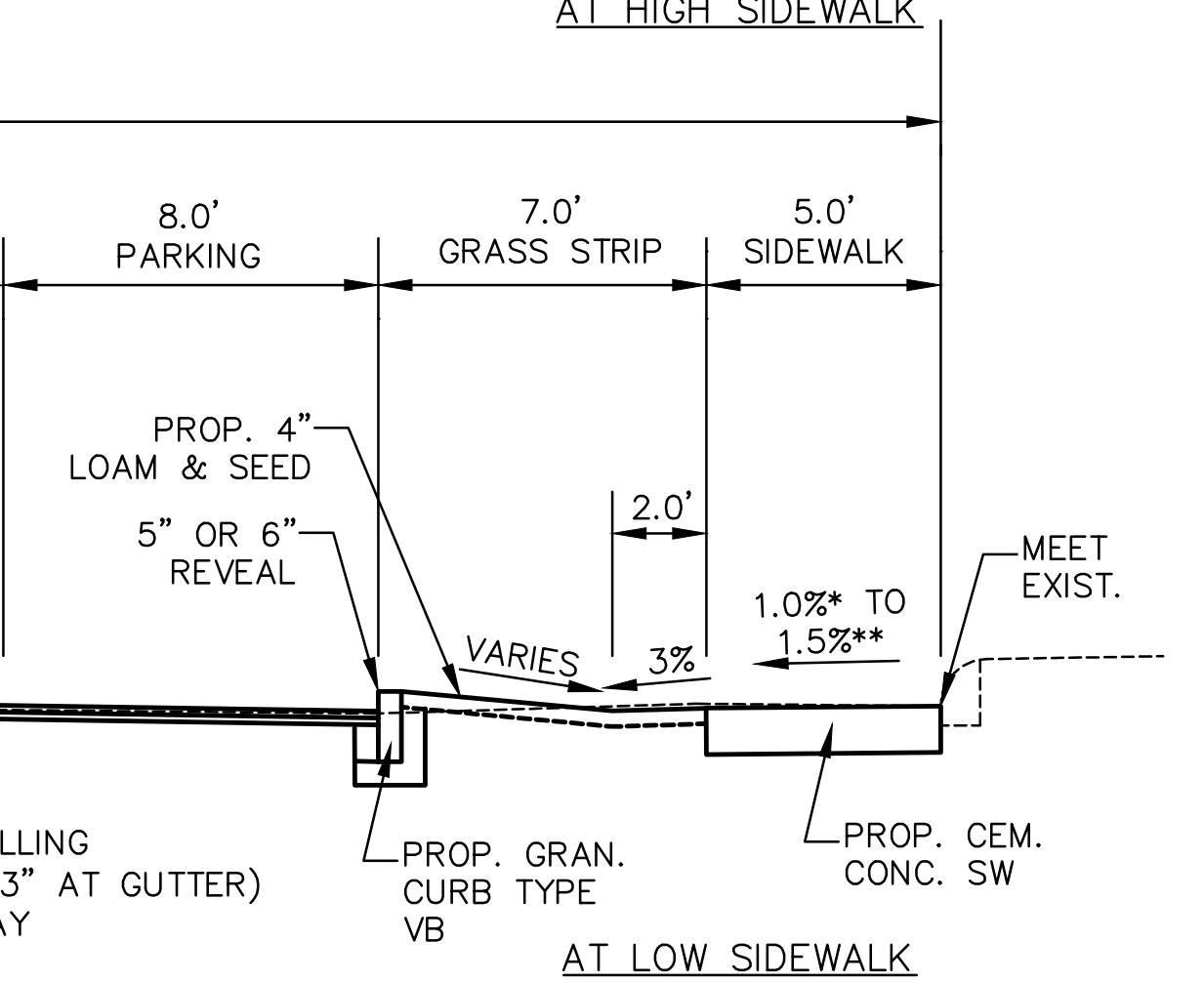
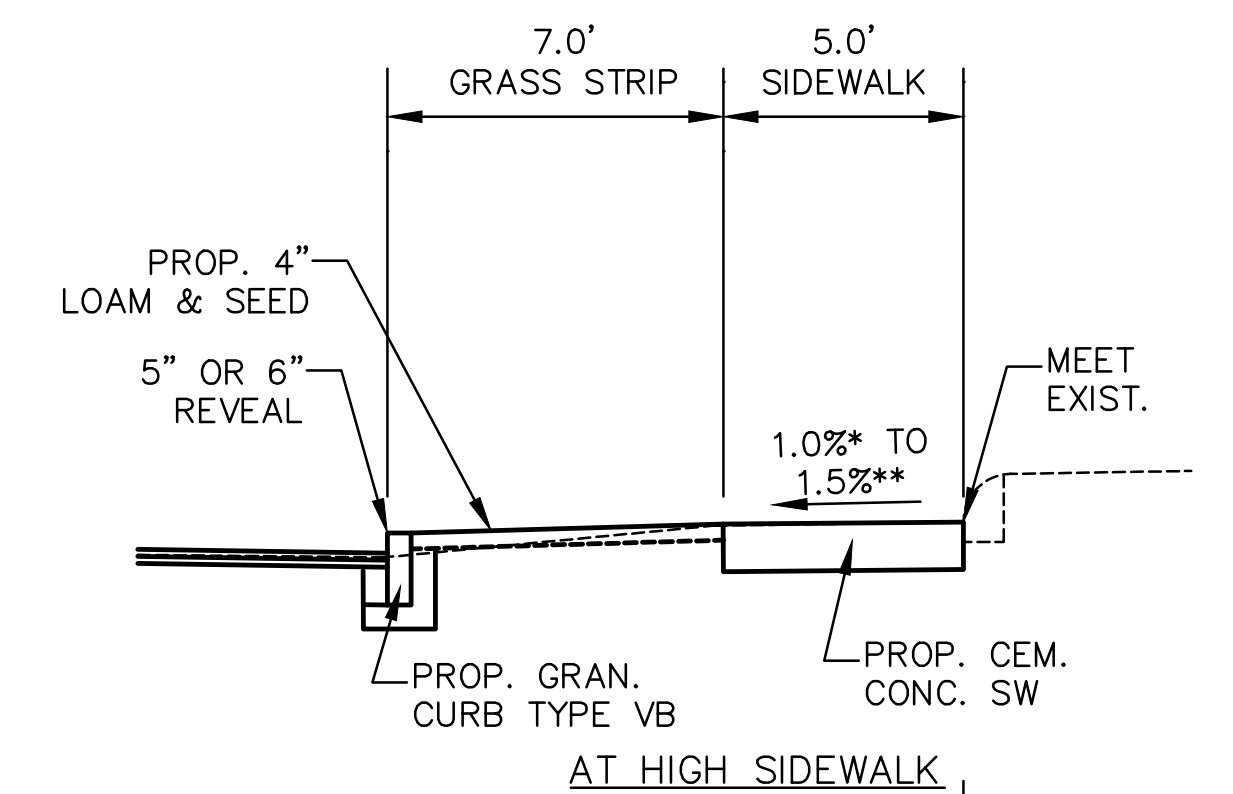
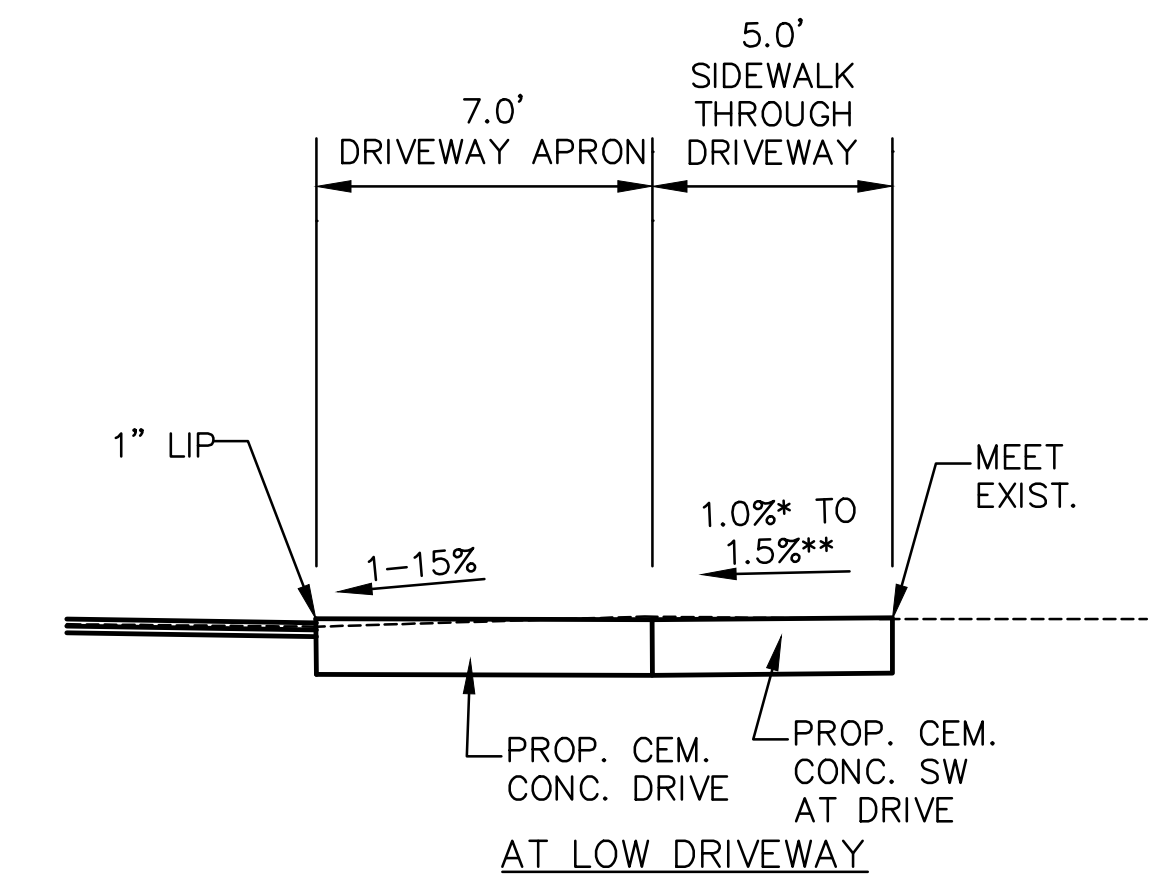
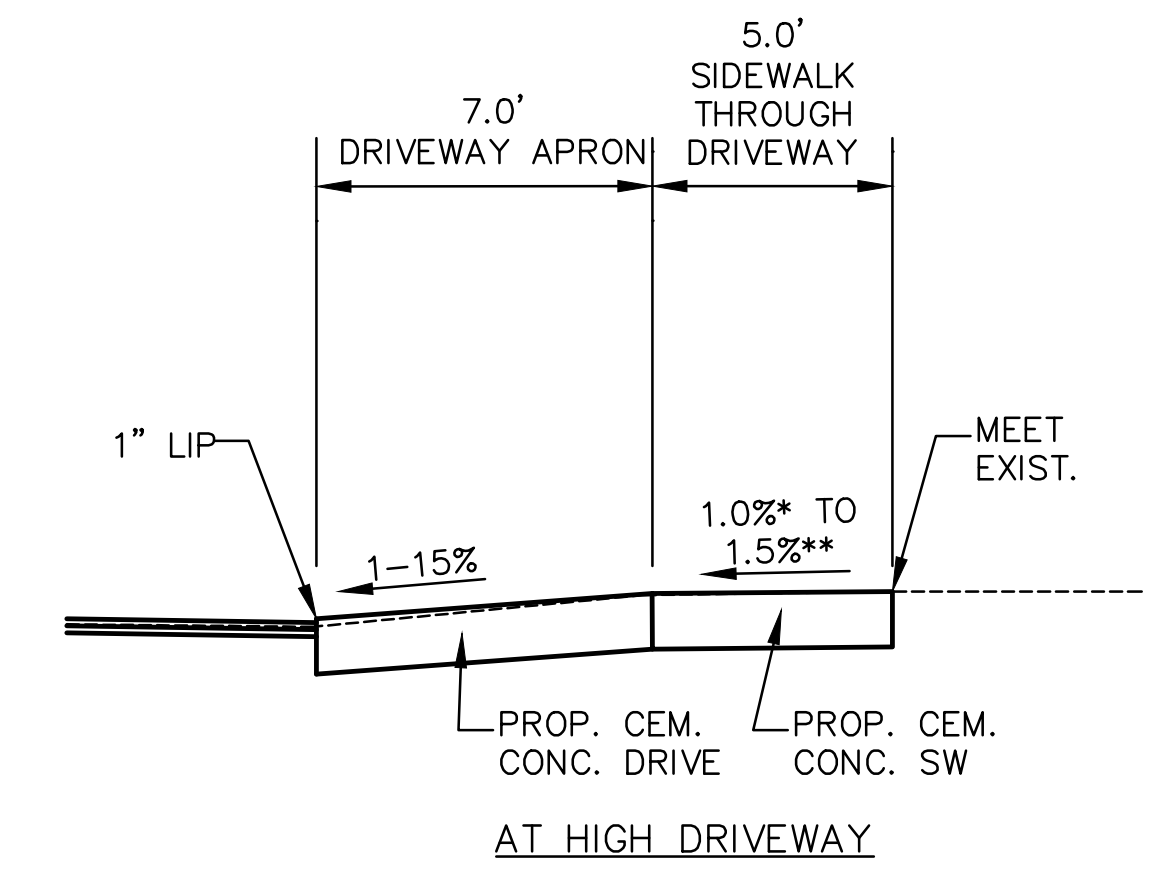
ALEXANDER AVENUE
SCALE: 1" = 4'



ALEXANDER AVENUE
SCALE: 1" = 4'

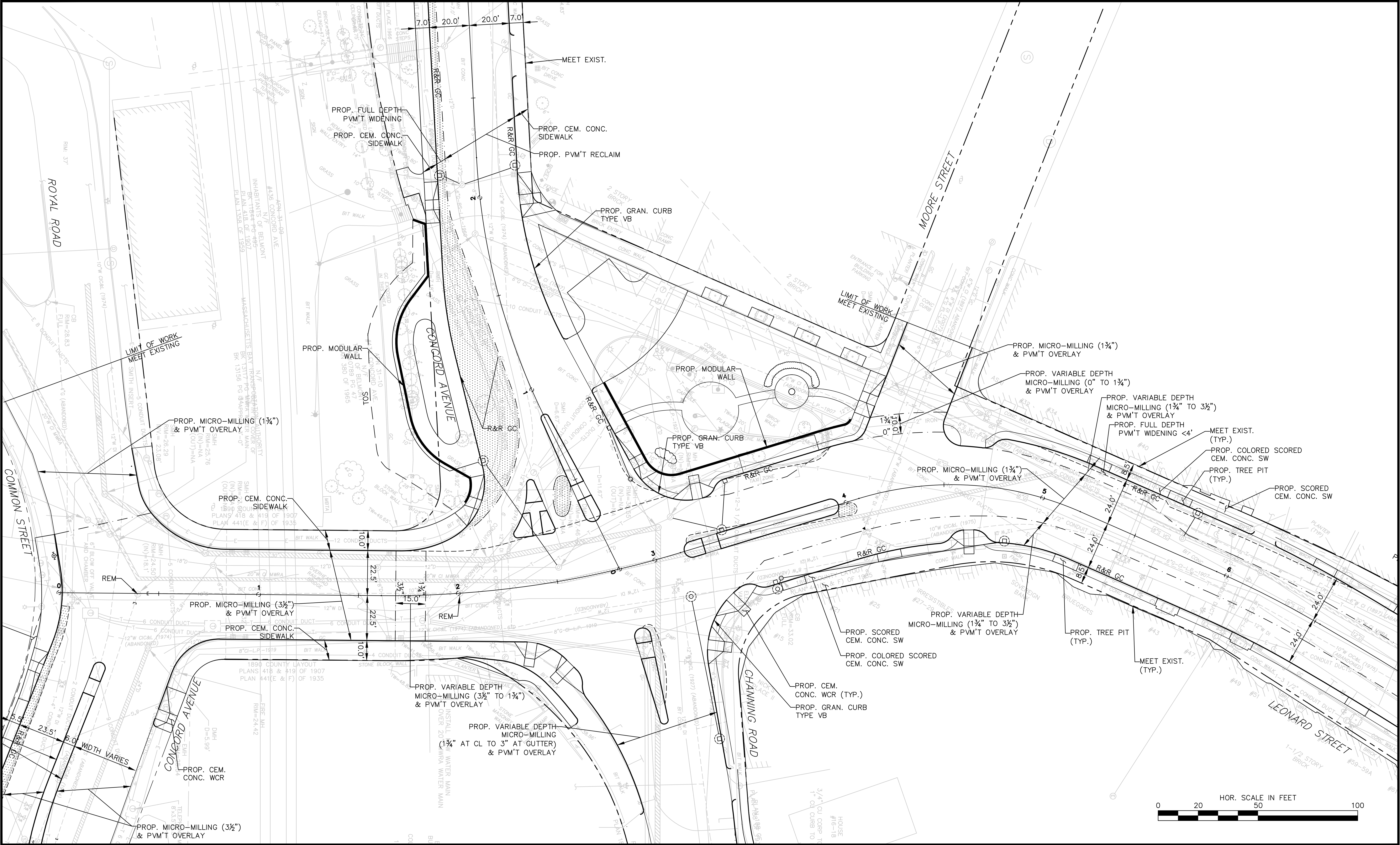


CHANNING ROAD
SCALE: 1" = 4'



*.....1.5% PREFERRED
**.....CONSTRUCTION TOLERANCE ±0.5%

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**BSC GROUP**

15 Elkins Street
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www.bscgroup.com

617 896 4300

PREPARED FOR:
**TOWN OF BELMONT
455 CONCORD AVENUE
BELMONT, MASSACHUSETTS**

SHEET TITLE:
**BELMONT CENTER IMPROVEMENTS
BELMONT, MASSACHUSETTS
GENERAL PLAN**

DATE:
SEPTEMBER 9, 2013
10 OF 25



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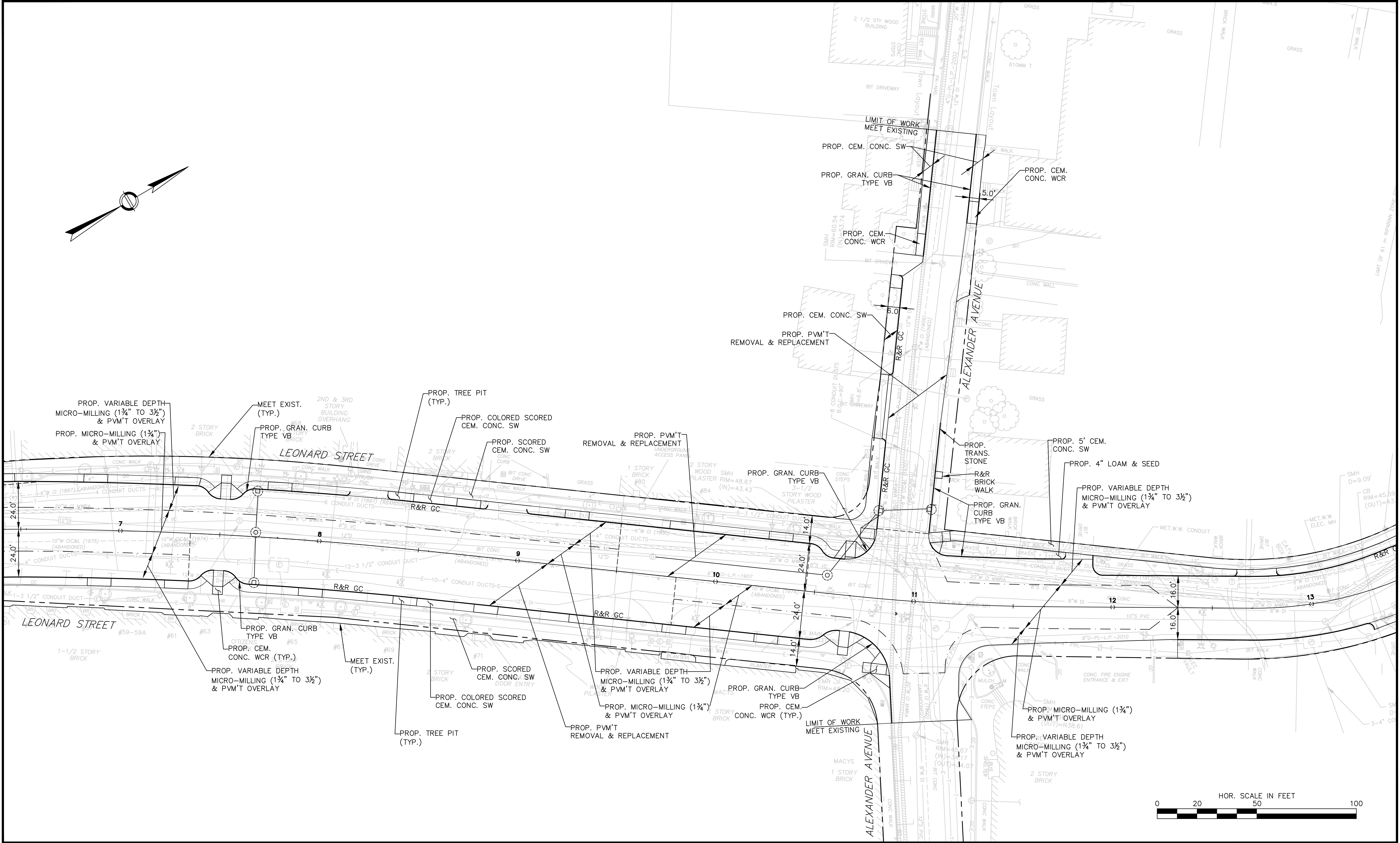
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PREPARED FOR:

**TOWN OF BELMONT
455 CONCORD AVENUE
BELMONT, MASSACHUSETTS**

SHEET TITLE:	BELMONT CENTER IMPROVEMENTS BELMONT, MASSACHUSETTS GENERAL PLAN	DATE: SEPTEMBER 9, 2013
		11 OF 25



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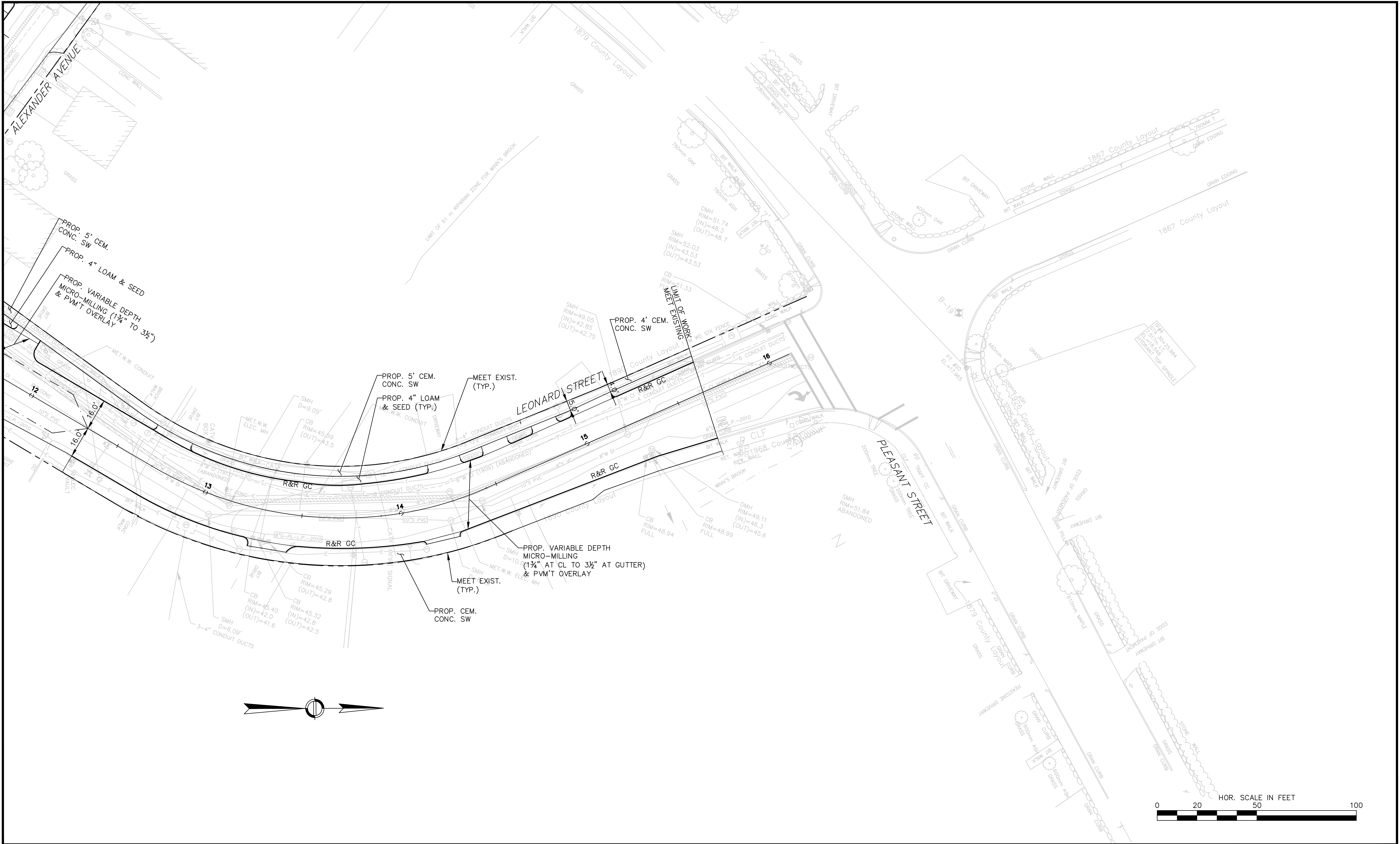
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SHEET TITLE:

**BELMONT CENTER IMPROVEMENTS
BELMONT, MASSACHUSETTS
GENERAL PLAN**

DATE:
SEPTEMBER 9, 2013

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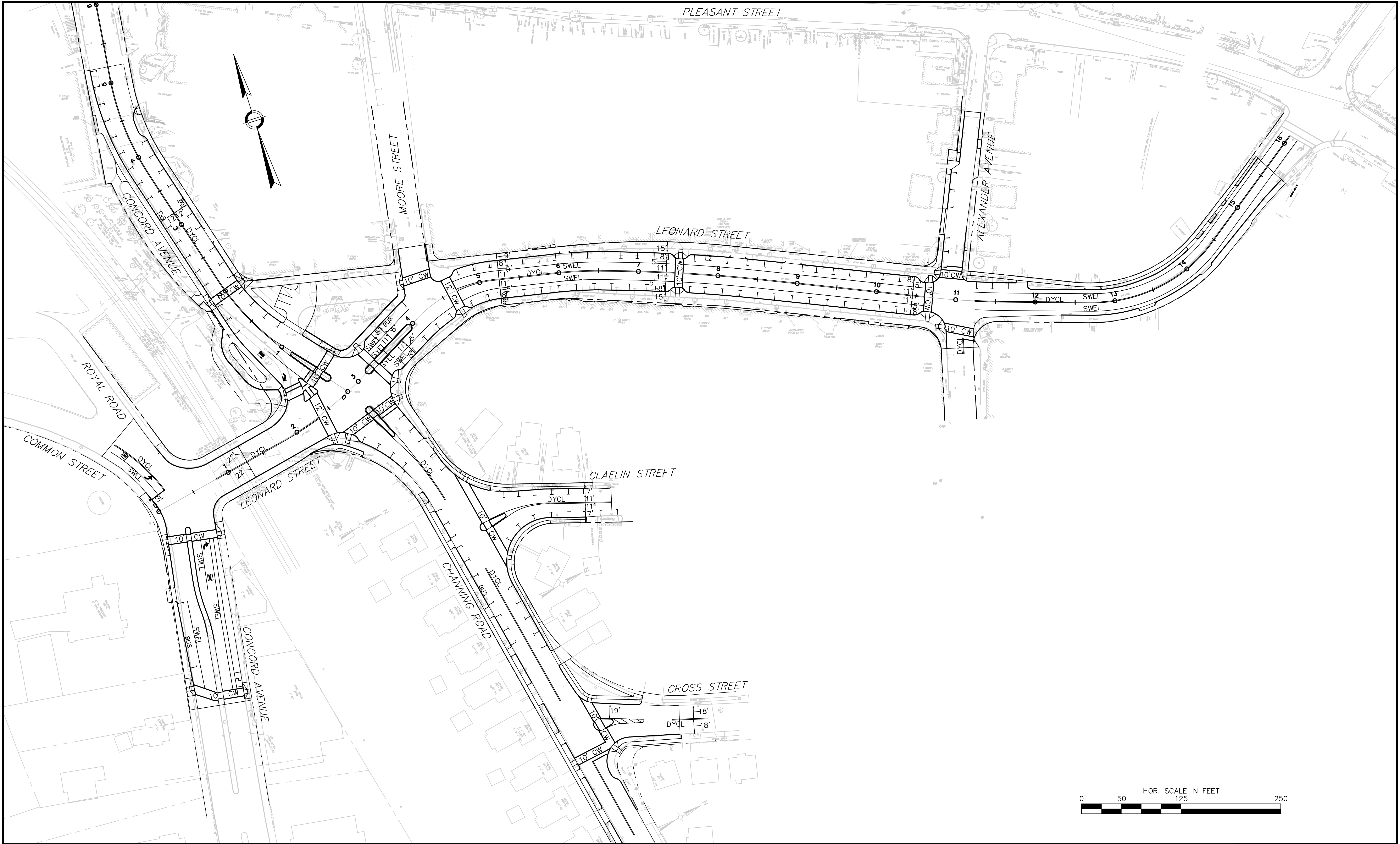
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BELMONT, MASSACHUSETTS
GENERAL PLAN**

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SEPTEMBER 9, 2013

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BELMONT, MASSACHUSETTS
PAVEMENT MARKING & SIGNING PLAN**

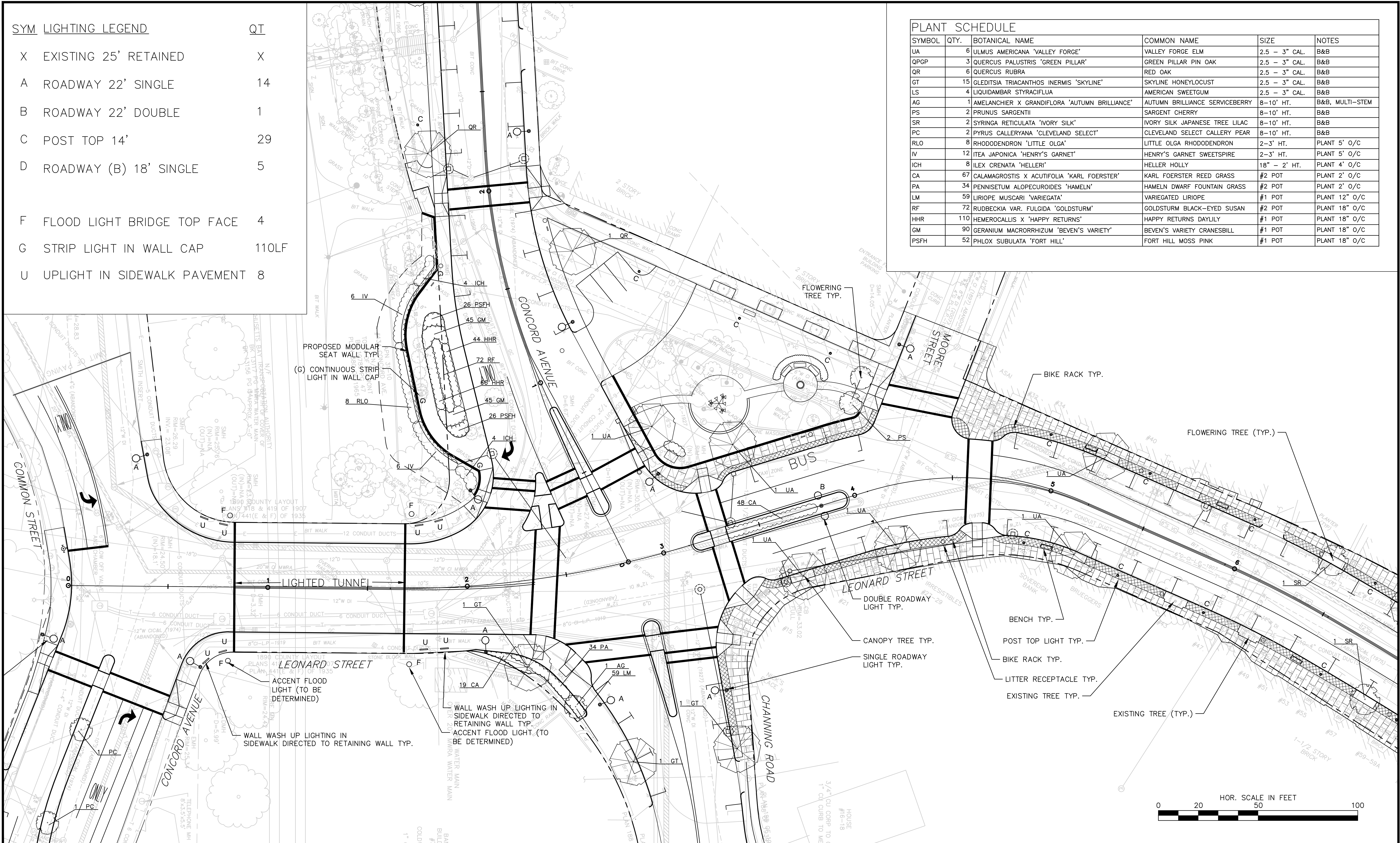
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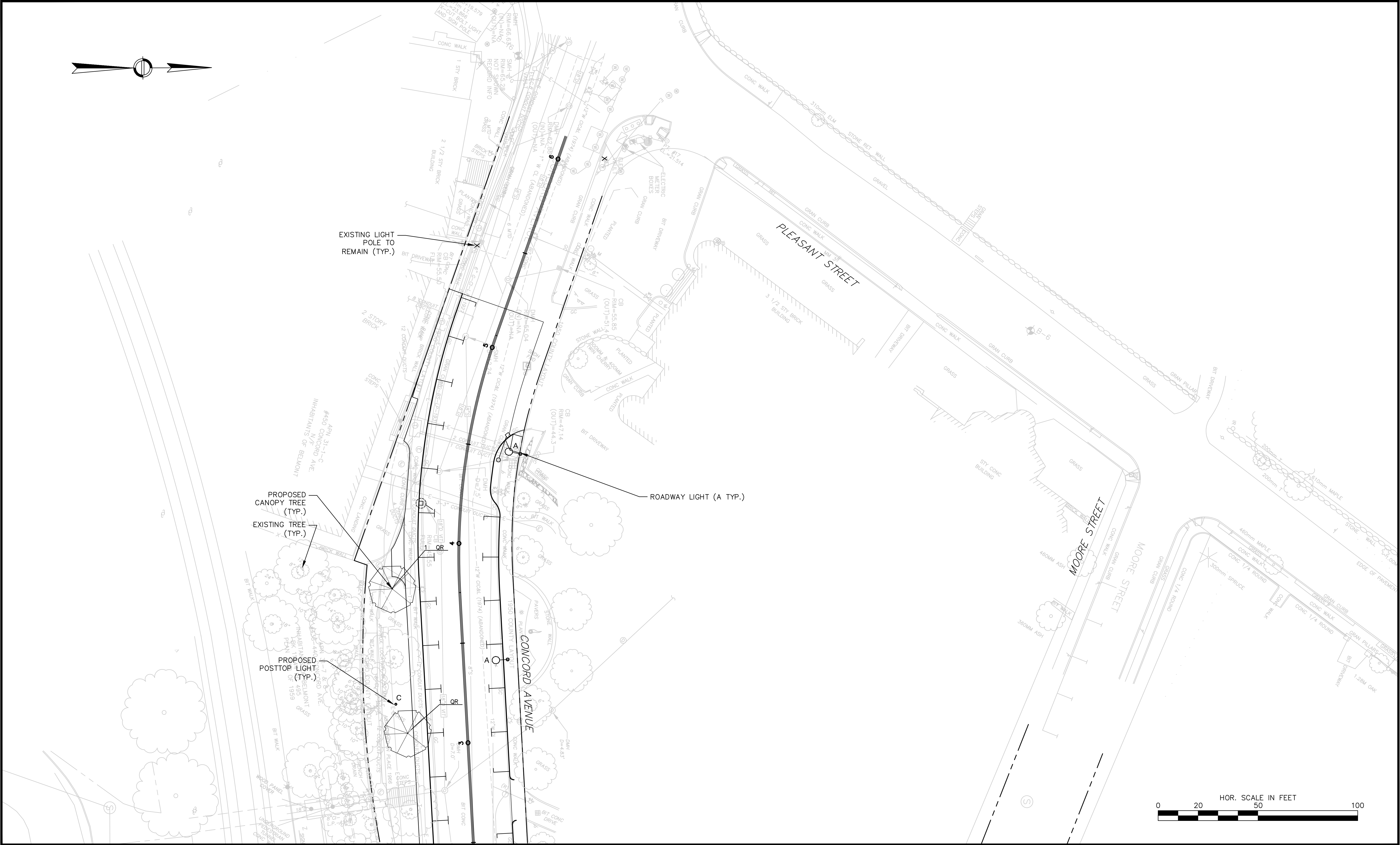
QT

X	EXISTING 25' RETAINED	X
A	ROADWAY 22' SINGLE	14
B	ROADWAY 22' DOUBLE	1
C	POST TOP 14'	29
D	ROADWAY (B) 18' SINGLE	5
F	FLOOD LIGHT BRIDGE TOP FACE	4
G	STRIP LIGHT IN WALL CAP	110LF
U	UPLIGHT IN SIDEWALK PAVEMENT	8

SYMBOL	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
UA	6	ULMUS AMERICANA 'VALLEY FORGE'	VALLEY FORGE ELM	2.5 – 3" CAL.	B&B
QPGP	3	QUERCUS PALUSTRIS 'GREEN PILLAR'	GREEN PILLAR PIN OAK	2.5 – 3" CAL.	B&B
QR	6	QUERCUS RUBRA	RED OAK	2.5 – 3" CAL.	B&B
GT	15	GLEDTISIA TRIACANTHOS INERMIS 'SKYLINE'	SKYLINE HONEYLOCUST	2.5 – 3" CAL.	B&B
LS	4	LYQUIDAMBAR SYRACIFLUA	AMERICAN SWEETGUM	2.5 – 3" CAL.	B&B
AG	1	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	8–10' HT.	B&B, MULTI–STEM
PS	2	PRUNUS SARGENTII	SARGENT CHERRY	8–10' HT.	B&B
SR	2	SYRINGA RETICULATA 'IVORY SILK'	IVORY SILK JAPANESE TREE LILAC	8–10' HT.	B&B
PC	2	PYRUS CALLERYANA 'CLEVELAND SELECT'	CLEVELAND SELECT CALLERY PEAR	8–10' HT.	B&B
RLO	8	RHODODENDRON 'LITTLE OLGA'	LITTLE OLGA RHODODENDRON	2–3' HT.	PLANT 5' O/C
IV	12	ILEX JAPONICA 'HENRY'S GARNET'	HENRY'S GARNET SWEETSPICE	2–3' HT.	PLANT 5' O/C
ICH	8	ITEA CRENATA 'HELLER'	HELLER HOLLY	18" – 2' HT.	PLANT 4' O/C
CA	67	CALAMAGROSTIS X ACUTIFOLIA 'KARL FOERSTER'	KARL FOERSTER REED GRASS	#2 POT	PLANT 2' O/C
PA	34	PENNISETUM ALOPECUROIDES 'HAAMELN'	HAMELN DWARF FOUNTAIN GRASS	#2 POT	PLANT 2' O/C
LM	59	LIRIOPE MUSCARI 'VARIEGATA'	VARIEGATED LIRIOPE	#1 POT	PLANT 12" O/C
RF	72	RUDEBECKIA VAR. FULGIDA 'GOLDSTURM'	GOLDSTURM BLACK–EYED SUSAN	#2 POT	PLANT 18" O/C
HHR	110	HEMEROCALLIS X 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1 POT	PLANT 18" O/C
GM	90	GERANIUM MACRORRHIZUM 'BEVEN'S VARIETY'	BEVEN'S VARIETY CRANESBILL	#1 POT	PLANT 18" O/C
PSFH	52	PHLOX SUBULATA 'FORT HILL'	FORT HILL MOSS PINK	#1 POT	PLANT 18" O/C



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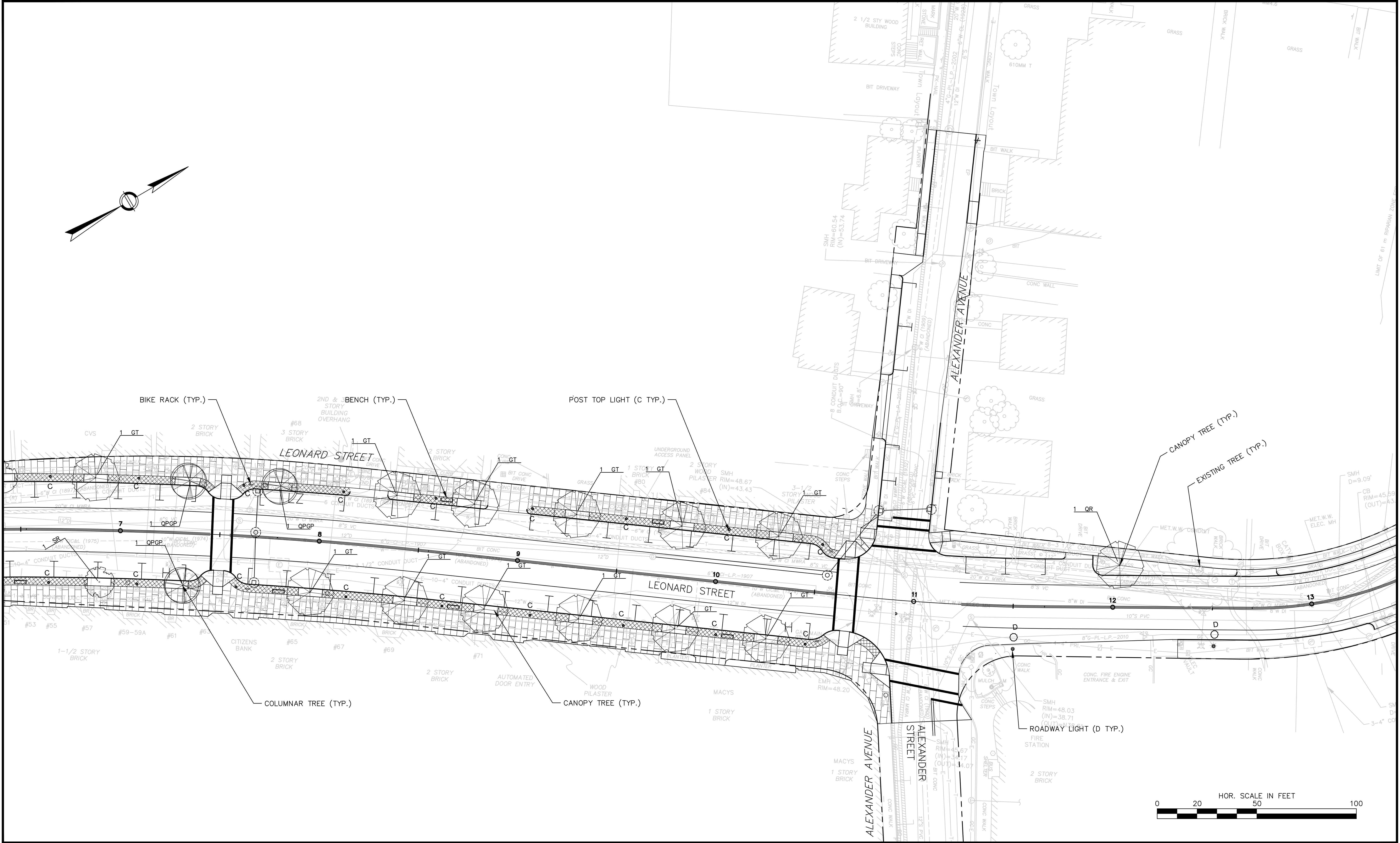
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BELMONT CENTER IMPROVEMENTS BELMONT, MASSACHUSETTS LIGHTING AND LANDSCAPE PLAN	SEPTEMBER 9, 2013
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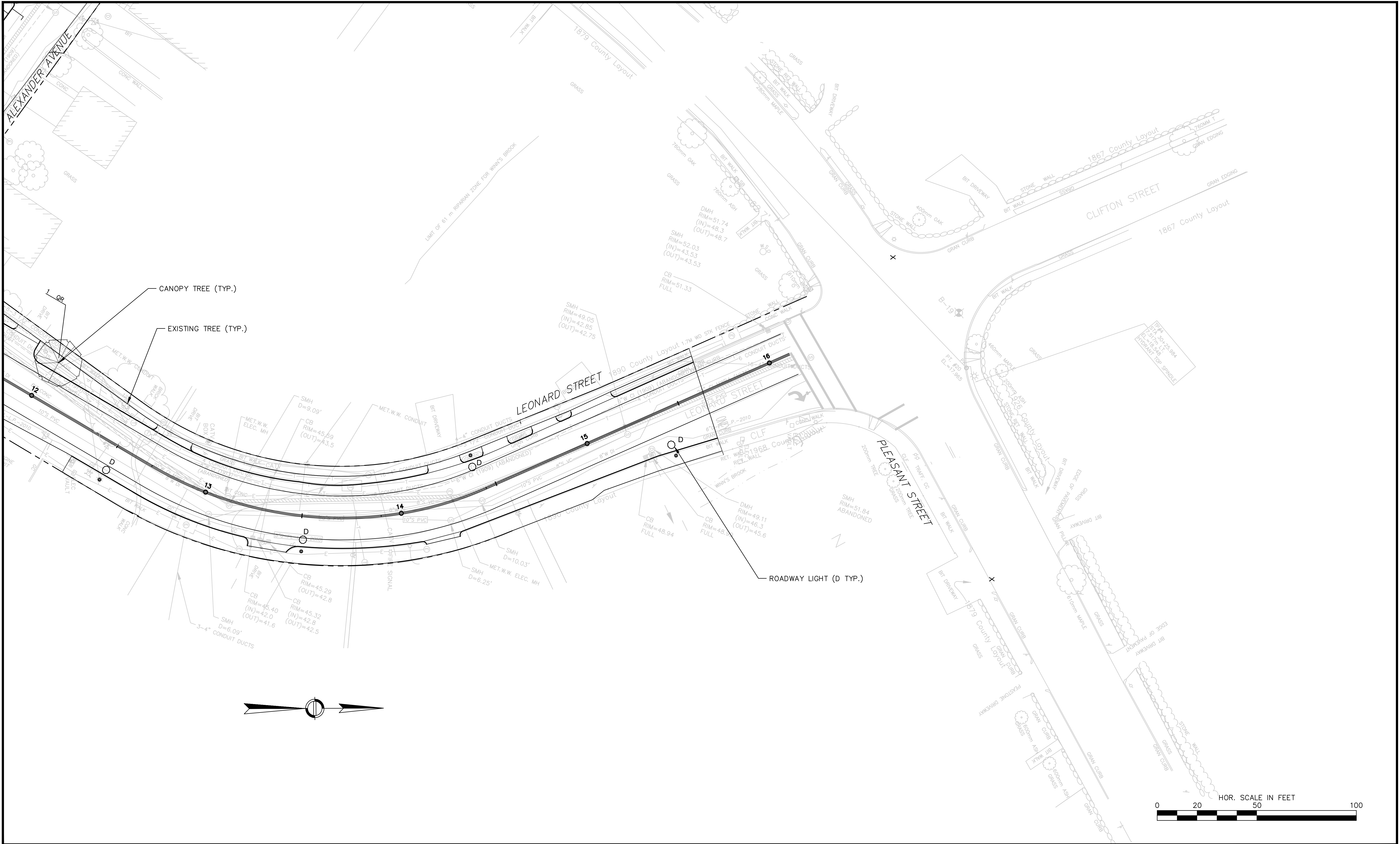
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BELMONT, MASSACHUSETTS
LIGHTING AND LANDSCAPE PLAN**

DATE:
SEPTEMBER 9, 2013
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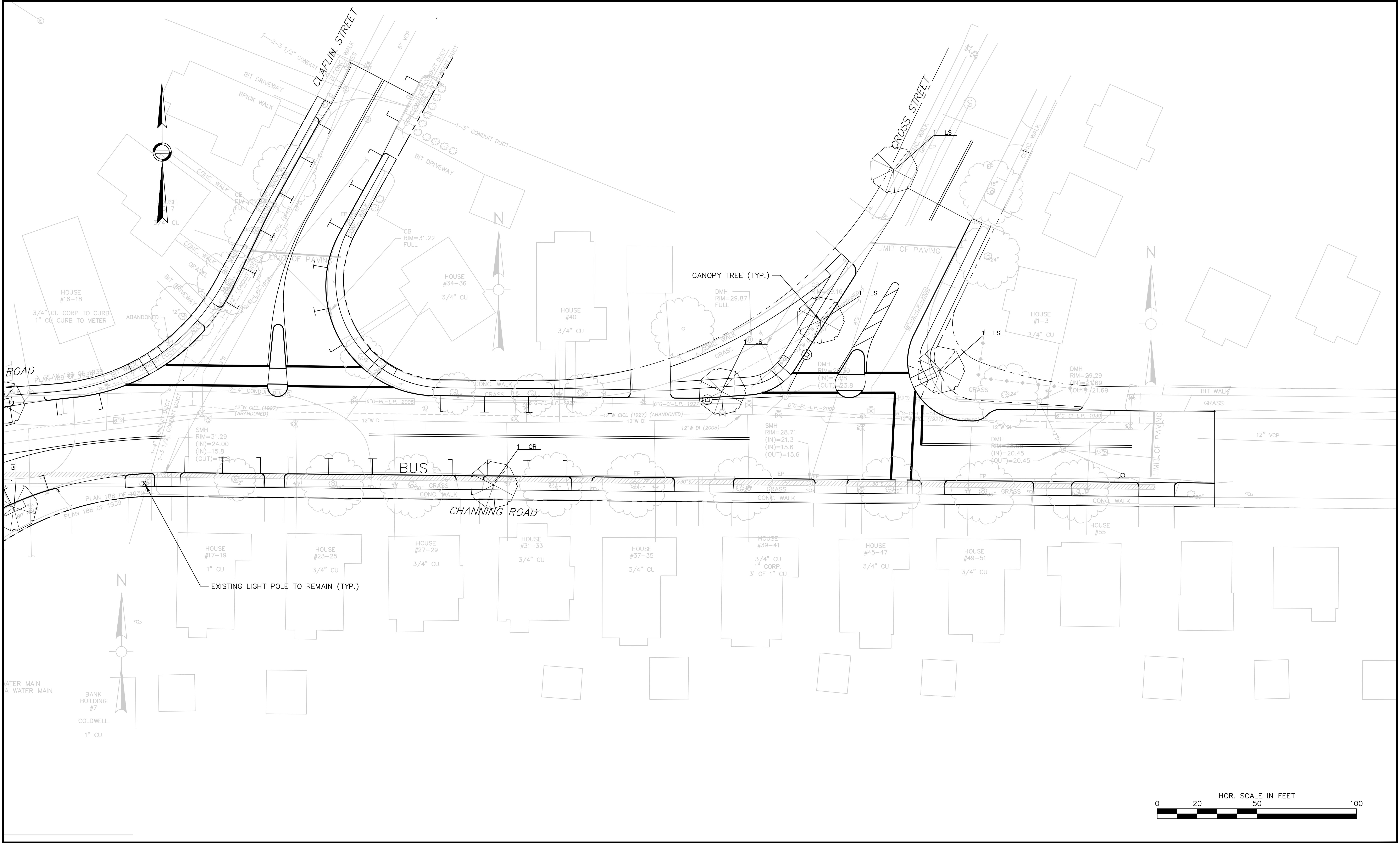
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LIGHTING AND LANDSCAPE PLAN**



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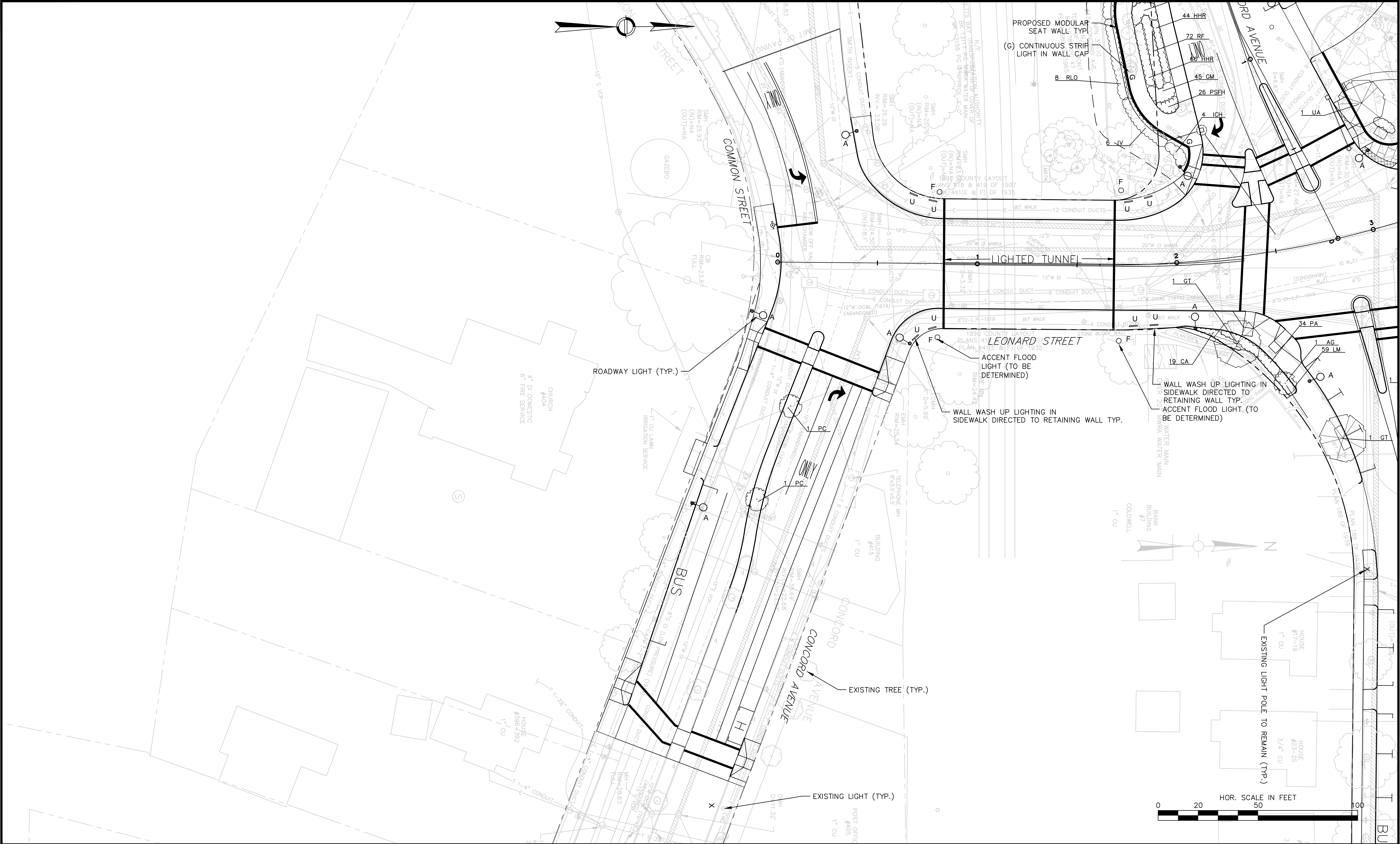
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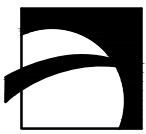
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SHEET TITLE: BELMONT CENTER IMPROVEMENTS BELMONT, MASSACHUSETTS LIGHTING AND LANDSCAPE PLAN
DATE: SEPTEMBER 9, 2013
21 OF 25



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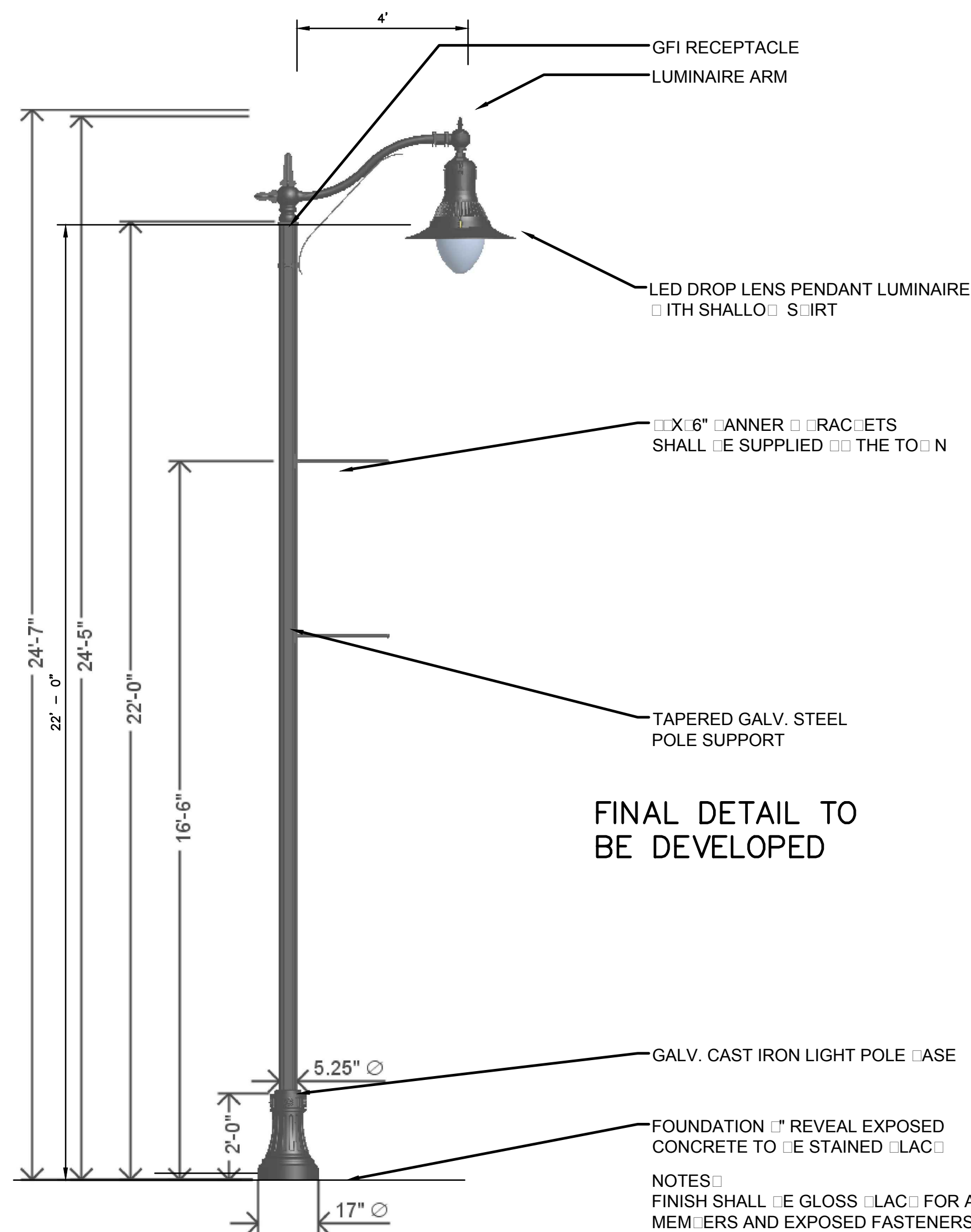


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SHEET TITLE:
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BELMONT, MASSACHUSETTS
LIGHTING AND LANDSCAPE PLAN**

DATE:
SEPTEMBER 9, 2013
22 OF 25



LIGHTPOLE AND LUMINAIRE TYPE (A) SINGLE

NOTES:

SCALE: NONE

CEMENT CONCRETE LIGHT POLE FOOTING PROVIDED FOR EMBEDDING ONLY. CONTRACTOR MUST SUBMIT SHOP DRAWING STAMPED BY STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL TO OWNER REPRESENTATIVE.

ANCHOR BOLTS AND PATTERN AS REQUIRED BY THE LIGHT POLE MANUFACTURER. (TEMPLATE TO BE SUPPLIED BY POLE MANUFACTURER)

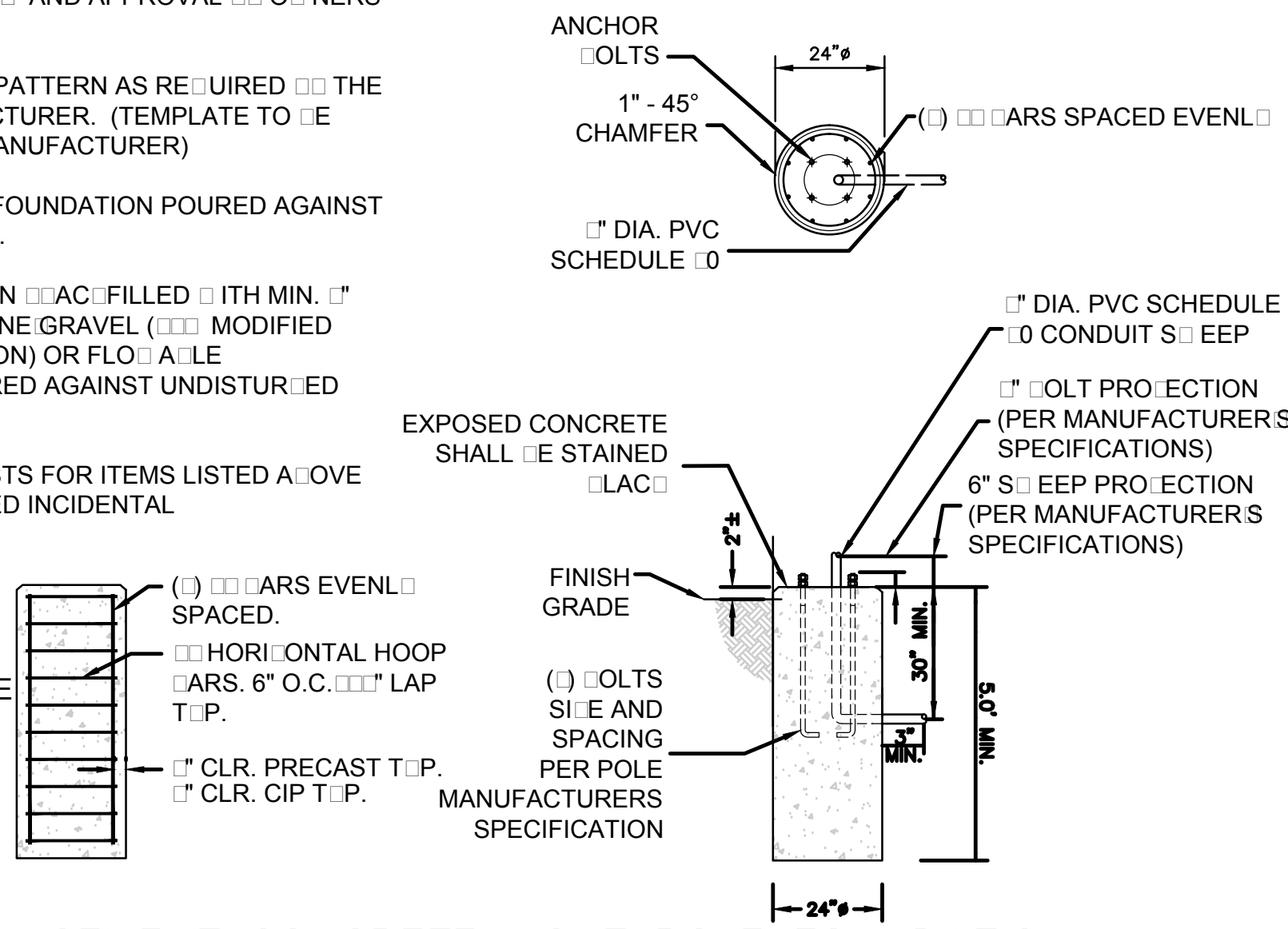
CAST-IN PLACE (CIP) FOUNDATION POURED AGAINST UNDISTURBED EARTH.

PRECAST FOUNDATION SHALL BE FILLED WITH MIN. 1" LAYER CRUSHED STONE GRAVEL (100% MODIFIED PROCTOR COMPACTION) OR FLOWABLE FILL CONCRETE POURED AGAINST UNDISTURBED EARTH.

ALL ASSOCIATED COSTS FOR ITEMS LISTED ABOVE SHALL BE CONSIDERED INCIDENTAL

CLASS "A" CONC. FOR CAST IN PLACE

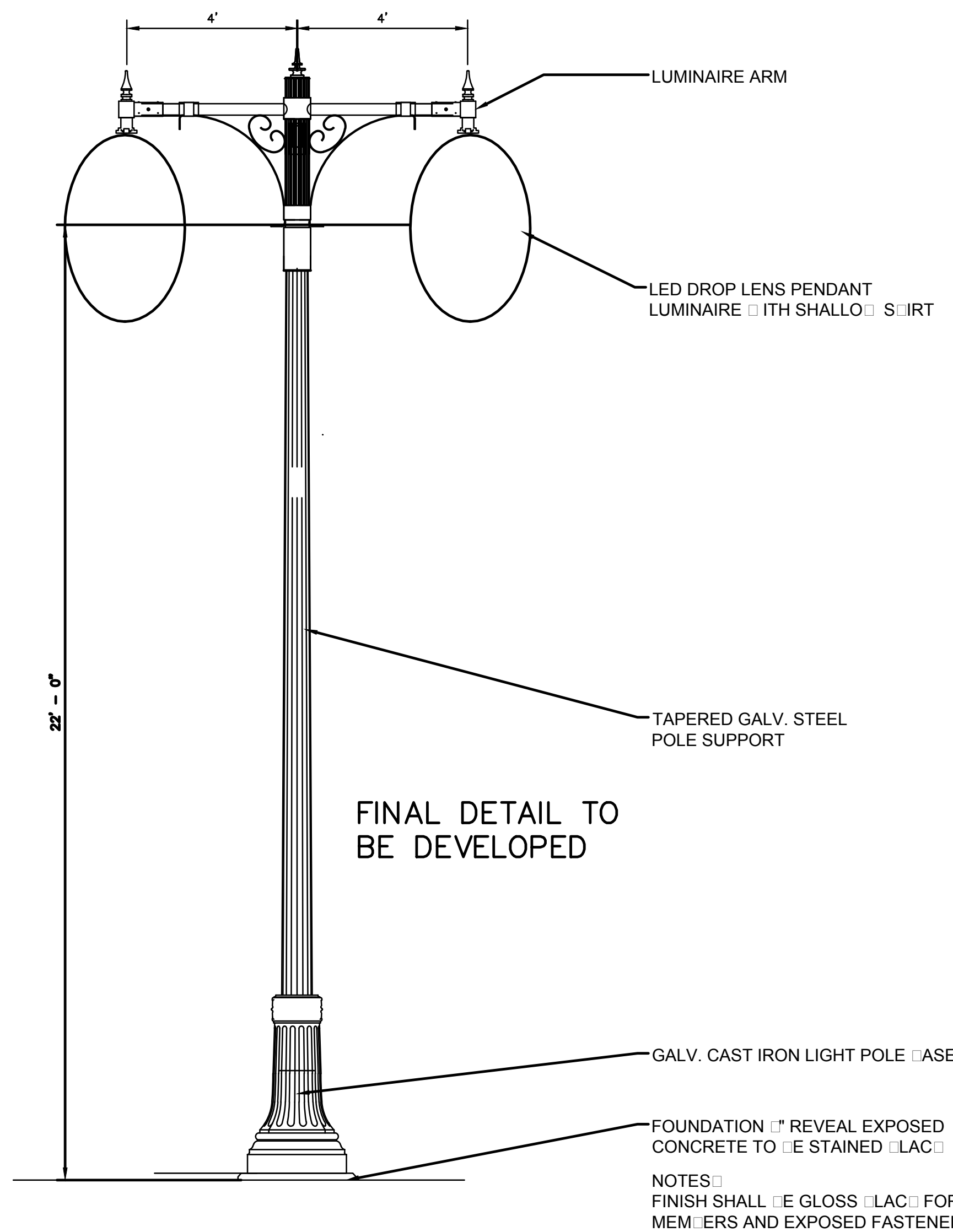
CLASS "D" CONC. FOR PRECAST



CEMENT CONCRETE LIGHT POLE FOUNDATION

SCALE: NONE

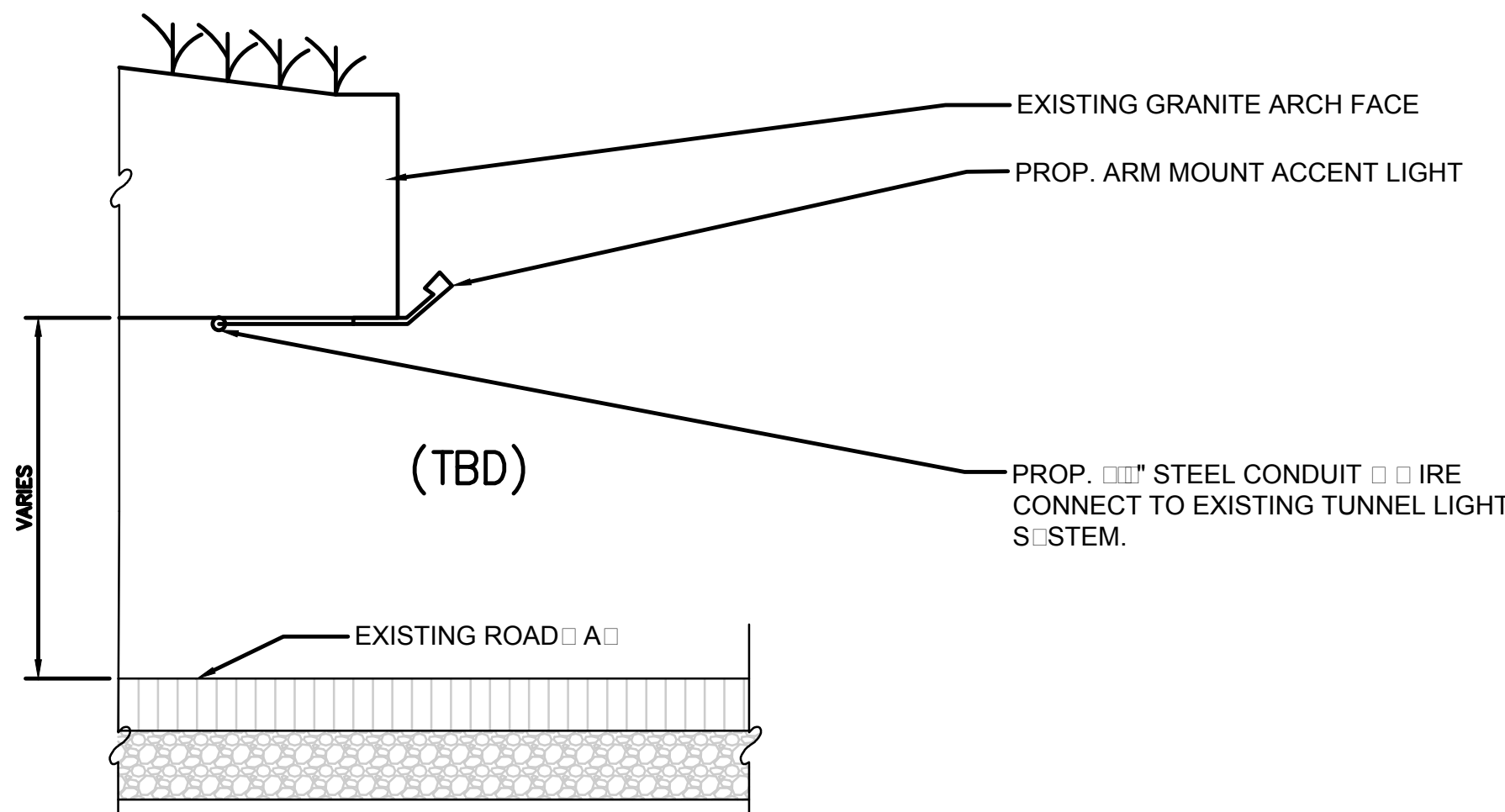
CLASS "A" CONC. - MASSDOT MIX DESIGN 1000 PSI/4 IN. 60 CEMENT CONCRETE
CLASS "D" CONC. - MASSDOT MIX DESIGN 1000 PSI/4 IN. 60 CEMENT CONCRETE
REINFORCEMENT - GRADE 60



LIGHTPOLE AND LUMINAIRE TYPE (B) DOUBLE

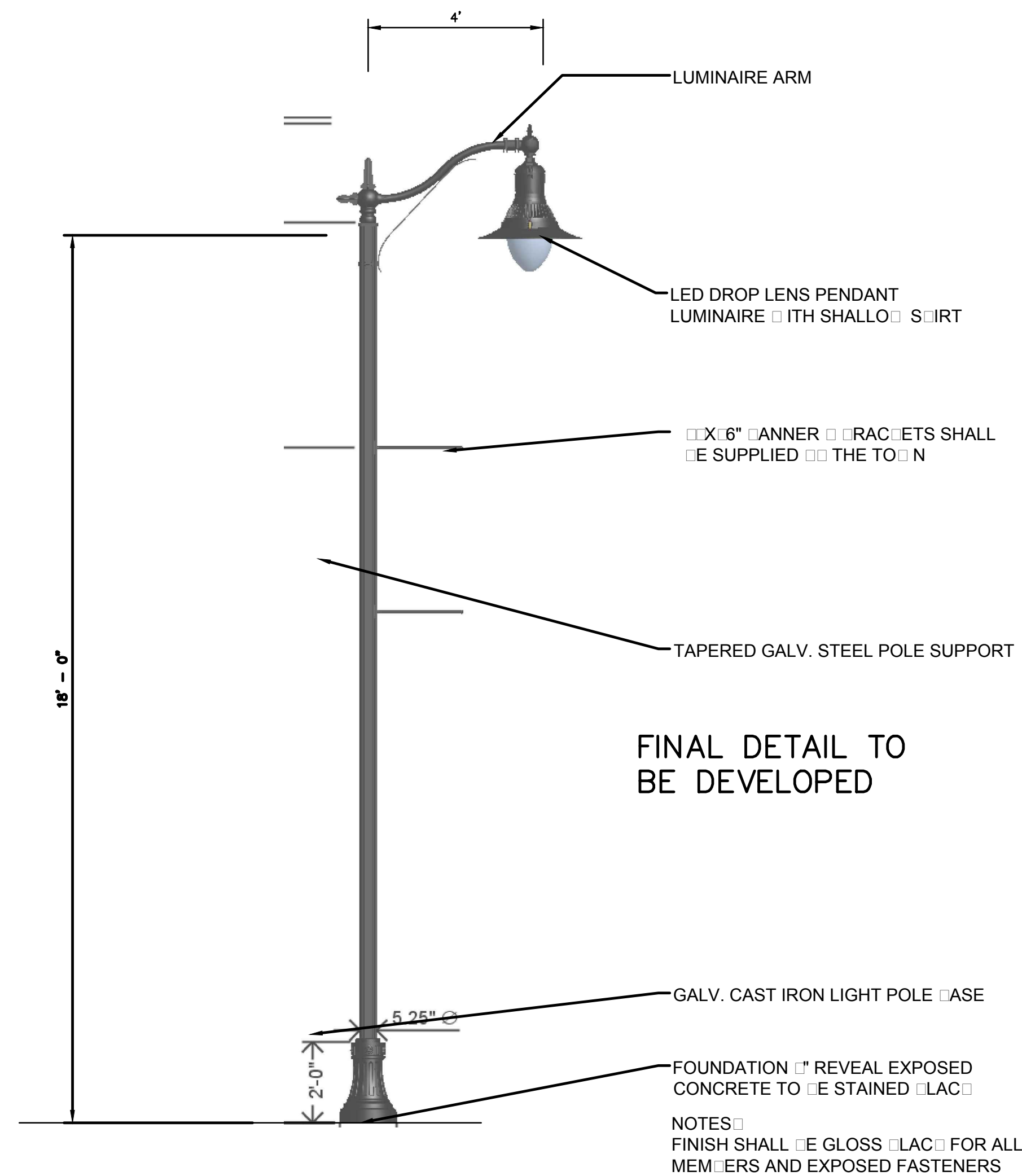
SCALE: NONE

NOTES:
FIXTURE SHALL BE POSITIONED SO POSITION AND BEAM ANGLE CAN BE ADJUSTED PRIOR TO PLACEMENT AND AGAIN PRIOR TO FINAL INSTALLATION



BRIDGE FACADE ACCENT LIGHTING TYPE (F) (TBD)

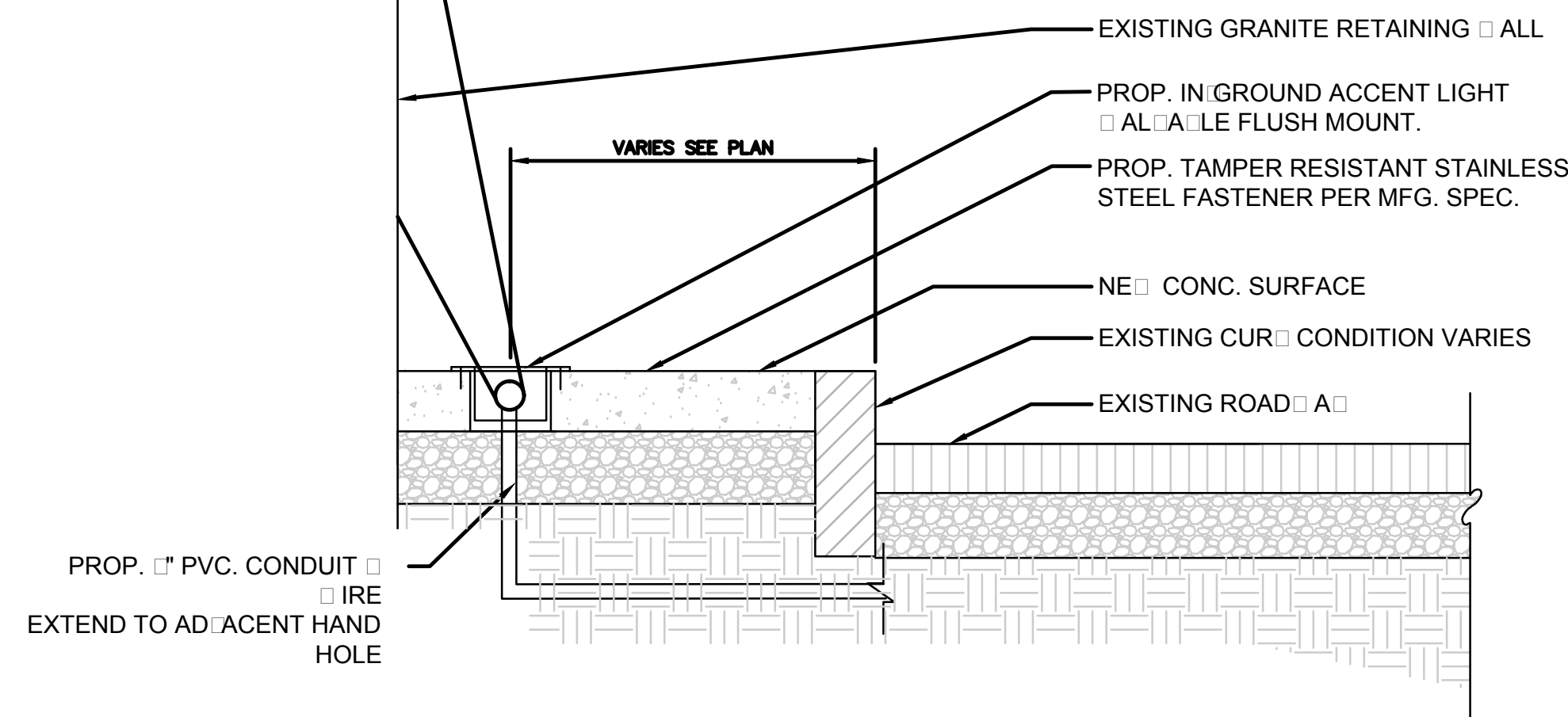
SCALE: NONE



LIGHTPOLE AND LUMINAIRE TYPE (D) RESIDENTIAL

SCALE: NONE

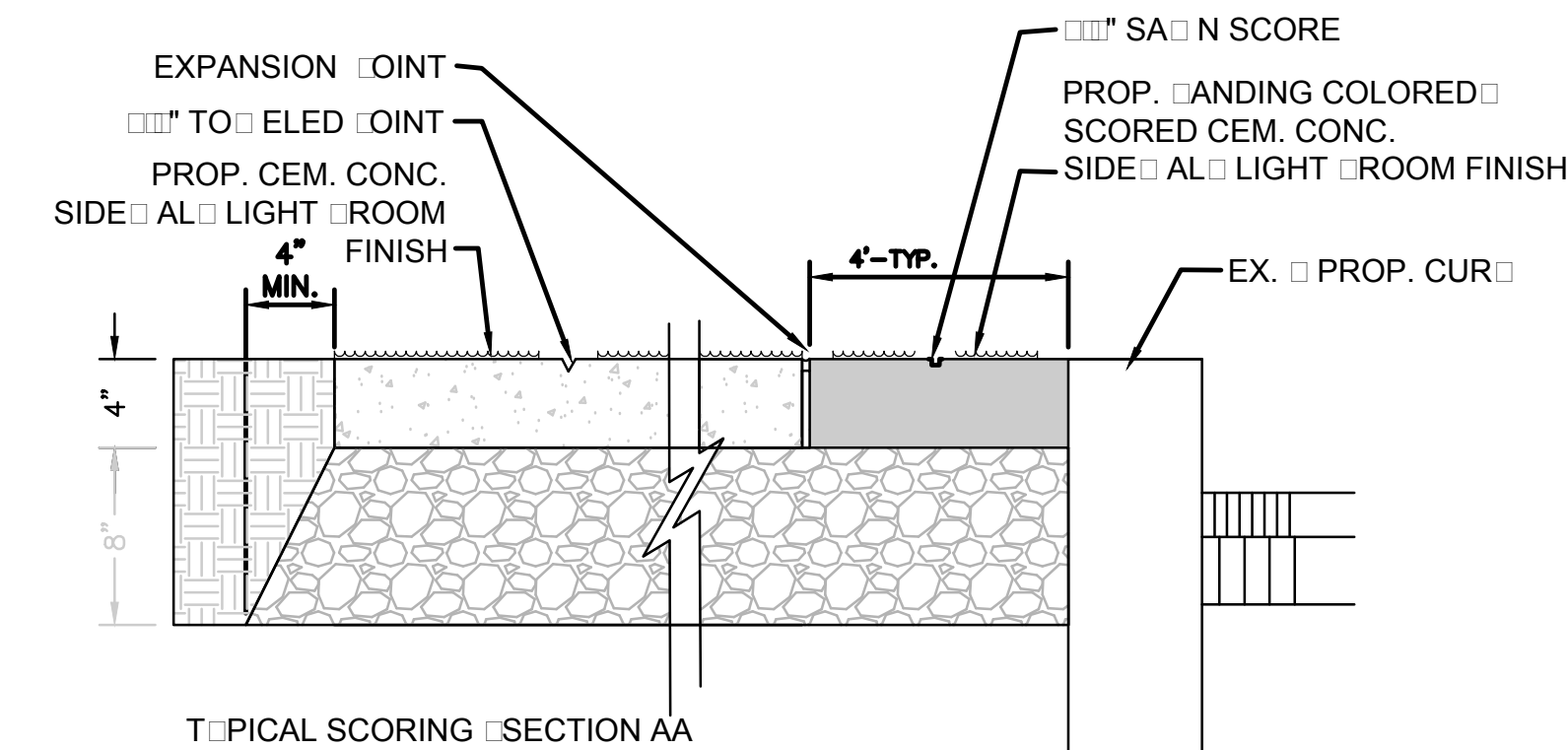
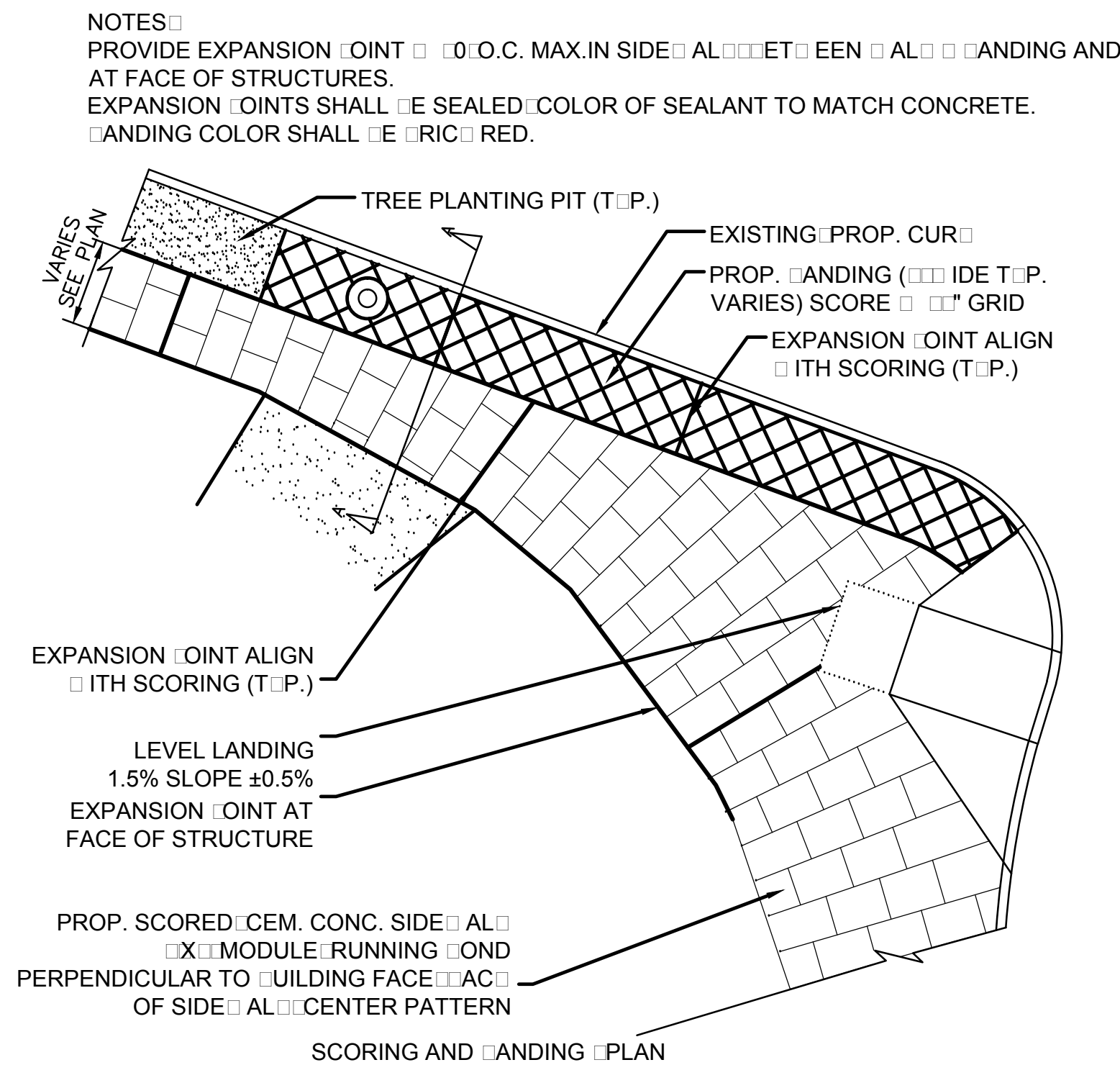
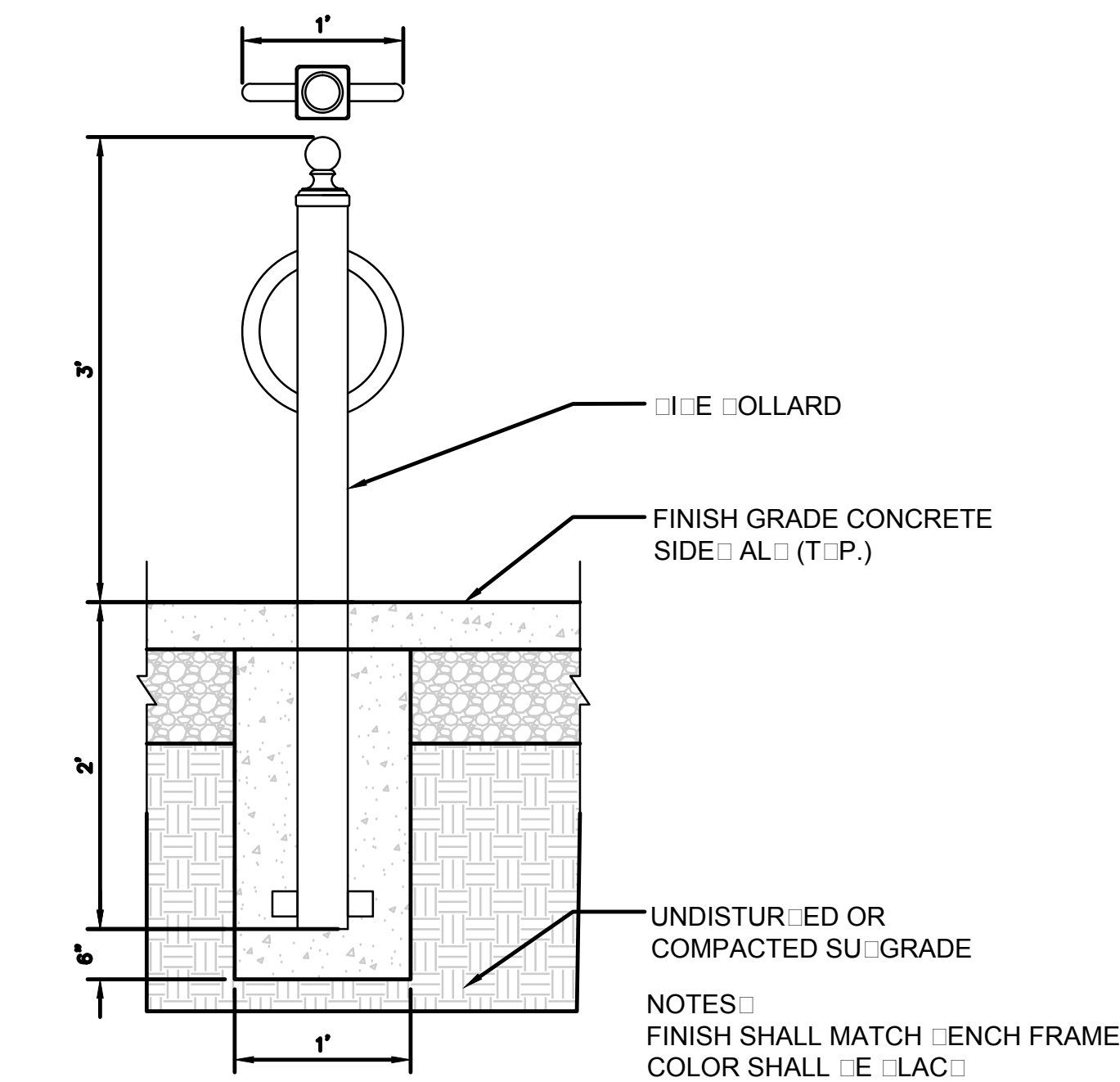
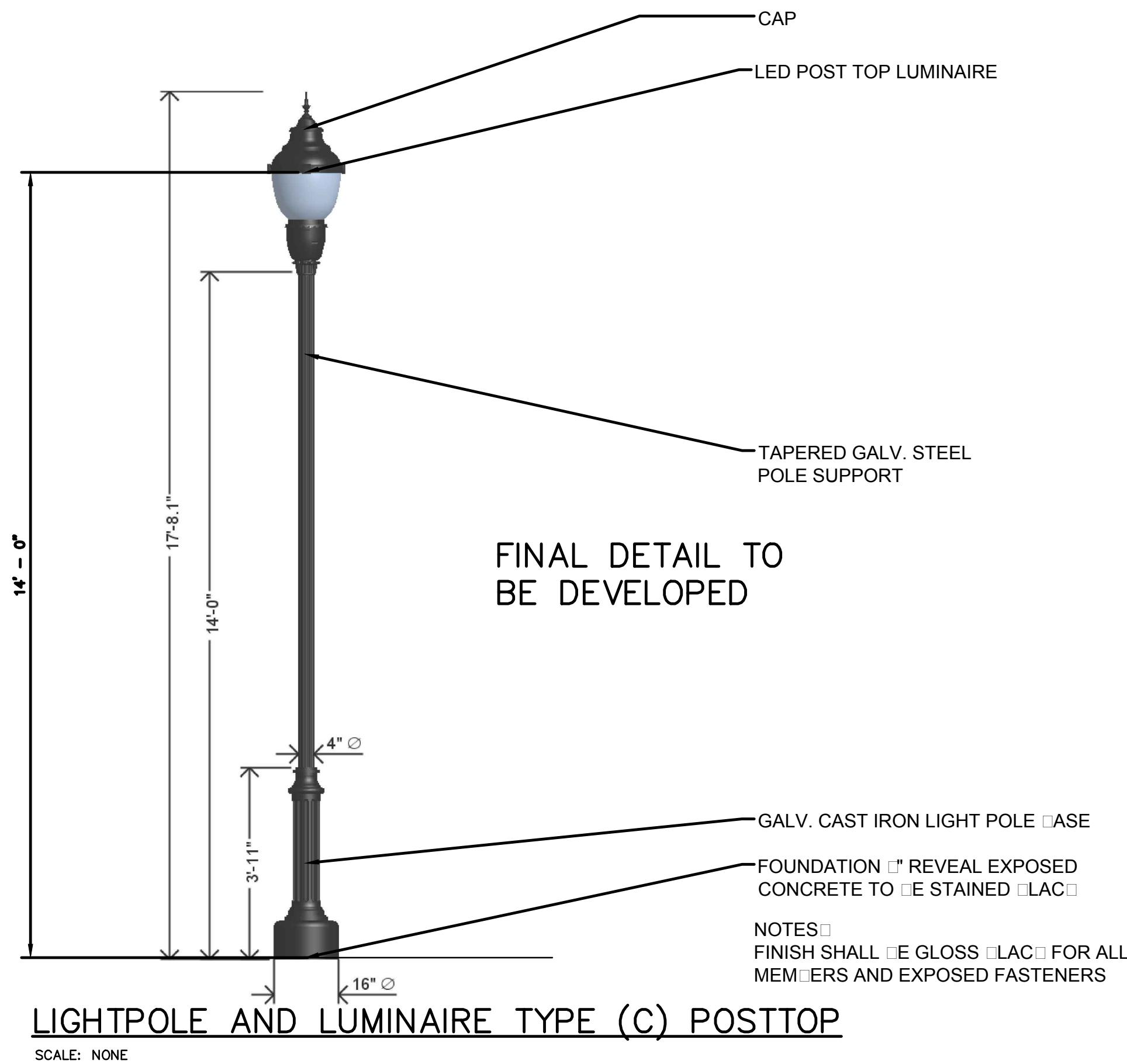
NOTES:
FIXTURE SHALL BE POSITIONED SO POSITION AND BEAM ANGLE CAN BE ADJUSTED PRIOR TO CONCRETE PLACEMENT AND AGAIN PRIOR TO FINAL COVER INSTALLATION



IN GROUND UP-LIGHT TYPE (U)

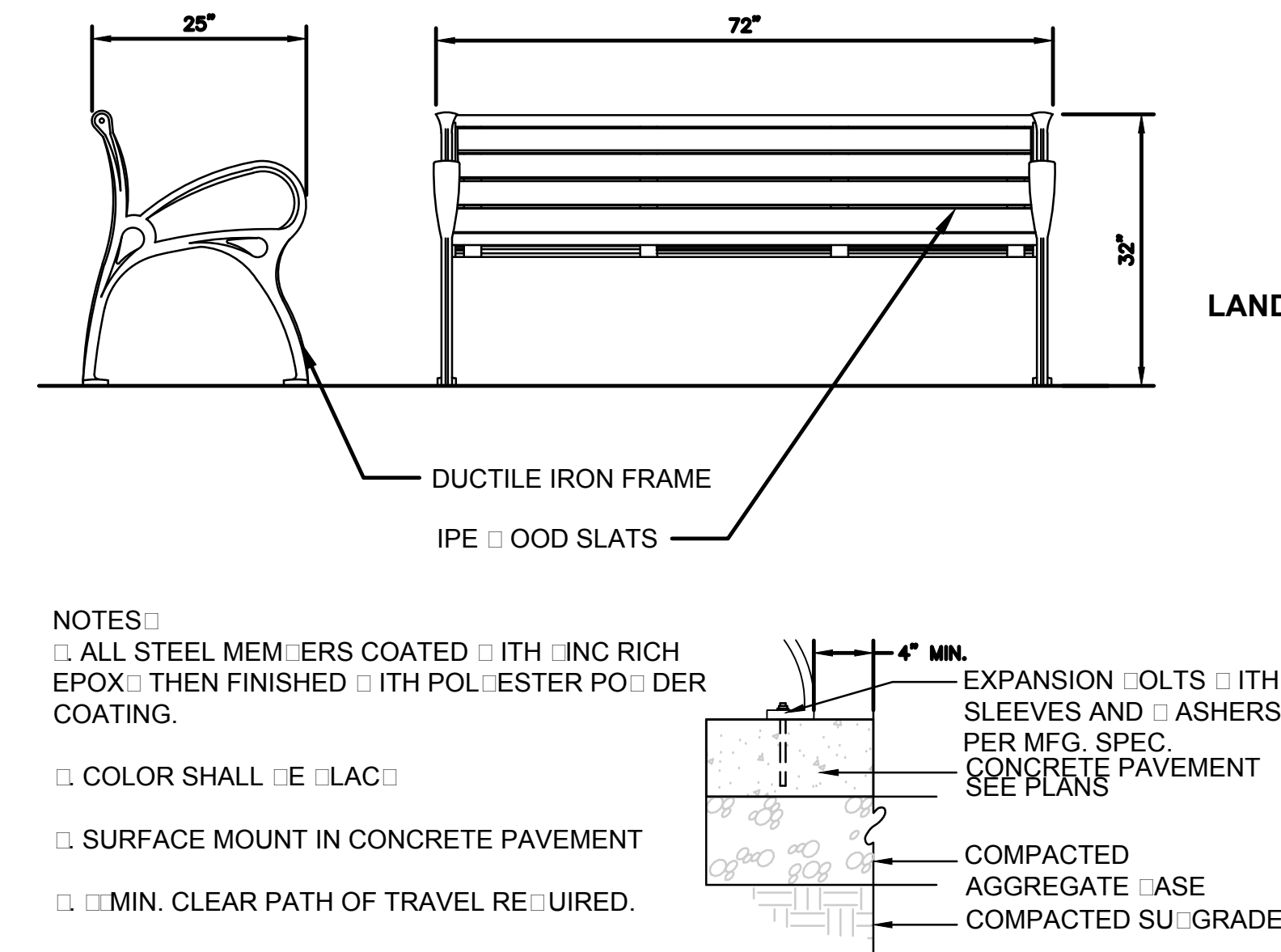
SCALE: NONE

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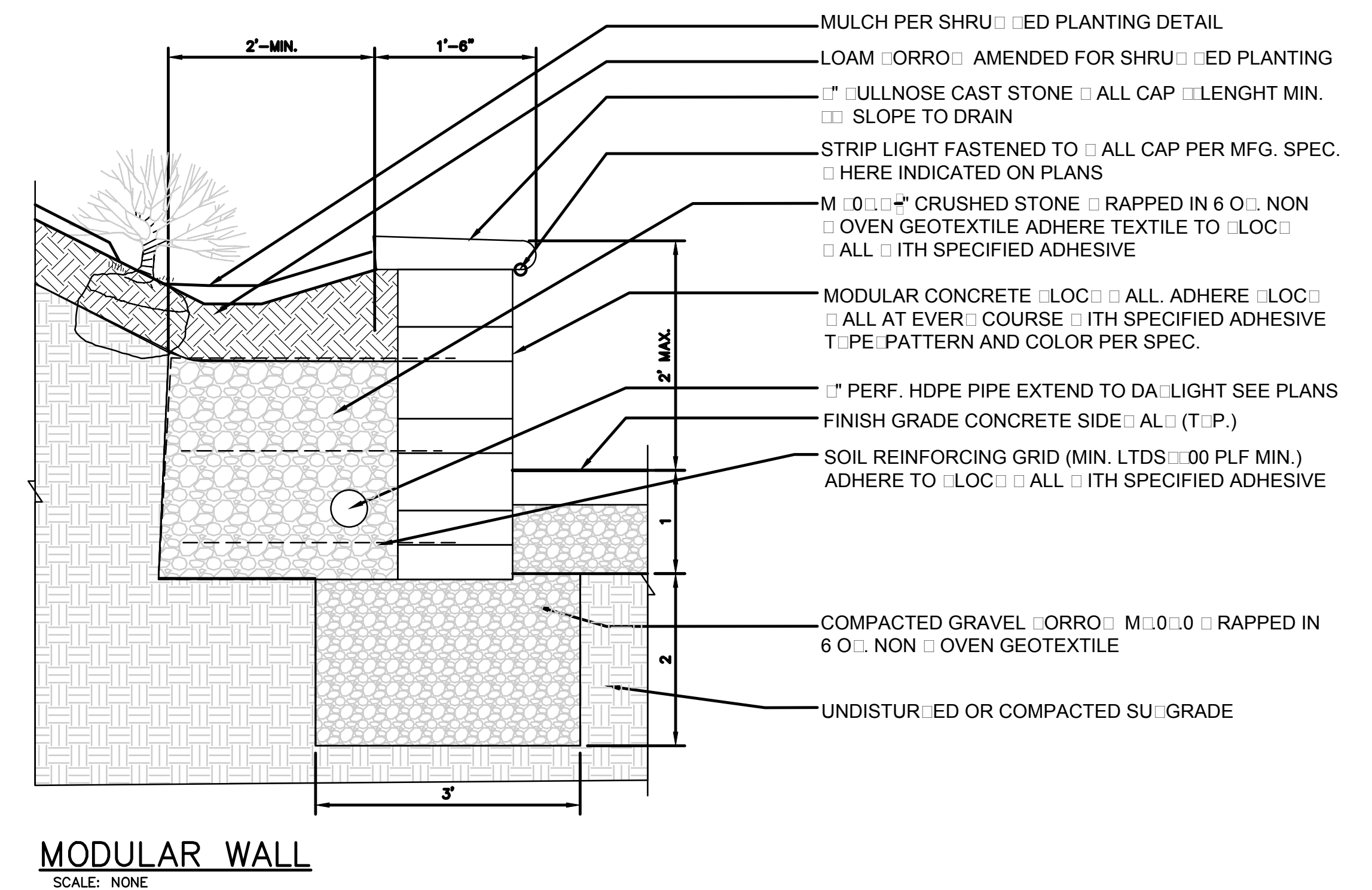
CEM. CONC. SIDEWALK SCORING AND BANDING

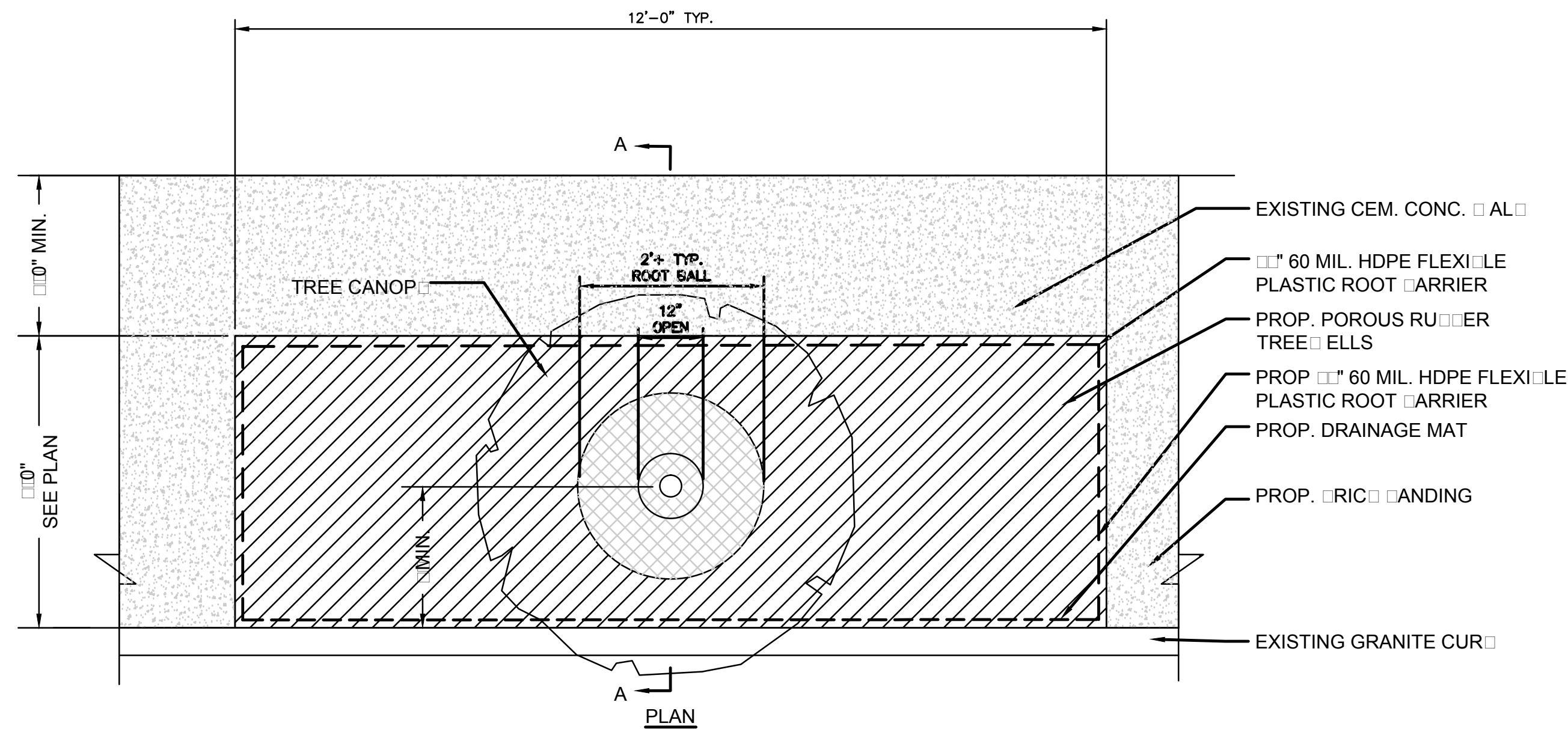
N.T.S.



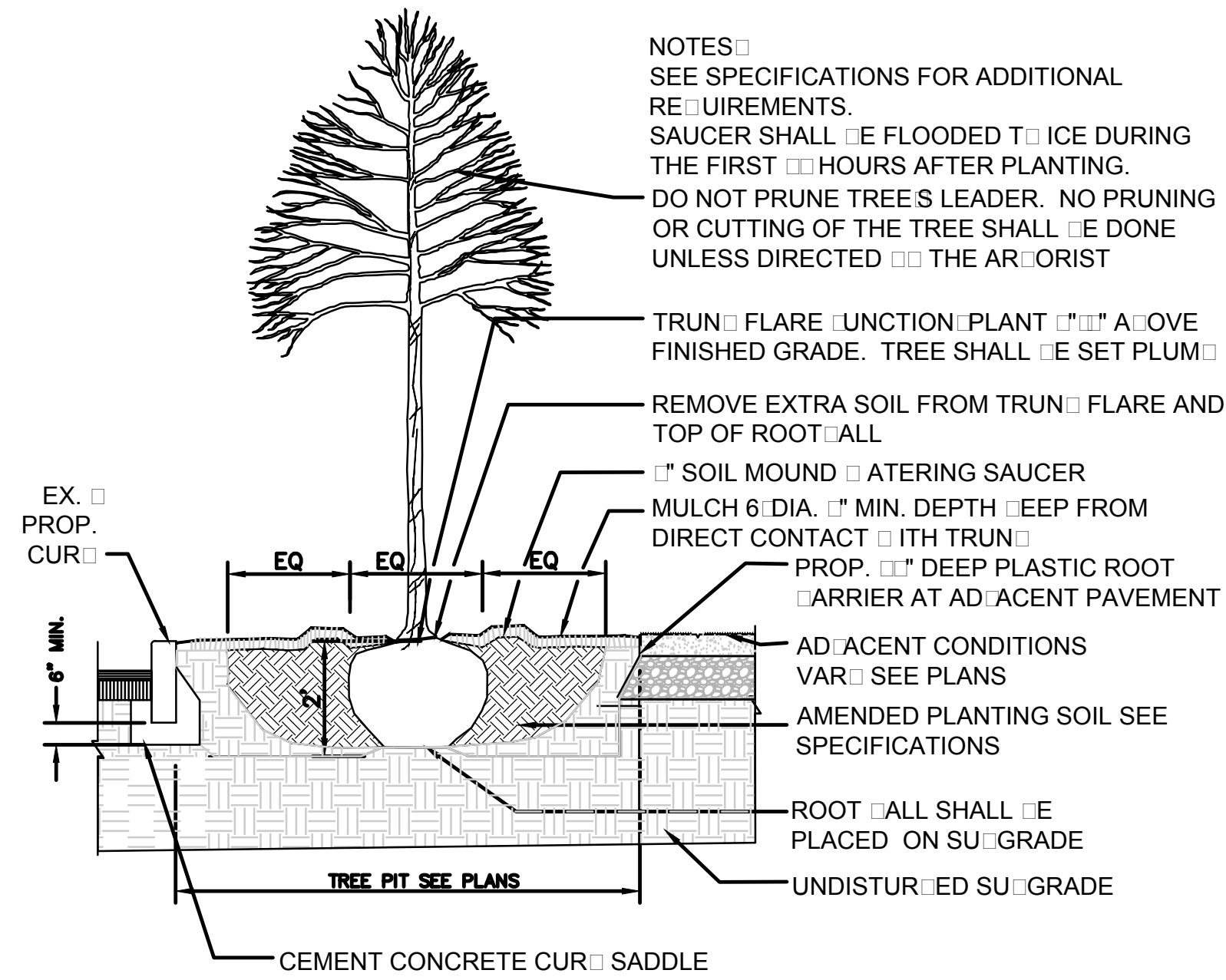
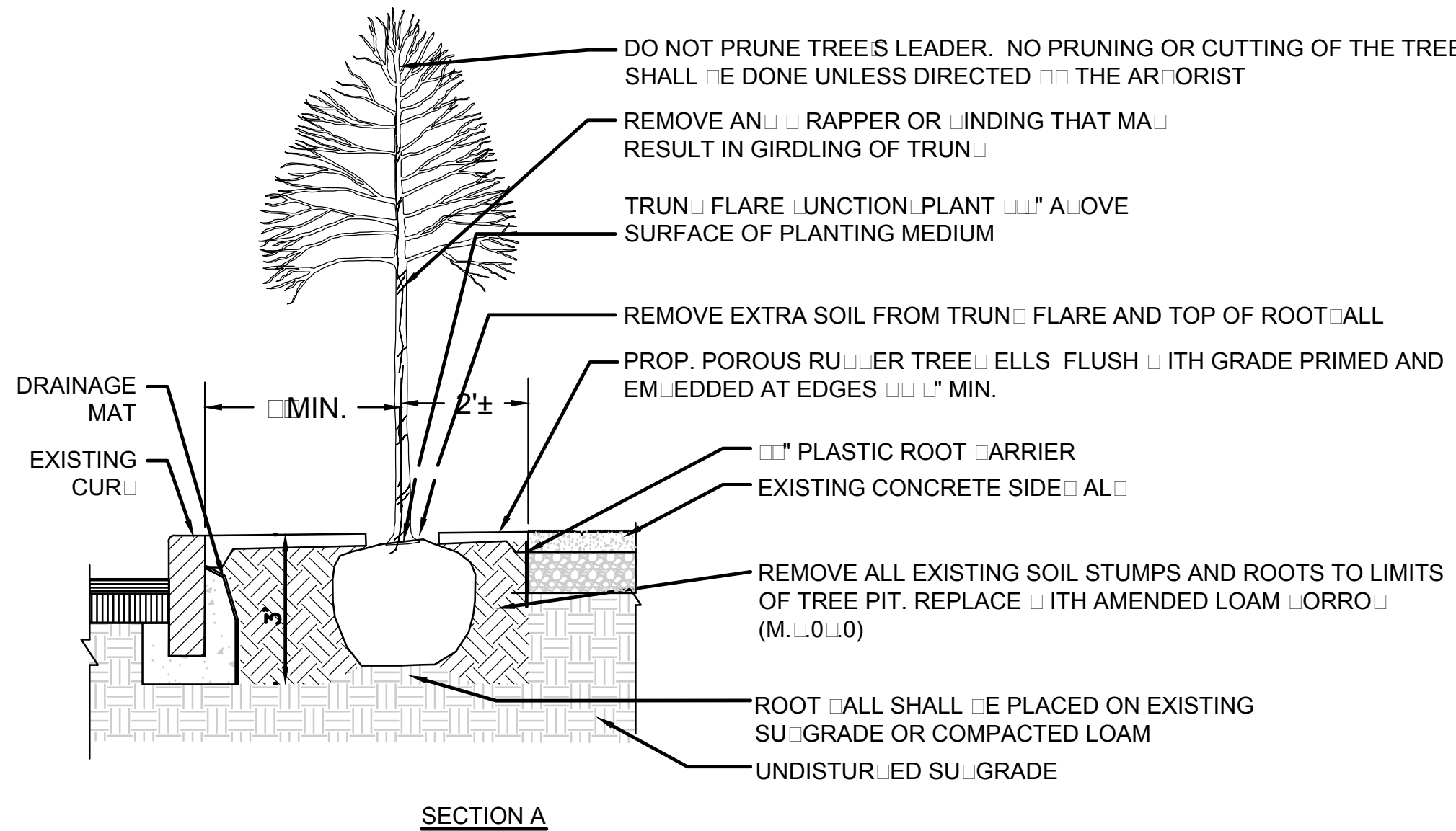
BENCH

N.T.S.

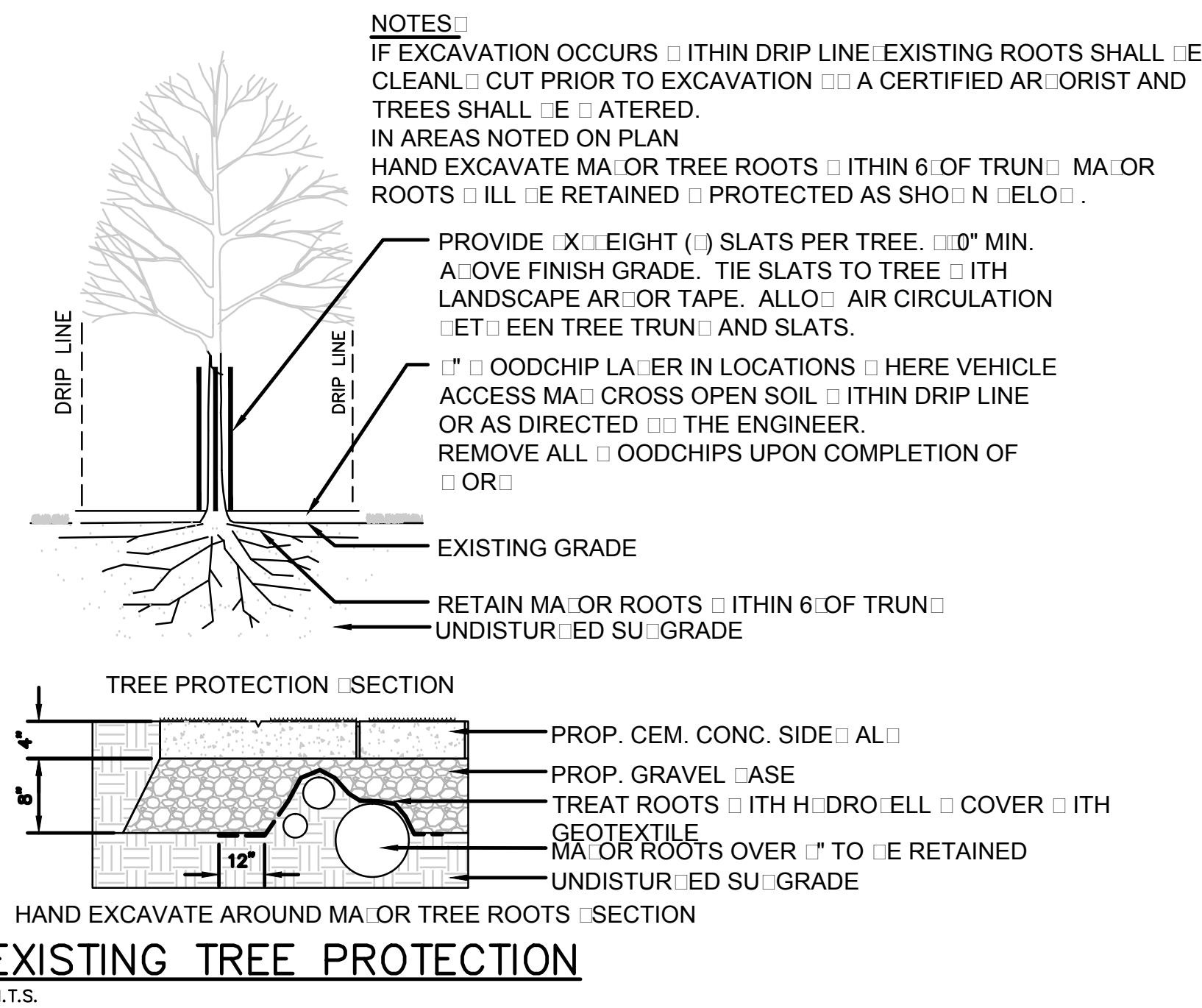




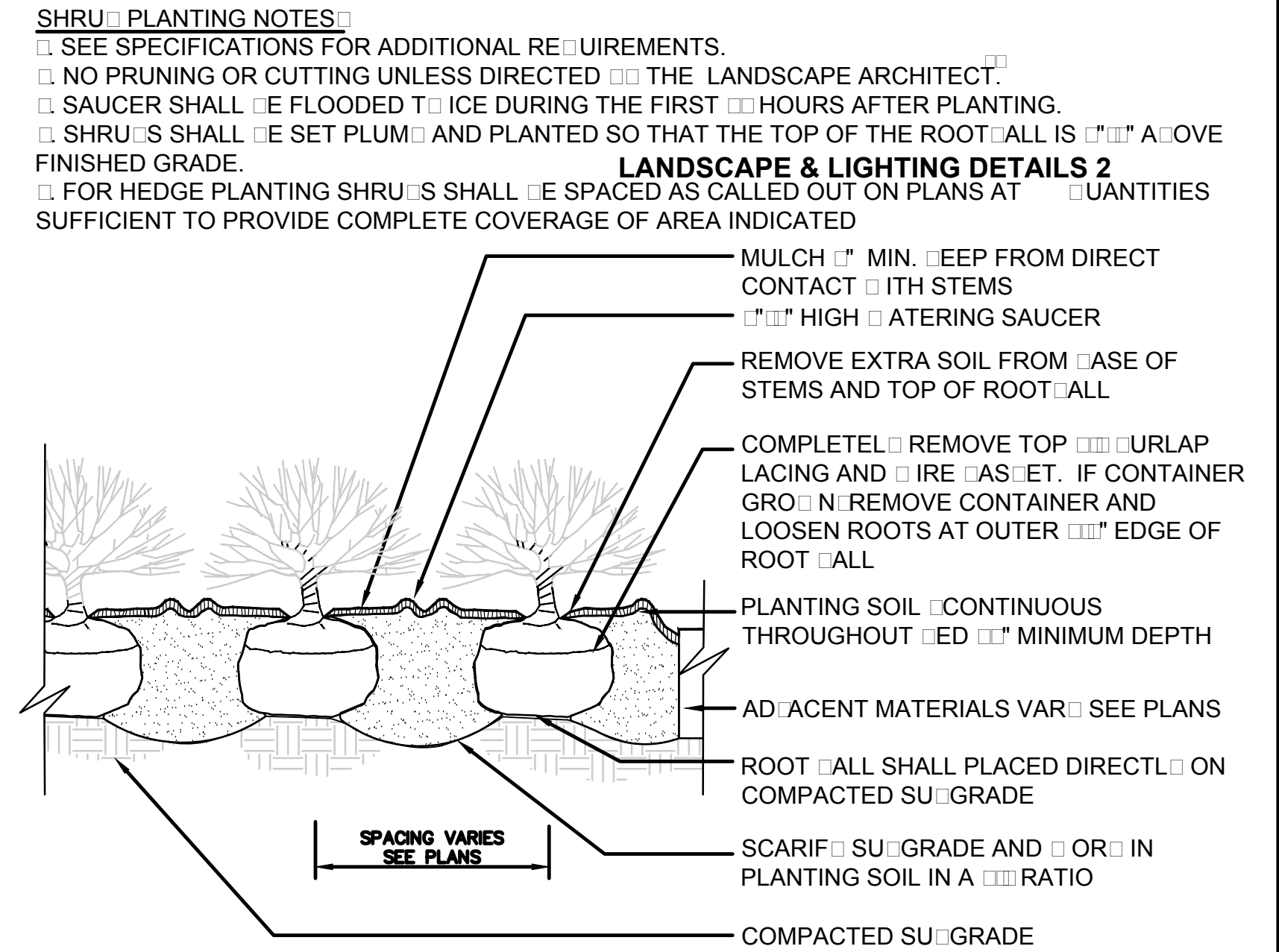
STREET TREE PLANTING
SCALE: NONE



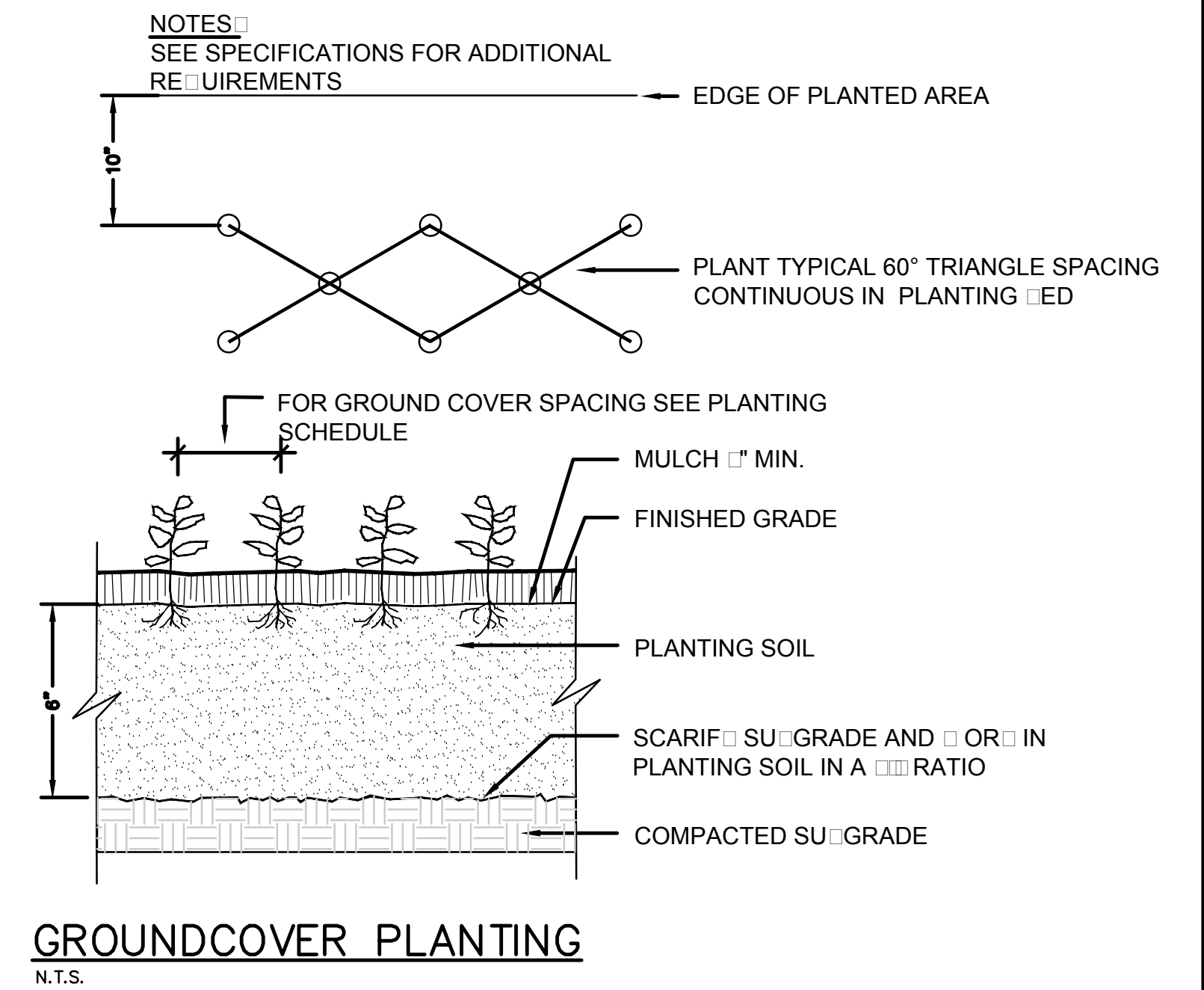
TREE PLANTING TYPICAL
N.T.S.



EXISTING TREE PROTECTION
N.T.S.



SHRUB PLANTING BED (HEDGE)
N.T.S.



GROUNDCOVER PLANTING
N.T.S.