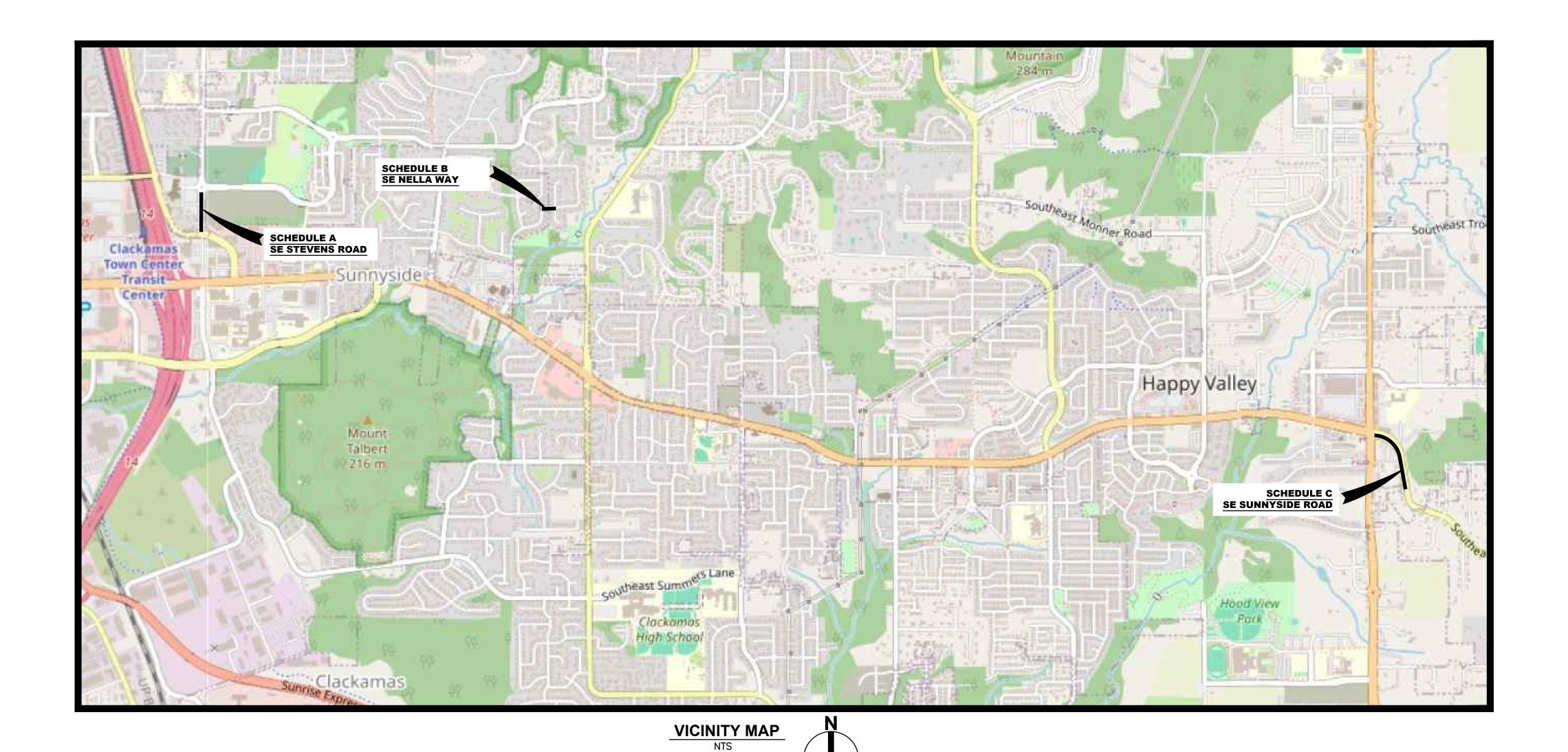
# CITY OF HAPPY VALLEY

# 2025 STREET IMPROVEMENTS

CIP-02-25 CLACKAMAS COUNTY, OREGON **JUNE 2025** 



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# **LEGEND**

PROPOSED GRIND & INLAY

EXISTING CONCRETE SIDEWALK

EXISTING CONCRETE CURB

PROPOSED OVERLAY AREA

☐ EXISTING CATCH BASIN

EXISTING MANHOLE (STORM/SANITARY)

EXISTING WATER VALVE

EXISTING FIRE HYDRANT

EXISTING MONUMENT

PROPOSED TACTILE WARNING

PROPOSED STOP BAR

PROPOSED CONCRETE CURB

PROPOSED CONCRETE SIDEWALK

**NOTE** 

CONTRACTORS ARE TO BUILD ALL CURB RAMPS TO MEET CURRENT ADA REGULATIONS AND CURRENT CITY OF HAPPY VALLEY STANDARD DETAILS. ANY RAMPS OR TRANSITION PANELS WITH SLOPES THAT EXCEED 8.3% WILL NEED DESIGN EXCEPTIONS GRANTED BY THE CITY. CONTRACTORS TO NOTIFY ENGINEER WHEN FORMS ARE SET AND READY FOR VIEW AND APPROVAL BEFORE CONCRETE IS PLACED.



**BID SET** 

ORIGINAL COPY OF DIGITALLY SIGNED DOCUMENT AVAILABLE UPON REQUEST PACE PROJECT NO. 250032 DWG NAME: P250032-CVR.DWG

**DIGITALLY SIGNED** 

DESIGNED CA/MA DATE BY APP'I **REVISION** 



PACE Engineers

4500 Kruse Way, Suite 250 Lake Oswego, OR 97035 p. 503.597.3222

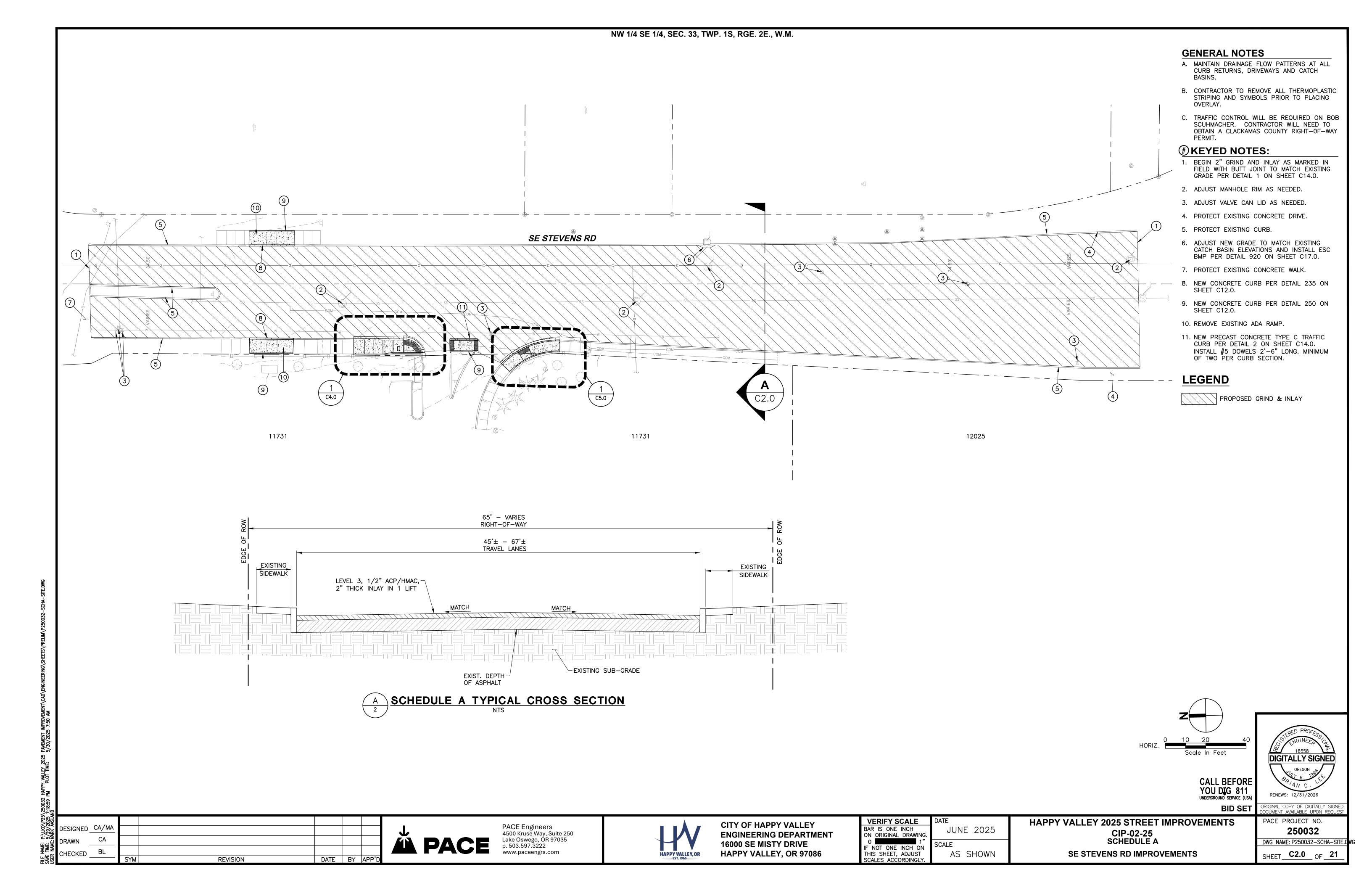


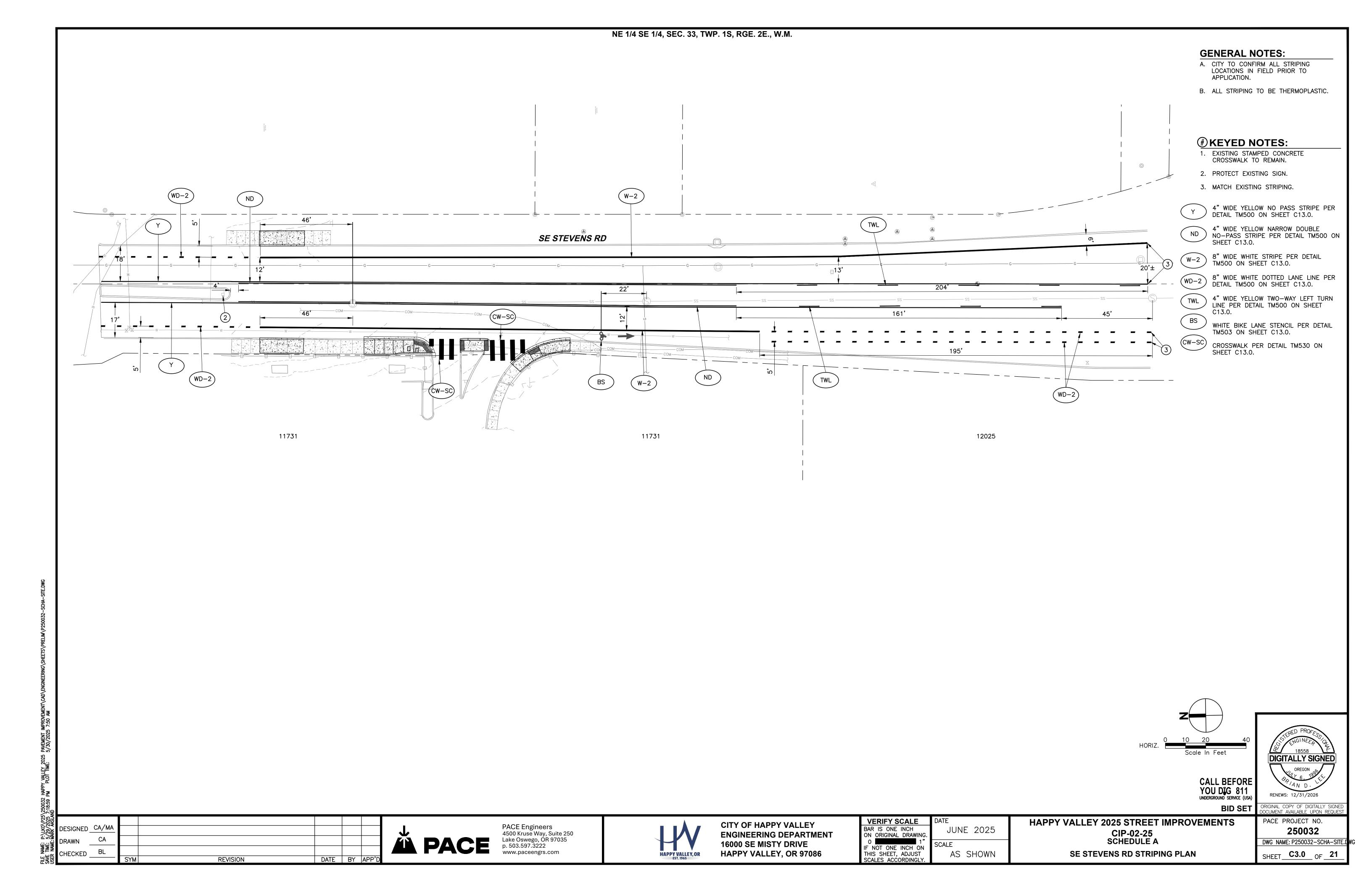
**CITY OF HAPPY VALLEY ENGINEERING DEPARTMENT** 16000 SE MISTY DRIVE **HAPPY VALLEY, OR 97086** 

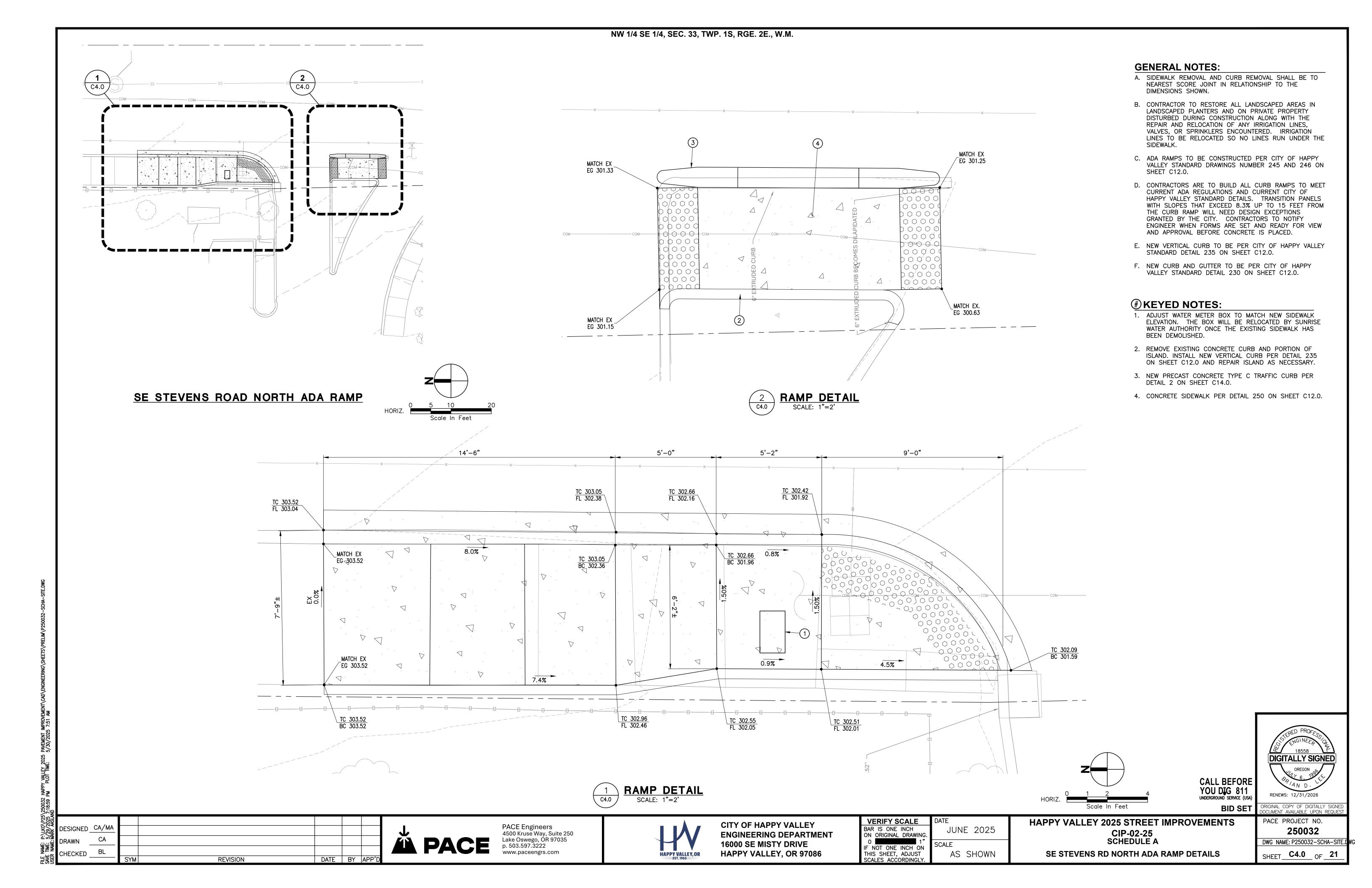
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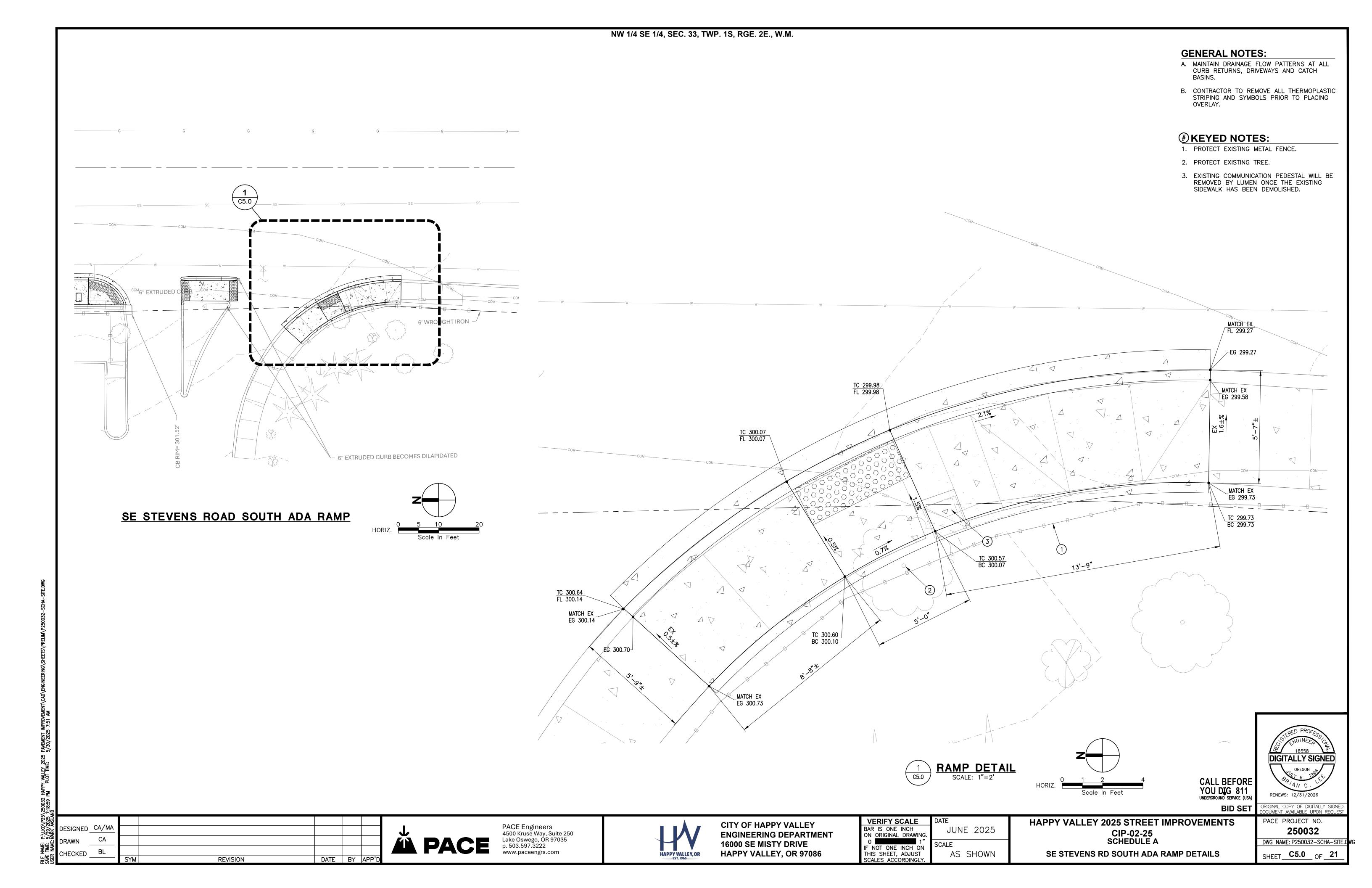
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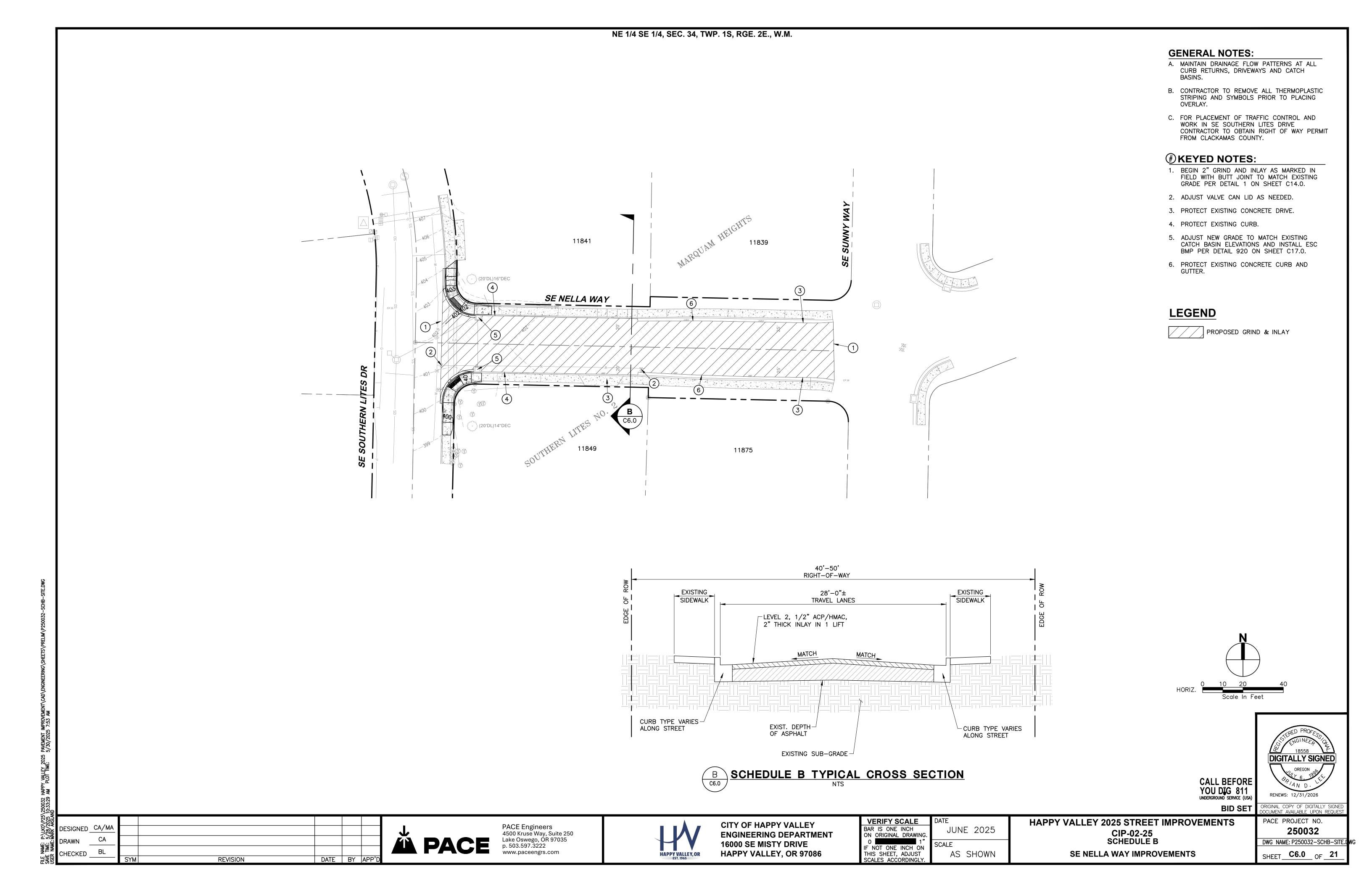
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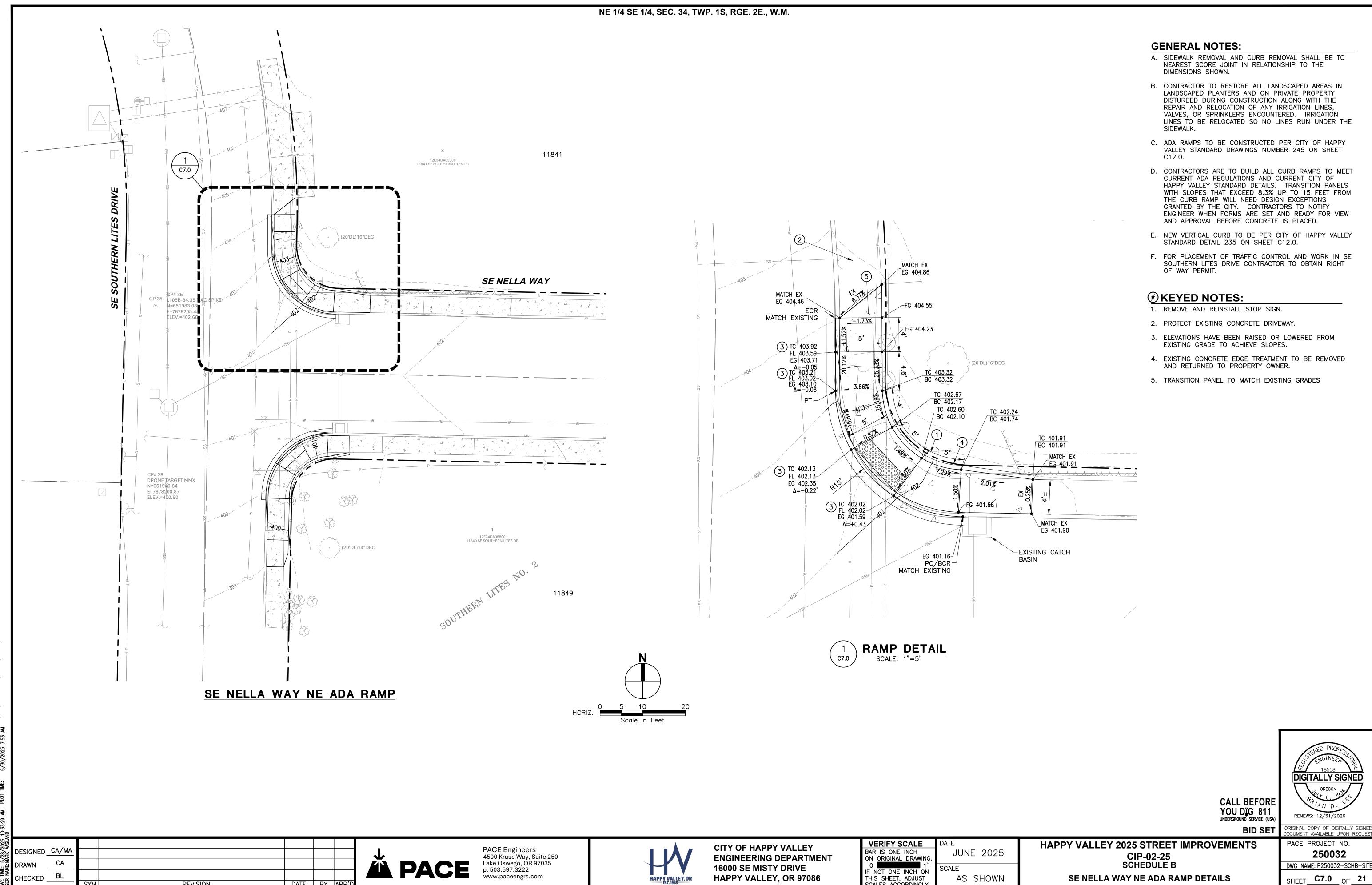












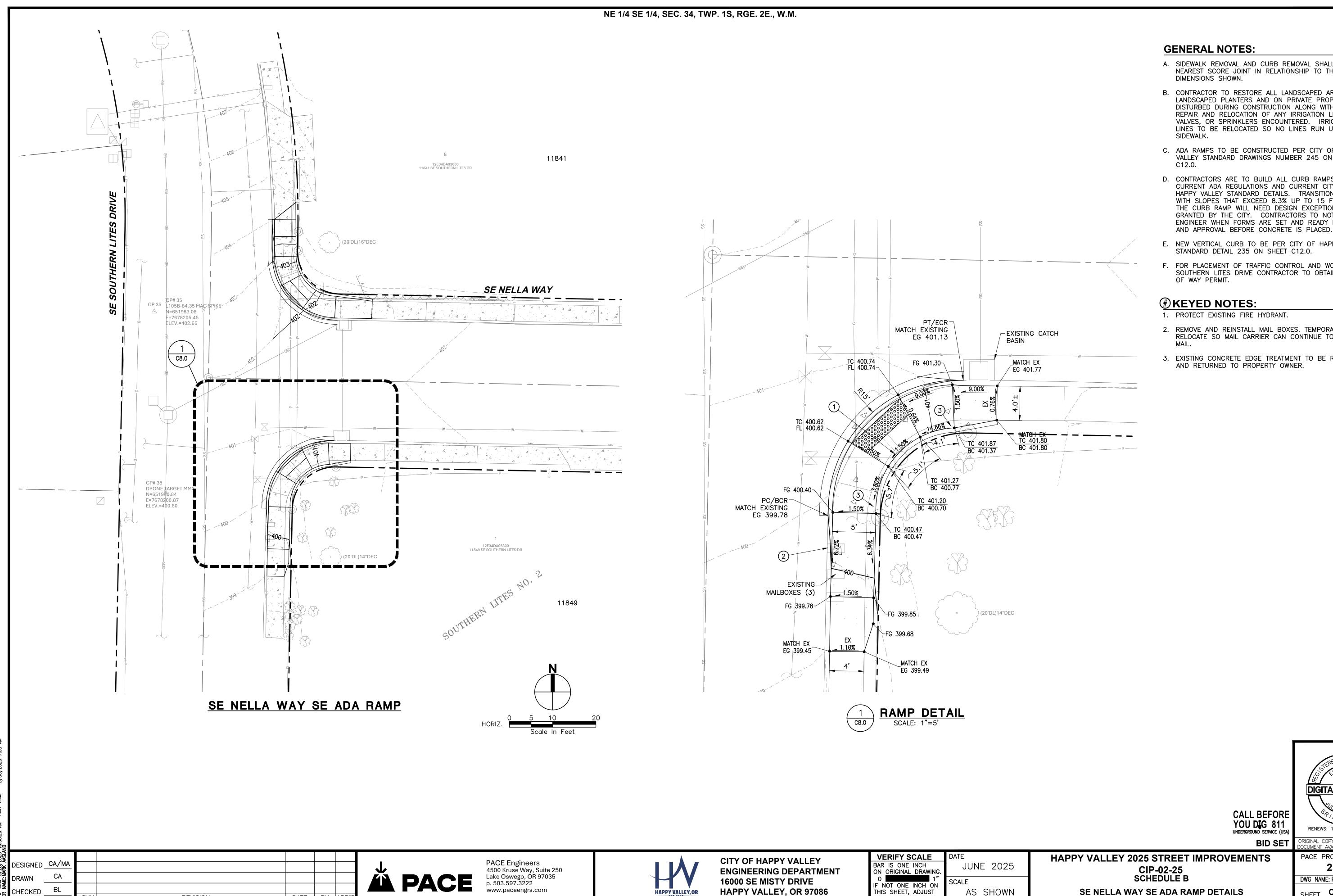
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**REVISION** 

**DIGITALLY SIGNED** 

DWG NAME: P250032-SCHB-SITE.I WG



DATE BY APP'I

**REVISION** 

**HAPPY VALLEY, OR 97086** 

AS SHOWN

SCALES ACCORDINGLY

**SE NELLA WAY SE ADA RAMP DETAILS** 

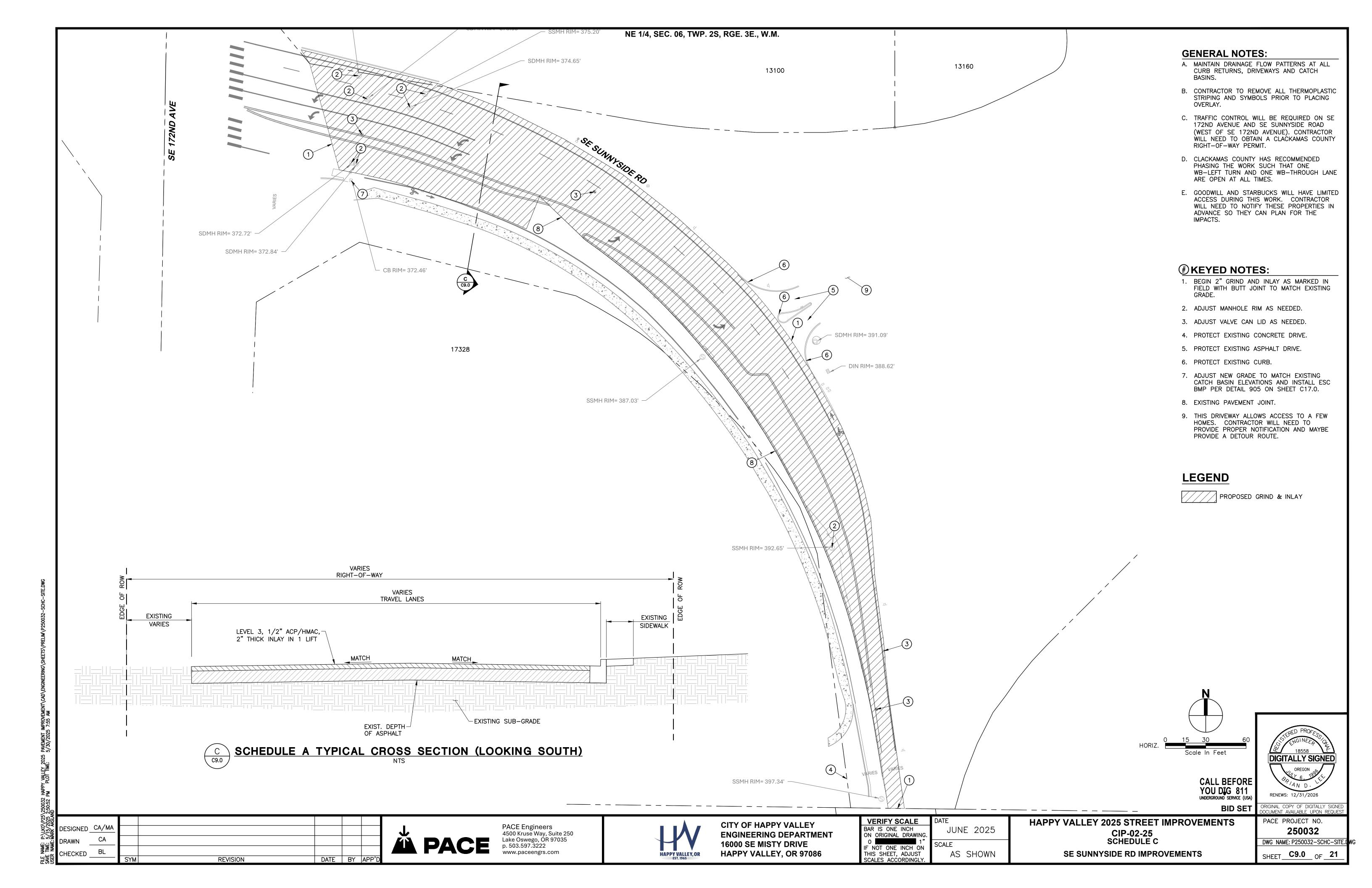
- A. SIDEWALK REMOVAL AND CURB REMOVAL SHALL BE TO NEAREST SCORE JOINT IN RELATIONSHIP TO THE
- B. CONTRACTOR TO RESTORE ALL LANDSCAPED AREAS IN LANDSCAPED PLANTERS AND ON PRIVATE PROPERTY DISTURBED DURING CONSTRUCTION ALONG WITH THE REPAIR AND RELOCATION OF ANY IRRIGATION LINES, VALVES, OR SPRINKLERS ENCOUNTERED. IRRIGATION LINES TO BE RELOCATED SO NO LINES RUN UNDER THE
- C. ADA RAMPS TO BE CONSTRUCTED PER CITY OF HAPPY VALLEY STANDARD DRAWINGS NUMBER 245 ON SHEET
- D. CONTRACTORS ARE TO BUILD ALL CURB RAMPS TO MEET CURRENT ADA REGULATIONS AND CURRENT CITY OF HAPPY VALLEY STANDARD DETAILS. TRANSITION PANELS WITH SLOPES THAT EXCEED 8.3% UP TO 15 FEET FROM THE CURB RAMP WILL NEED DESIGN EXCEPTIONS GRANTED BY THE CITY. CONTRACTORS TO NOTIFY ENGINEER WHEN FORMS ARE SET AND READY FOR VIEW
- E. NEW VERTICAL CURB TO BE PER CITY OF HAPPY VALLEY
- F. FOR PLACEMENT OF TRAFFIC CONTROL AND WORK IN SE SOUTHERN LITES DRIVE CONTRACTOR TO OBTAIN RIGHT
- 2. REMOVE AND REINSTALL MAIL BOXES. TEMPORARILY RELOCATE SO MAIL CARRIER CAN CONTINUE TO DELIVER
- 3. EXISTING CONCRETE EDGE TREATMENT TO BE REMOVED

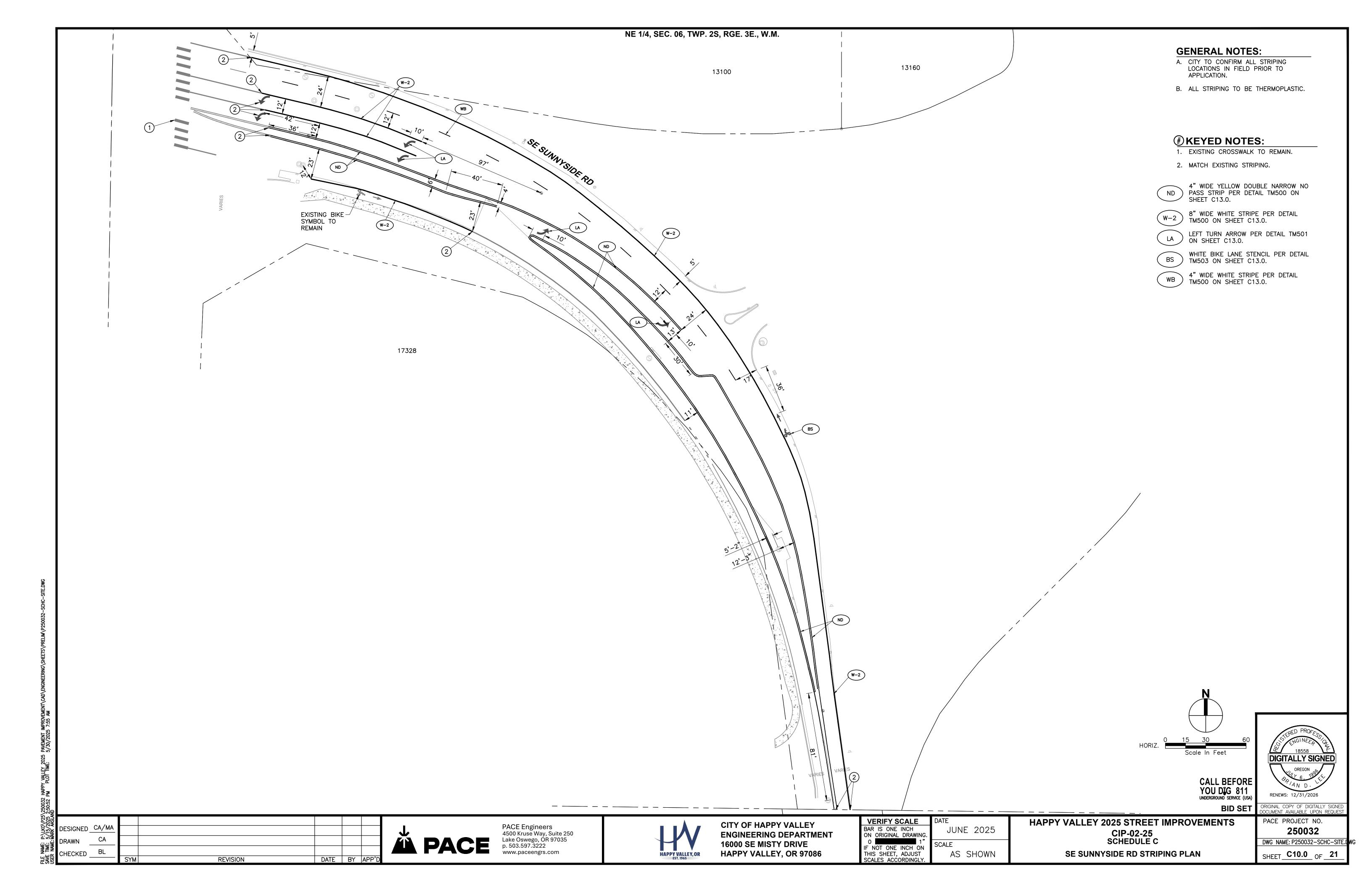
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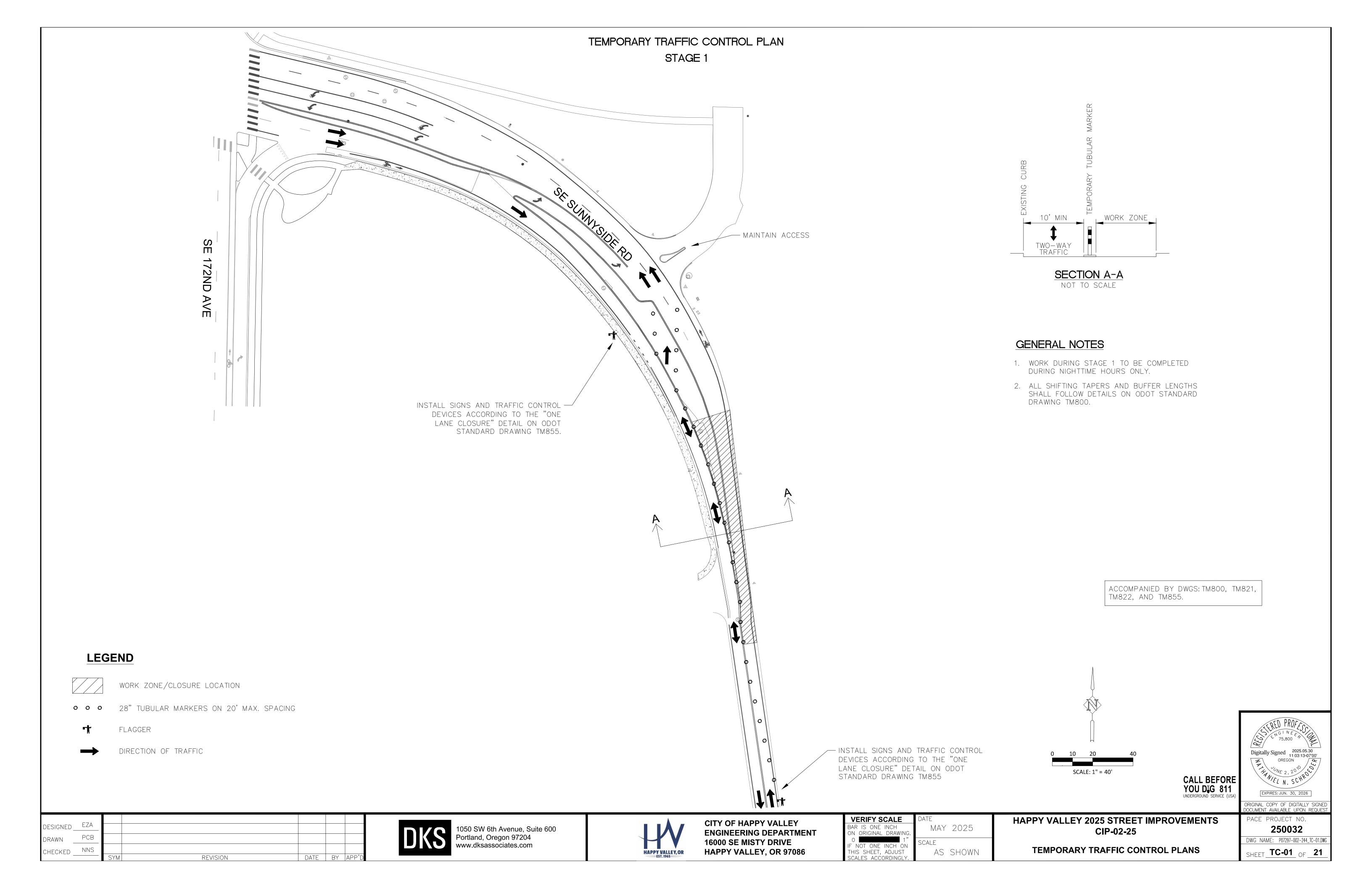
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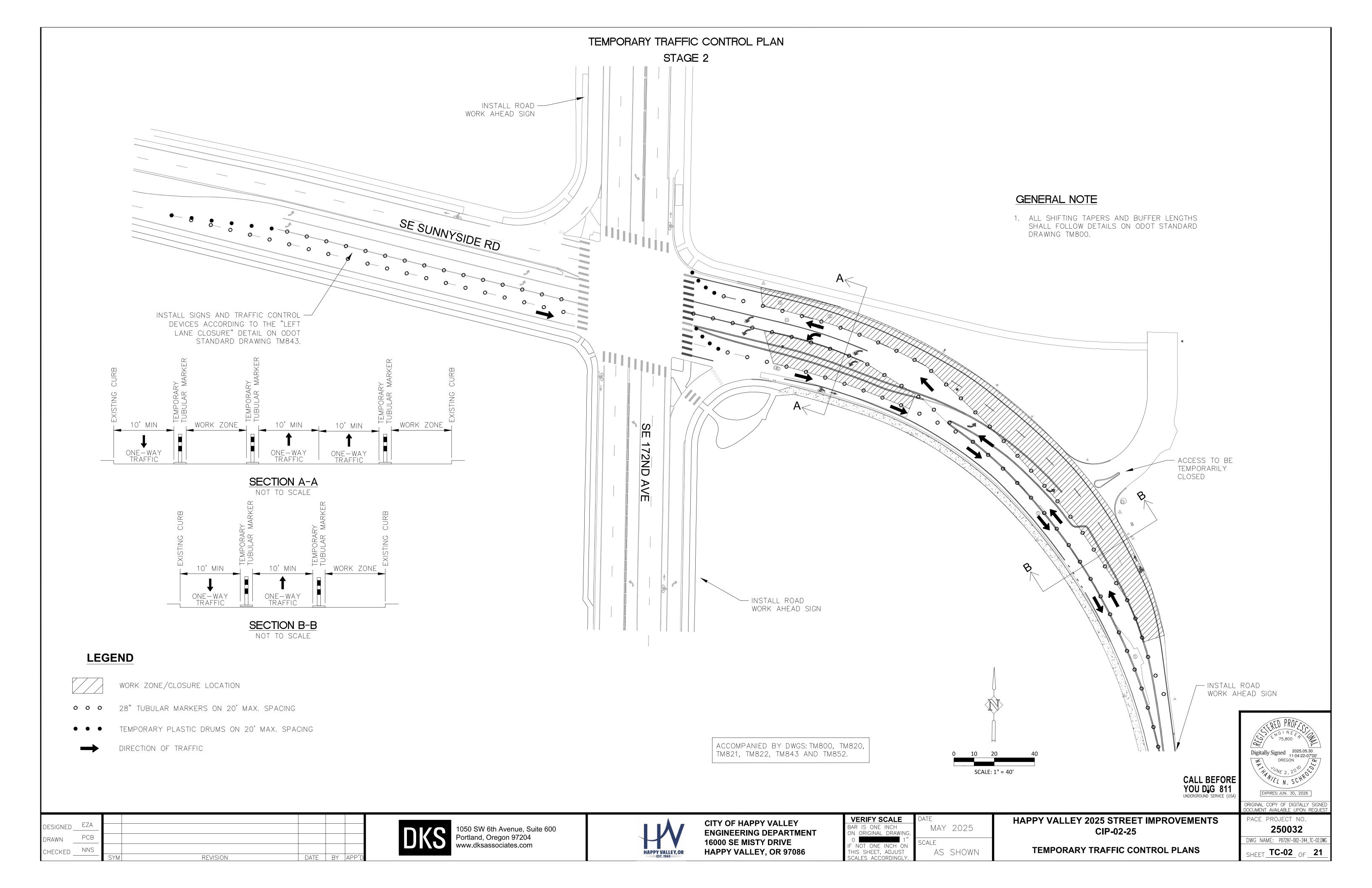
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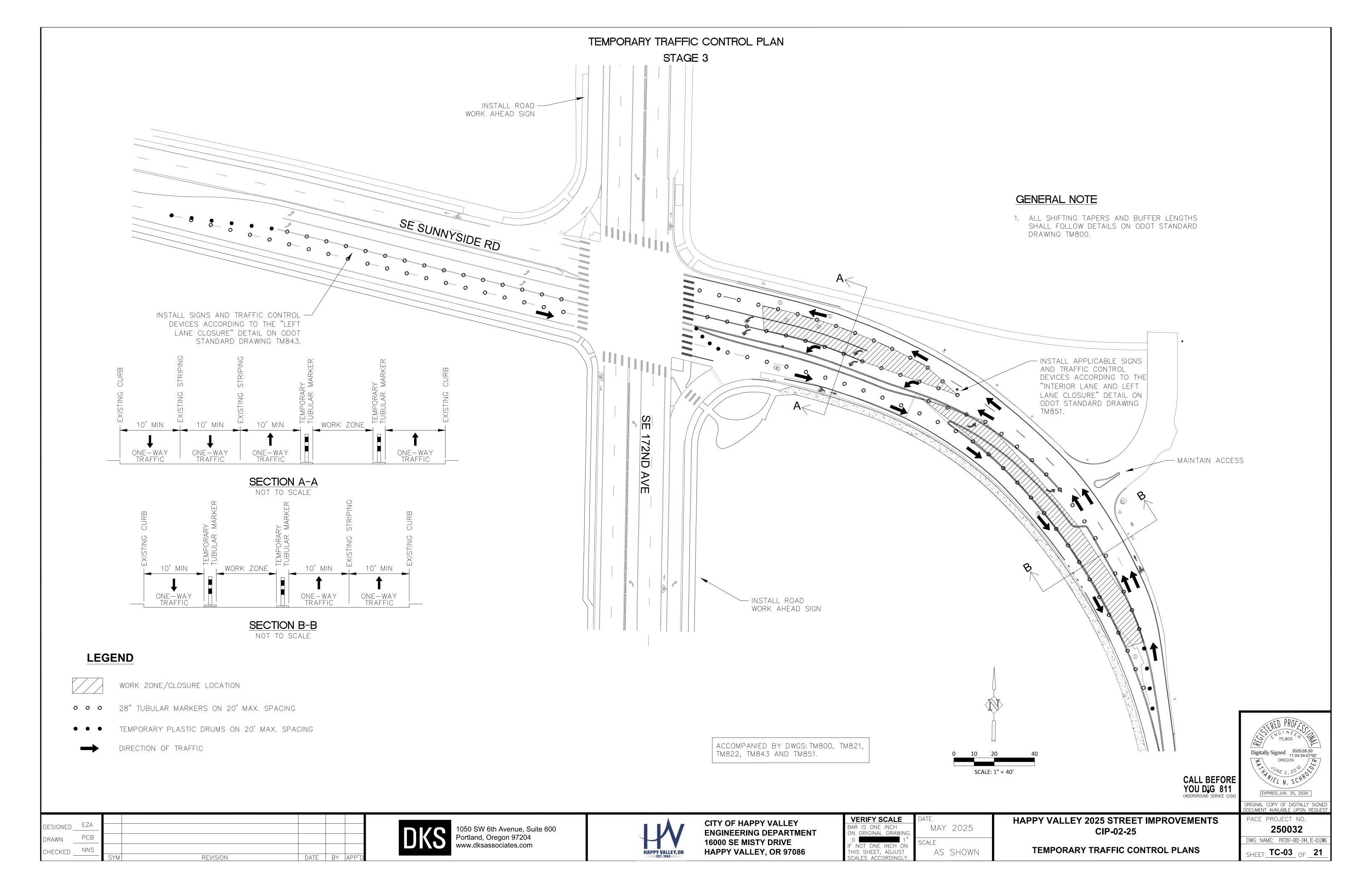
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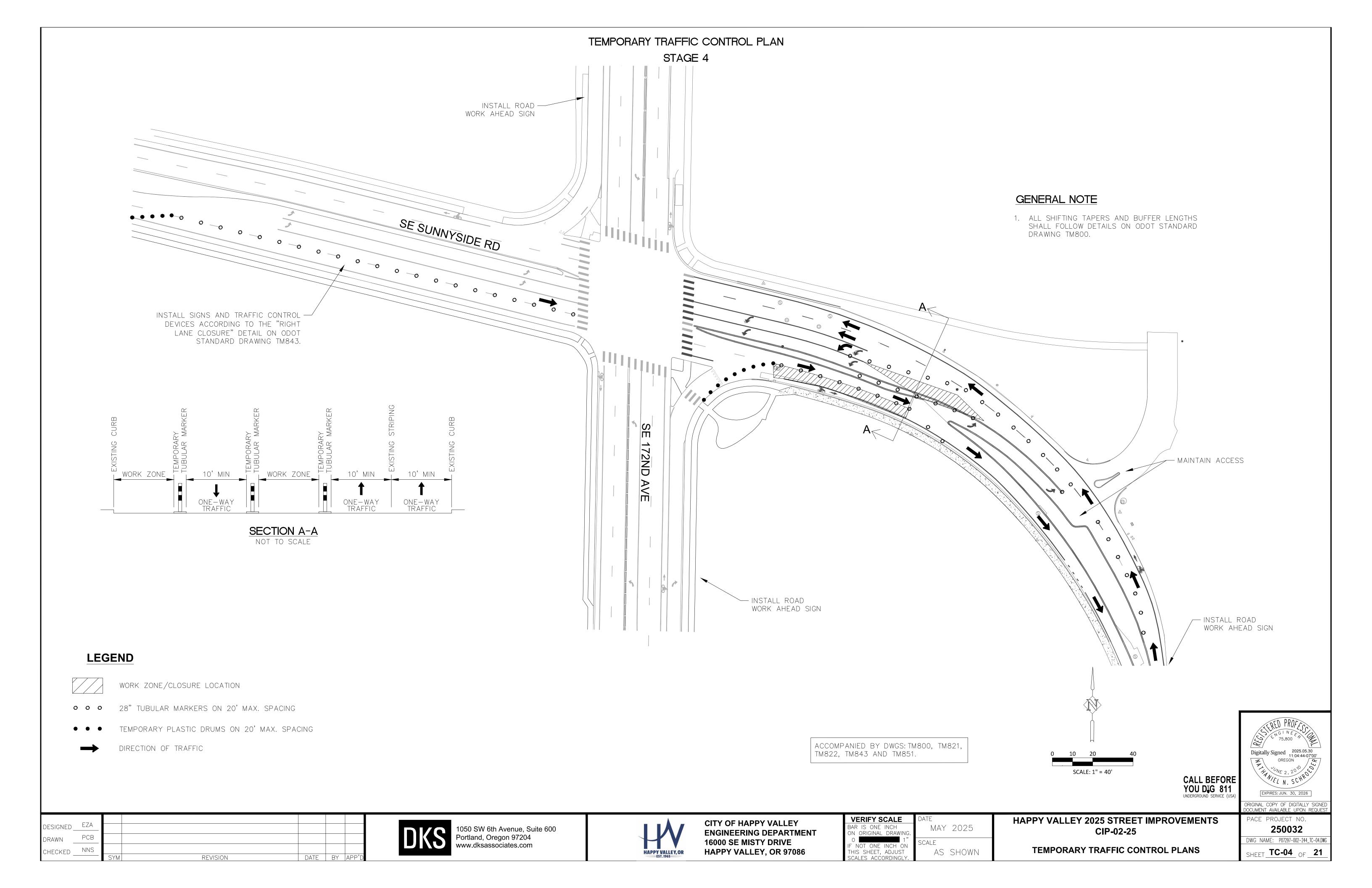












### **CONSTRUCTION NOTES:**

- 1 ALL WORK AND MATERIAL SHALL CONFORM TO THESE PLANS AND THE APPLICABLE PROVISIONS OF THE CITY'S ENGINEERING DESIGN AND STANDARD DETAILS MANUAL (DESIGN MANUAL), LATEST EDITION, APWA/ODOT OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
- 2 THE CONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) SET OF APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING THE CONSTRUCTION PHASES.
- 3 AT THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING ITEMS:
  - COPY OF THE CONTRACTOR'S CERTIFICATE OF INSURANCE
  - EMERGENCY CONTACT NAME AND PHONE NUMBER
  - PROGRESS SCHEDULE.
  - TRAFFIC CONTROL PLAN.
  - e. LIST OF SUBCONTRACTORS.
- 4 A COPY OF THE PERMIT WITH ALL ATTACHMENTS, A COPY OF THE APPROVED CONSTRUCTION PLANS, AND ALL AMENDMENTS SHALL BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. ALL WORK SHALL CONFORM TO THE PERMIT TERMS, CONDITIONS/PROVISIONS, APPROVED CONSTRUCTION PLANS, APPROVED PLAN AMENDMENTS, AND THESE GENERAL CONDITIONS. CHANGES TO ANY OF THE FORESAID MUST BE APPROVED BY THE PROJECT ENGINEER AND CITY, IN ADVANCE OF WORK PERFORMANCE.
- 5 THE CONTRACTOR SHALL HAVE A CURRENT HAPPY VALLEY BUSINESS LICENSE BEFORE STARTING CONSTRUCTION.
- 6 A SIGN SHALL BE POSTED CONSPICUOUSLY AT THE JOB SITE ENTRANCE PRIOR TO SITE CONSTRUCTION, AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. USE 2-INCH HIGH BLACK LETTERS ON AN ORANGE BACKGROUND. THIS SIGN SHALL READ AS FOLLOWS:
  - "CONSTRUCTION SHALL BE LIMITED TO 7:00 AM TO 6:00 PM ON WEEKDAYS, AND 8:00 AM TO 5:00 PM ON SATURDAYS AND SUNDAYS. HOWEVER, SITE CLEARING, EARTH MOVING, INSTALLATION OR CONSTRUCTION OF UNDERGROUND UTILITIES, PAVING OF STREETS AND SIDEWALKS, FOUNDATION FRAMING AND POURING, AND STRUCTURAL FRAMING SHALL BE ENTIRELY PROHIBITED ON SUNDAYS. TO REPORT VIOLATIONS CALL 503-783-3800."
- 7 ALL FENCING, ESC MEASURES, AND CONSTRUCTION GRAVEL ENTRANCES SHALL BE INSTALLED AND MAINTAINED BY THE DEVELOPER AND INSPECTED BY THE CITY OF HAPPY VALLEY PRIOR TO BEGINNING WORK ON THE SITE. CALL FOR INSPECTION 24 HOURS IN ADVANCE, 503-783-3800.
- 8 MAINTENANCE OF THE WORK AREA AND APPROACH ROADS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE WORK AREA AND APPROACH ROADS SHALL BE MAINTAINED IN A CLEAN AND SANITARY CONDITION, FREE FROM OBSTRUCTIONS, HAZARDS, DEBRIS, AND TRASH AT ALL TIMES. A COPY OF THE CONTRACTOR CERTIFICATE OF INSURANCE SHALL BE AVAILABLE AT THE WORK AREA.
- 9 THE SPREADING OF MUD OR DEBRIS OR STORAGE OF MATERIAL OR EQUIPMENT OF ANY KIND UPON ANY PUBLIC ROADWAY IS STRICTLY PROHIBITED AND VIOLATION SHALL BE CAUSE FOR IMMEDIATE SUSPENSION OF THE PERMIT. THE PROJECT ENGINEER AND/OR CITY MAY AT ANY TIME ORDER IMMEDIATE CLEAN UP AND STOPPAGE OF WORK TO ACCOMPLISH CLEAN-UP.
- 10 DUST SHALL BE CONTROLLED WITHIN THE DEVELOPMENT DURING CONSTRUCTION AND SHALL NOT BE PERMITTED TO DRIFT ONTO ADJACENT PROPERTIES.
- 11 CONTRACTOR SHALL MONITOR THE HAULING OF DEBRIS TO ENSURE THAT ALL SPILLAGE FROM TRUCKS IS PROMPTLY AND COMPLETELY REMOVED AND CLEANED UP.
- 12 THE CONTRACTOR SHALL CONTROL TRAFFIC THROUGH THE PROJECT SITE IN CONFORMANCE WITH THE LATEST EDITION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), "OREGON SUPPLEMENTS", AND CITY REQUIREMENTS. THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN LOCAL ACCESS FOR OWNERS NEAR THE PROJECT SITE. THE CONTRACTOR SHALL PROVIDE A PROJECT-SPECIFIC TRAFFIC CONTROL PLAN, APPROVED BY THE CITY, AND AVAILABLE ON THE PROJECT SITE.
- 13 THE CONTRACTOR IS RESPONSIBLE FOR PROVISION OF TIMELY NOTIFICATION OF TRAFFIC FLOW DISRUPTIONS TO AREA-WIDE EMERGENCY SERVICES AND THE SCHOOL DISTRICT. THE CONTRACTOR SHALL MAINTAIN AND COORDINATE ACCESS TO ALL AFFECTED PROPERTIES.
- 14 TRAFFIC CONTROL DEVICES, FLAG PERSONS, ETC., SHALL BE IN PLACE PRIOR TO INITIATION OF CONSTRUCTION WORK AND SHALL BE EFFECTIVELY MAINTAINED. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO ANY WORK WITHIN EXISTING
- 15 PUBLIC ROADWAYS SHALL NOT BE CLOSED TO TRAFFIC, AT ANY TIME, WITHOUT HAVING FIRST OBTAINED A STREET CLOSURE PERMIT FROM THE CITY.
- COMPACTION TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR. PROVIDE THE CITY WITH COPIES OF THE TEST RESULTS ON BASE ROCK AND ASPHALT. SCHEDULE PROOF ROLLS WITH THE CITY AT LEAST 48 HOURS IN ADVANCE.
- 17 CONTRACTOR MUST VERIFY ALL EXISTING UTILITIES FOR BOTH VERTICAL ELEVATION AND HORIZONTAL LOCATION PRIOR TO START OF WORK (POTHOLE BEFORE DIGGING IF NECESSARY). CONTRACTOR SHALL COORDINATE THE WORK WITH APPLICABLE AGENCIES.
- TRENCHES WITHIN RIGHTS-OF-WAY, PAVEMENT, OR CONCRETE AREAS SHALL BE BACKFILLED WITH APPROVED CRUSHED ROCK (DRAWING NO. 205) OR CDF (DRAWING NO. 210), AND AS SPECIFIED ON THESE PLANS. TRENCHES OUTSIDE OF THE PAVED OR CONCRETE AREAS MAY BE BACKFILLED WITH NATIVE MATERIAL PER DRAWING NO. 205
- THE CONTRACTOR SHALL MAINTAIN BENCHMARKS, PROPERTY CORNERS, AND MONUMENTS. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY THE CONSTRUCTION ACTIVITIES. THEY SHALL BE REPLACED IN ACCORDANCE WITH ORS 209 BY EMPLOYING A PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS AND OTHER SUCH MONUMENTS.
- 20 THE CONTRACTOR SHALL NOTIFY THE CITY FORTY-EIGHT (48) HOURS PRIOR TO ANY PROOF ROLL, CONCRETE FORM INSPECTION AND PAVING.
- 21 PROPERTY DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED. GRASS, SHRUBS, FLOWERS, BARK DUST, EXISTING SIGNS, PAVEMENT MARKINGS, MAILBOXES, ETC. DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE RE-ESTABLISHED, REINSTALLED OR REPLACED, WITH LIKE KIND AND MATERIAL.

- 22 EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE SITE AND SHALL BE ROUTED SO THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE PROJECT ENGINEER AND/OR CITY MAY AT ANY TIME ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.
- 23 TRENCHES WILL NOT BE ALLOWED TO REMAIN OPEN OVERNIGHT. A TEMPORARY HARD SURFACE PATCH (HOT MIX BASE PAVING) OR STEEL PLATES SECURED WITH PINS AND COLD MIX RAMPS SHALL BE PLACED ON TRENCHES WITHIN EXISTING ROADWAYS AT THE END OF EACH DAY'S WORK. NO TRENCH, ON-SITE OR OFF-SITE, SHALL BE LEFT AT ANY TIME IN AN UNSAFE CONDITION. THE CONTRACTOR IS RESPONSIBLE AND LIABLE FOR HAZARDS OR DAMAGE RESULTING FROM THE PROSECUTION OF THE WORK.
- 24 WORK PROVIDED FOR UNDER THE PERMIT SHALL INCLUDE REPAIR OF EXISTING FACILITIES (ROADS, DITCHES, ETC.) AS MAY BE NECESSARY, IN THE CITY'S OPINION, TO OVERCOME DETERIORATION OR DAMAGE WHICH OCCURRED IN CONJUNCTION WITH THE WORK AUTHORIZED BY THE PERMIT. CORRECTIVE WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- 25 POWER, TELEPHONE, GAS, AND CABLE TELEVISION TRENCHING AND CONDUITS ARE TO BE INSTALLED PER UTILITY COMPANY REQUIREMENTS. VERIFY WITH UTILITY COMPANY FOR SIZE AND TYPE OF CONDUIT PRIOR TO CONSTRUCTION.
- 26 UNIDENTIFIED UTILITIES SHALL NOT BE DISRUPTED OR CUT UNTIL UTILITY COMPANY HAS APPROVED THE CUT OR DISRUPTION.
- 27 ALL FACILITIES SHALL BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR SHALL TAKE ALL PRECAUTIONS, NECESSARY TO SUPPORT, MAINTAIN, OR OTHERWISE PROTECT EXISTING UTILITIES AND OTHER FACILITIES AND OTHER FACILITIES AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR TO LEAVE EXISTING FACILITIES IN AN EQUAL OR BETTER THAN-ORIGINAL CONDITION.
- 28 NOTIFY THE UTILITY COMPANY IMMEDIATELY OF ALL UTILITIES EXPOSED. UTILITIES OR INTERFERING PORTION OF UTILITIES THAT ARE ABANDONED IN PLACE SHALL BE REMOVED BY THE CONTRACTOR TO THE EXTENT NECESSARY TO ACCOMPLISH THE WORK.
- 29 THE CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, TOPSOIL. AND OTHER MATERIAL IN THE NEW PUBLIC RIGHT-OF-WAY, UNDER THE NEW ROADWAY AND WHERE INDICATED ON THE PLANS. MATERIAL SHALL BE DISPOSED OF IN SUCH A MANNER AS TO MEET ALL APPLICABLE REGULATIONS.
- 30 IF GROUND WATER SPRINGS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE MEASURES TO ENSURE THAT THE WATER IS NOT CONVEYED THROUGH UTILITY TRENCHES, AND THE NATURAL FLOW PATH OF THE SPRING IS ALTERED AS LITTLE AS PRACTICABLE.
- 31 SAWCUT STRAIGHT MATCH LINES WHERE EXISTING PAVEMENT MEETS NEW PAVEMENT. SAND AND SEAL JOINT (TYPICAL).
- 32 CONTRACTOR SHALL FOLLOW OSHA REQUIREMENTS.
- 33 ALL TRENCHES SHALL BE PROPERLY SHORED AND BRACED TO PREVENT CAVING.
- 34 WHERE TRENCH EXCAVATION REQUIRES REMOVAL OF PORTLAND CEMENT CONCRETE CURBS AND/OR SIDEWALKS, THE CURBS AND/OR SIDEWALKS SHALL BE SAWCUT AND REMOVED AT A TOOL JOINT UNLESS OTHERWISE AUTHORIZED BY THE OWNER'S REPRESENTATIVE. THE SAWCUT LINES SHOWN ON THE DRAWINGS ARE SCHEMATIC AND NOT INTENDED TO SHOW THE **EXACT ALIGNMENT OF SUCH CUTS.**
- 35 THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE APPROVED DRAWINGS AND DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS AND DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. ALL REPAIRS SHALL USE NEW MATERIAL. REPAIRS SHALL RESTORE THE DAMAGED ITEM TO THE PRE-EXISTING CONDITION OR BETTER. SUCH REPAIRS SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH SHALL INCLUDE BUT NOT BE LIMITED TO THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, AND OTHER APPROPRIATE SAFETY ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITY.
- 37 SETTLEMENT OR CRACKING OF FINISHED SURFACES WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SUBGRADE, AND REPAIRED IN A MANNER ACCEPTABLE TO AND AT NO COST TO THE CITY OR DEVELOPER
- 38 PRIOR TO FINAL PROJECT ACCEPTANCE, THE CONTRACTOR SHALL CLEAN THE WORK SITE AND ADJACENT AREAS OF ANY DEBRIS. DISCARDED ASPHALTIC CONCRETE MATERIAL. OR OTHER ITEMS DEPOSITED BY THE CONTRACTOR'S PERSONNEL DURING THE PERFORMANCE OF THIS

## UTILITY CONTACTS

<u>POWER</u>

PORTLAND GENERAL ELECTRIC ATTN: STACY FERGUSON (PRIMARY POWER) PH: 503-669-5219 ATTN: JEFF WIESE (STREET LIGHTS) PH: 503-742-8363 1705 EAST BURNSIDE STREET

GRESHAM, OR 97030

CABLE COMCAST ATTN: ROB BALEY

PH (CELL): 503-348-5610

PH (OFFICE): 503-818-0485

ROBERT BALEY@COMCAST.COM

### <u>TELEPHONE</u>

FRONTIER ATTN: JAMES ANDVIK

150 NW 20TH STREET P.O. BOX 31

GRESHAM, OR 97030

PH: 503-667-9780

GRESHAMENGINEERING@FTR.COM

NW NATURAL

ATTN: BRIAN KELLEY

220 NW 2ND AVENUE PORTLAND, OR 97209

PH: 503-220-2427

NCPROJ@NWNATURAL.COM

### **WATER**

SUNRISE WATER AUTHORITY ATTN: TIM JANNSEN

10602 SW 129TH AVENUE HAPPY VALLEY, OR 97086

PH: 503-761-0220 TJANNSEN@SUNRISEWATER.COM

# SOLID WASTE COLLECTION

HOODVIEW DISPOSAL PH: 503-668-8300

SUNSET GARBAGE PH: 503-774-4122

> WASTE MANAGEMENT PH: 800-808-5901

> > **CALL BEFORE** YOU DIG 811 UNDERGROUND SERVICE (USA

ORIGINAL COPY OF DIGITALLY SIGNE **BID SET HAPPY VALLEY 2025 STREET IMPROVEMENTS** 

OCUMENT AVAILABLE UPON REQUEST PACE PROJECT NO. 250032 DWG NAME: P250032-GN.DWG

SHEET **C11.0** OF **21** 

RENEWS: 12/31/2026

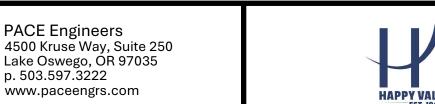
**DIGITALLY SIGNED** 

DESIGNED \_CA/MA RAWN DATE BY APP' **REVISION** 



PACE Engineers

p. 503.597.3222



**CITY OF HAPPY VALLEY ENGINEERING DEPARTMENT 16000 SE MISTY DRIVE HAPPY VALLEY, OR 97086** 

**VERIFY SCALE** BAR IS ONE INCH ON ORIGINAL DRAWING NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JUNE 2025 AS SHOWN

CIP-02-25

SPECIFICATION 00330.43

	С		ECTION CHART CKNESS (INCHE	S)	
STREET FUNCTIONAL CLASSIFICATION	LEVEL HMAC	TOP LIFT HMAC THICKNESS	BASE LIFT HMAC THICKNESS	LEVELING COURSE THICKNESS	BASE ROCK COURSE THICKNESS
LOCAL	2	2"	ONE LIFT 2"	2"	10"
LOCAL COMMERCIAL/ INDUSTRIAL	3	2-1/2"	ONE LIFT 2-1/2"	3"	12"
NEIGHBORHOOD	2	2"	ONE LIFT 2"	2"	10"
COLLECTOR	3	2-1/2"	ONE LIFT 2-1/2	3"	12"
ARTERIAL	3	2-1/2"	TWO LIFTS 2-1/2"	3"	12"
PRIVATE	2	3"	NA	2"	8"

HAPPY VALLEY, EST. 1965

2% CROSS-SLOPE

(DRAIN TO STREET)

- MATERIALS AND PLACEMENT OF THE ASPHALTIC CONCRETE PAVEMENT (ACP) SHALL CONFORM TO THE REQUIREMENTS DELINEATED IN SECTION 00744.40 OF THE ODOT/APWA, OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXCEPT AS MODIFIED BY THE CITY AND/OR APPROVED BY CITY ENGINEER.
- ACP SHALL BE COMPACTED TO A MINIMUM OF 91% MAMD FOR BASE LIFT AND 92% MAMD FOR TOP LIFT. THE TOP LIFT OF ACP SHALL BE PLACED PRIOR TO CITY FINAL ACCEPTANCE OF PUBLIC INFRASTRUCTURE IMPROVEMENTS. THE FINAL LIFT OF ACP SHALL NOT BE PLACED UNTIL ALL UTILITIES WITHIN THE ROADWAY HAVE BEEN
- INSTALLED AND ACCEPTED. CRUSHED AGGREGATE USED FOR BASE ROCK AND LEVELING COURSE SHALL CONFORM TO THE REQUIREMENTS DELINEATED IN SECTION 02630 - BASE AGGREGATE, OF THE ODOT/APWA, OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION. MAXIMUM MOISTURE DENSITY BY AASHTO T-180 ASTM D-1557 AS
- ½" DENSE ACP MAY BE USED IN-LIEU-OF ¾" DENSE ACP FOR THE BASE LIFT OF ASPHALT. PAVEMENT DESIGN SHALL BE BASED ON SITE SPECIFIC CONDITIONS. THE ABOVE PAVEMENT SECTIONS REPRESENT THE MINIMUM THICKNESS AFTER COMPACTION.
- THE ENGINEER OF RECORD IS RESPONSIBLE FOR DESIGNING AND CONSTRUCTING AN ADEQUATE STRUCTURAL
- 9. DEVELOPER/CONTRACTOR IS TO PROVIDE AC TESTING FOR BOTH LIFTS OF AC PER ODOT SPECIFICATION 00744. COMPACTION TESTING SHALL BE DONE EVERY 100 TO 200 LINEAL FEET OF PAVEMENT. 10. FOR IMPROVEMENTS TO EXISTING STREETS, FINAL SAWCUT LINES AND RESTORATION LIMITS SHALL BE
- DETERMINED BY CITY ENGINEERING PRIOR TO COMMENCEMENT OF WORK.

1	CITY OF HAPPY VALLEY ENGINEERING DIVISION	1	
	16000 SE MISTY DRIVE	ı	
OR	HAPPY VALLEY, OR 97086	<b>)</b>	
SEC	TIONS DWG PRINTED April 22 2024		

PRINTED April 22, 202



SIDEWALK

SIDEWALK WITH PLANTER STRIP DENSITY PER AASHTO T-180



2% MAX CROSS-SLOPE

(DRAIN TO STREET)

LOF ¾"-0" BASE ROCK

CITY OF HAPPY VALLEY **ENGINEERING DIVISION** 16000 SE MISTY DRIVE HAPPY VALLEY, OR 97086

DISTANCE.

PLANTER STRIP -

SLOPE VARIES

12% MAX.

6"x 6"x 10 GA MESH

EMBEDDED 1½" FROM

CITY ENGINEER.

24'

5' SIDEWALK

DWG NO: 230 MONOLITHIC CURB AND GUTTER

**MAX** 

10'

- FACE OF CURB

**COMMERCIAL DRIVEWAY** 

(PLAN VIEW)

SIDEWALK

5' CURB

SIDEWALK

- SLOPE 2% MAX

PRIVATE

DRIVEWAY

12% MAX.

EMBEDDED 1½" FROM BASE

**SECTION B-B** 

- 6"x 6"x 10 GA MESH

12% MAX

'RADIUS

- BACKFILL BEHIND

CURB AND GUTTER

(BASE ROCK LIMITS)

FACE OF CURB

STREET WIDTH

1" RADIUS

- BASE ROCK

**CURB & GUTTER** 

I. CONCRETE SHALL BE COMMERCIAL MIX WITH A 28-DAY COMPRESSIVE STRENGTH OF

3. EXPANSION JOINT MATERIAL SHALL BE PREFORMED FILLER NOT LESS THAN  $lak{1}\!\!\!/$  WIDE

5. BASE ROCK SHALL BE  $\frac{3}{4}$ "-0", COMPACTED TO 95% OF MAXIMUM DENSITY PER AASHTO

SECTIONS, REVERSE THE GUTTER PAN SLOPE SO THAT THERE IS A 1" DROP FROM

7. AT CATCH BASIN INLETS TRANSITION GUTTER LINE TO MATCH CATCH BASIN OVER A 3'

T-180. BASE ROCK SHALL BE TO SUBGRADE OF STREET STRUCTURES OR 4",

6. FOR CURB AND GUTTER REQUIREMENTS ON SHED AND SUPERELEVATED ROAD

3300 PSI AND SHALL MEET ALL REQUIREMENTS FROM ODOT SECTION 00440.

2. CONSTRUCT EXPANSION JOINTS AT 200' MAXIMUM SPACING, AND AT POINTS OF

AND SHALL MEET ALL REQUIREMENTS FROM ODOT SECTION 00759.

WHICHEVER IS GREATER, AND SHALL EXTEND 12" BEHIND CURB.

FACE OF CURB TO THE EDGE OF THE GUTTER PAN.

1" BATTER —

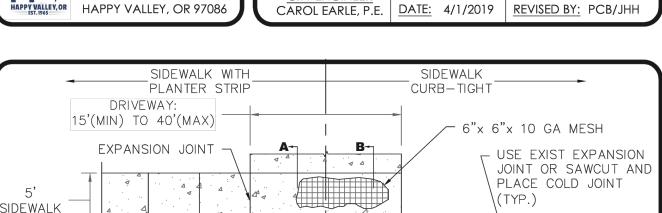
(BOTTOM GUTTER LIMITS)

4. CONTRACTION JOINTS SHALL HAVE:

TANGENCY, AND AT ENDS OF EACH DRIVEWAY.

A. SPACING OF NOT MORE THAN 15 FEET.

B. DEPTH OF JOINT OF AT LEAST 1½".



2" OF  $\frac{3}{4}$ "-0" BASE ROCK

COMPACTED TO 95% MAX

2. EXPANSION JOINT MATERIAL SHALL BE PREFORMED FILLER NOT LESS THAN ½" WIDE AND

4. IF DURING CURB REMOVAL THE GUTTER BECOMES SEPERATED FROM THE STREET SURFACE

5. SLOPE OF THE DRIVEWAY MAY BE AWAY FROM THE CURB WHEN PRE-APPROVED BY THE

COMMERCIAL MIX W/A 28-DAY COMPRESSIVE STRENGTH OF

3300psi. SHALL MEET ALL REQUIREMENTS FROM ODOT

IN EXCESS OF  $\frac{1}{16}$ ", THEN THE GUTTER SHALL ALSO BE REMOVED AND REPLACED.

6. EDGE OF DRIVEWAY WINGS MUST BE A MINIMUM OF 10' FROM ANY FIRE HYDRANTS.

PRIVATE

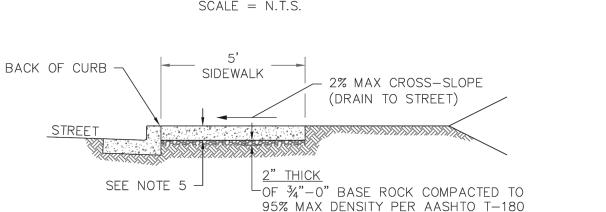
DRIVEWAY

12% MAX

SECTION A - A DENSITY PER AASHTO T-180

SHALL MEET ALL REQUIREMENTS FROM ODOT SECTION 00759.

3. CONCRETE SHALL HAVE A BROOM FINISH AND EDGE ALL JOINTS.



### **CURB-TIGHT SIDEWALK** SCALE = N.T.S.

STERILIZE AND

COMPACT SUBGRADE

- 1. CONCRETE SHALL BE A COMMERCIAL MIX WITH A 28 DAY COMPRESSIVE STRENGTH OF 3300 PSI AND SHALL MEET ALL REQUIREMENTS FROM ODOT SECTION 00440.
- 2. SIDEWALK PANELS TO BE SQUARE (5' LONG x 5' WIDE TYP.).

PLANTER STRIP

- 4. EXPANSION JOINT MATERIAL SHALL BE PREFORMED FILLER NOT LESS THAN 1/2" WIDE AND SHALL MEET ALL REQUIREMENTS FROM ODOT SECTION 00759.
- 5. FOR SIDEWALKS ADJACENT TO THE CURB AND POURED AT THE SAME TIME AS THE CURB, THE JOINT BETWEEN THEM SHALL BE A TROWELED JOINT WITH A MINIMUM ½"
- 6. SIDEWALKS SHALL HAVE A MINIMUM THICKNESS OF 6" IF MOUNTABLE CURB IS USED, OR IF SIDEWALK IS INTENDED AS A PORTION OF A DRIVEWAY. OTHERWISE SIDEWALK SHALL HAVE A MINIMUM THICKNESS OF 4".
- 7. CONCRETE SHALL HAVE A BROOM FINISH, ALL JOINTS SHALL BE EDGED.
- WIDTH OF PLANTER STRIP IS MEASURED FROM FACE OF CURB. WIDTH OF A CURB-TIGHT SIDEWALK IS MEASURED FROM BACK OF CURB.

HAPPY VALLEY, OR	CITY OF HAPPY VALLEY ENGINEERING DIVISION 16000 SE MISTY DRIVE HAPPY VALLEY, OR 97086	
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**DWG NO: 250** 

SIDEWALK CAROL EARLE, P.E. DATE: 4/1/2019 REVISED BY: PCB/JHH ≥ 24' SECTION 00440. CITY OF HAPPY VALLEY ENGINEERING DIVISION 16000 SE MISTY DRIVE

APPY VALLEY, OR 97086

DRIVEWAY|CONCRETE |CONCRETE TYPE

**DWG NO: 275 COMMERCIAL DRIVEWAY** CAROL EARLE, P.E. DATE: 4/1/2019 REVISED BY: PCB/JHH

AC PAVEMENT BASE ROCK (BOTTOM CURB LIMITS) (BASE ROCK LIMITS) STANDARD VERTICAL CURB SCALE = N.T.S.

/ ½" RADIUS

<u>NOTES:</u>

- VERTICAL CURB MAY BE USED AT MEDIANS AND MEDIAN PLANTING STRIPS, OR IN REPLACEMENT OF DAMAGED EXISTING VERTICAL CURBS.
- 2. CONCRETE SHALL BE COMMERCIAL MIX WITH A 28-DAY COMPRESSIVE STRENGTH OF 3300 PSI AND SHALL MEET ALL REQUIREMENTS FROM ODOT SECTION 00440.
- 3. CONSTRUCT EXPANSION JOINTS AT 200' MAXIMUM SPACING, AND AT POINTS OF
- 4. EXPANSION JOINT MATERIAL SHALL BE PREFORMED FILLER NOT LESS THAN 1/2" WIDE AND SHALL MEET ALL REQUIREMENTS FROM ODOT SECTION 00759.
- 5. CONTRACTION JOINTS SHALL HAVE: A. SPACING OF NOT MORE THAN 15 FEET.

TANGENCY, AND AT ENDS OF EACH DRIVEWAY.

FACE OF CURB

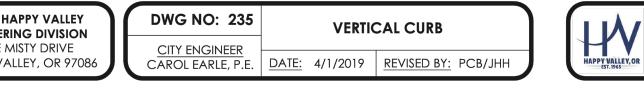
STREET WIDTH

1" RADIUS

- 6. BASE ROCK SHALL BE 3/4"-0", COMPACTED TO 95% OF MAXIMUM DENSITY PER AASHTO T-180. BASE ROCK SHALL BE TO SUBGRADE OF STREET STRUCTURES OR 4", WHICHEVER IS GREATER, AND SHALL EXTEND 12" BEHIND CURB.
- 7. WEEP HOLES ARE NOT ALLOWED THROUGH THE CURB.

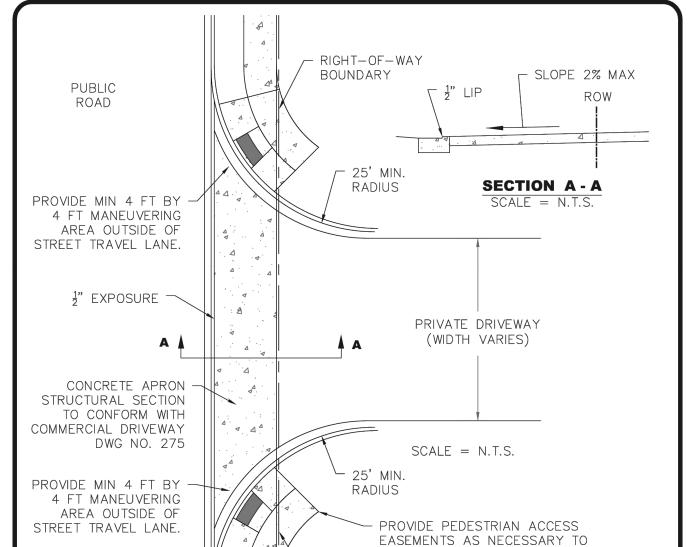
B. DEPTH OF JOINT OF AT LEAST 11/2".

HAPPY VALLEY, OR	CITY OF HAPPY VALLEY ENGINEERING DIVISION 16000 SE MISTY DRIVE HAPPY VALLEY, OR 97086
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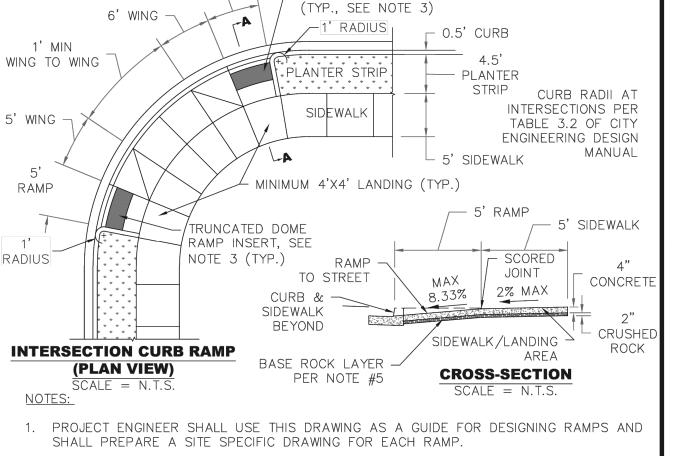
CONTAIN CURB RAMP LOCATED

OUTSIDE OF THE RIGHT-OF-WAY



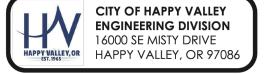
- RIGHT-OF-WAY BOUNDARY 1. SIDEWALK RAMP SHALL MEET CURRENT ADA STANDARDS. CONSTRUCT ALL RAMPS PERPENDICULAR TO THE CURB. SEE DWG NO. 245.
- 2. DETECTABLE WARNING SHALL BE TRUNCATED DOME TYPE, 24" LONG IN DIRECTION OF TRAVEL AND FULL WIDTH OF RAMP, WITH DOMES ALIGNED ON A SQUARE GRID WITH ITS GRIDLINES PARALLEL AND PERPENDICULAR TO THE CENTERLINE OF THE RAMP. COLOR OF DETECTABLE WARNING SURFACE SHALL BE YELLOW AND CONTRAST FROM ADJACENT SURFACE.
- 3. CURB INLET OR CATCH BASIN SHALL NOT BE ALLOWED IN FRONT OF RAMP.

CITY OF HAPPY VALLEY **DWG NO: 280** COMMERICAL DRIVEWAY ENGINEERING DIVISION 16000 SE MISTY DRIVE CAROL EARLE, P.E. | DATE: 4/1/2019 | REVISED BY: PCB/JHH HAPPY VALLEY, OR 97086

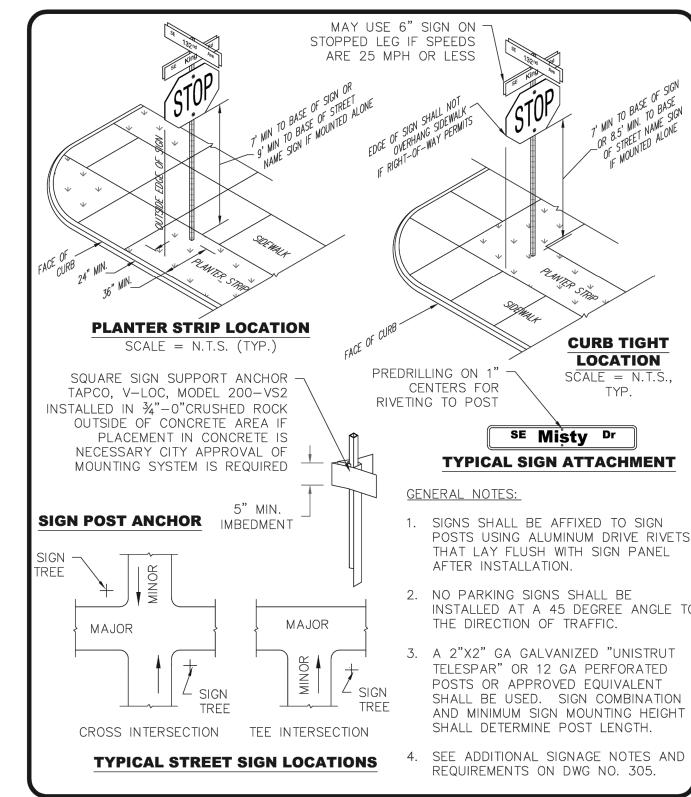


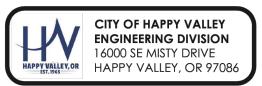
TRUNCATED DOME RAMP INSERT

- 2. SIDEWALK RAMP SHALL MEET CURRENT ADA STANDARDS. CONSTRUCT ALL RAMPS PERPENDICULAR TO THE CURB. CITY TO INSPECT FORMS PRIOR TO POUR.
- 3. DETECTABLE WARNING SHALL BE TRUNCATED DOME TYPE, 24" LONG IN DIRECTION OF TRAVEL AND FULL WIDTH OF RAMP, WITH DOMES ALIGNED ON A SQUARE GRID WITH ITS GRIDLINES PARALLEL AND PERPENDICULAR TO THE CENTERLINE OF THE RAMP. COLOR OF DETECTABLE WARNING SURFACE SHALL BE YELLOW AND CONTRAST FROM ADJACENT
- 4. CURB INLET OR CATCH BASIN SHALL NOT BE ALLOWED IN FRONT OF RAMP.
- 5. CONCRETE SHALL BE 4" THICK LAYER OF COMMERCIAL MIX WITH A 28 DAY COMPRESSIVE STRENGTH OF 3300 PSI AND SHALL MEET ALL REQUIREMENTS FROM ODOT SECTION 00440, OVER 2" LAYER OF 3/4"-0" BASE ROCK COMPACTED TO 95% MAX. DENSITY PER AASHTO T-180.
- 6. SCORE CONCRETE AT GRADE CHANGES, SURFACE TEXTURE CHANGES AND AT ALL OTHER POINTS SHOWN.
- 7. CONCRETE SURFACE SHALL HAVE BROOM FINISH, AND EDGE ALL JOINTS.



**DWG NO: 245 CURB RAMPS** CAROL EARLE, P.E. | DATE: 4/1/2019 | REVISED BY: PCB/JHH





**DWG NO: 300 STREET SIGNING** CAROL EARLE, P.E. DATE: 4/1/2019 REVISED BY: PCB/JHF

18558 DIGITALLY SIGNED OREGON RENEWS: 12/31/2026

ORIGINAL COPY OF DIGITALLY SIGNED DOCUMENT AVAILABLE UPON REQUEST PACE PROJECT NO. 250032

DWG NAME: P250032-HV-DET.DW SHEET **C12.0** OF **21** 

**CITY OF HAPPY VALLEY ENGINEERING DEPARTMENT** 16000 SE MISTY DRIVE **HAPPY VALLEY, OR 97086** 

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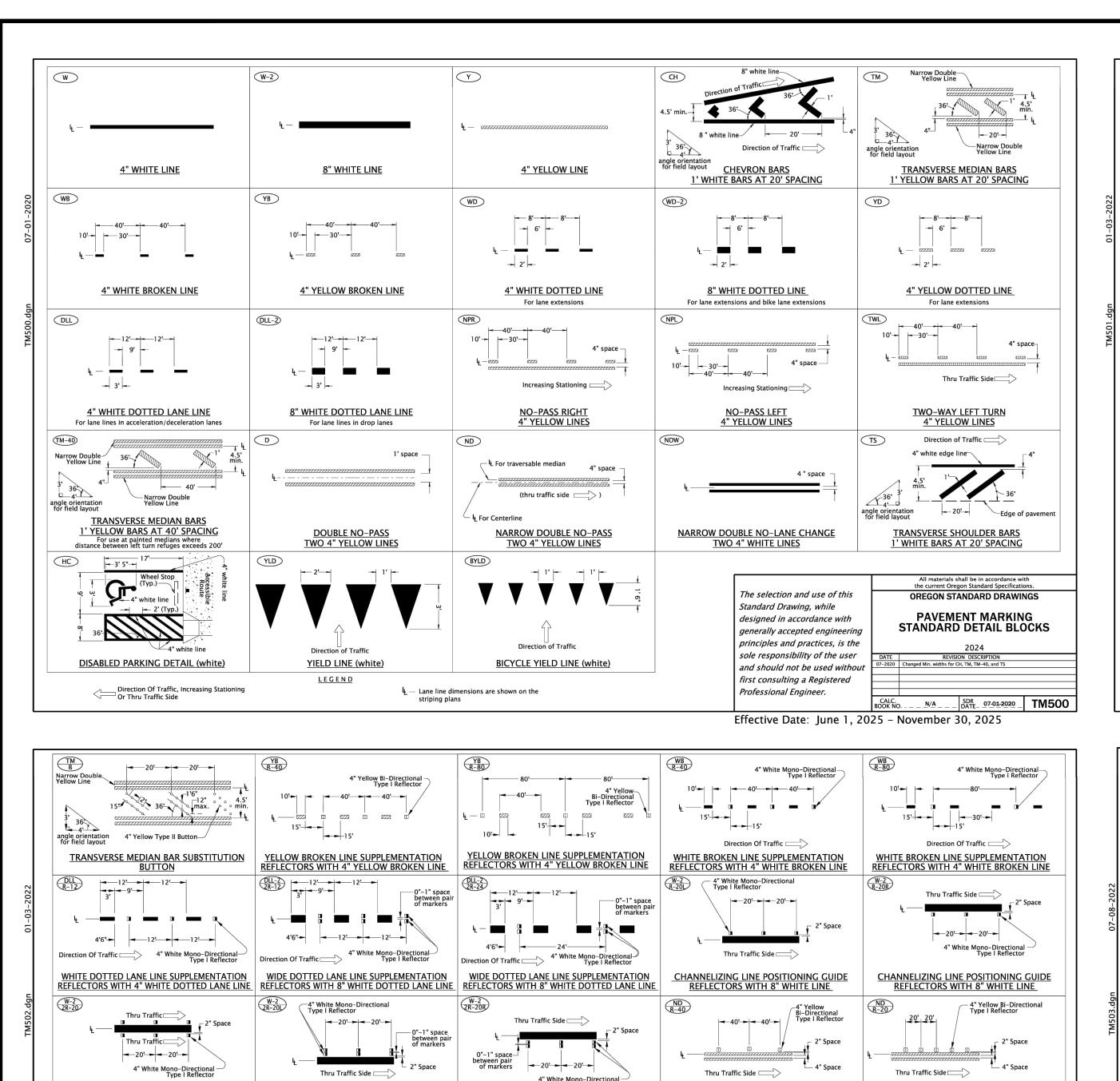
JUNE 2025 AS SHOWN

HAPPY VALLEY 2025 STREET IMPROVEMENTS CIP-02-25

HAPPY VALLEY STANDARD DETAILS

DESIGNED RAWN DATE | BY APP **REVISION** 

PACE Engineers 4500 Kruse Way, Suite 250 Lake Oswego, OR 97035 p. 503.597.3222 www.paceengrs.com



CHANNELIZING LINE SUPPLEMENTATION

┌ 2" Space

Surface mount Raised Pavement Markers (RPMs) unless otherwise specified.

Direction Of Travel, Increasing Stationing or Thru Traffic Side

L — Lane line dimensions are shown on the striping plans

Mono-directional crystal white marker reflects white to the left in this symbol

Bi-directional yellow marker reflects yellow both left and right in this symbol

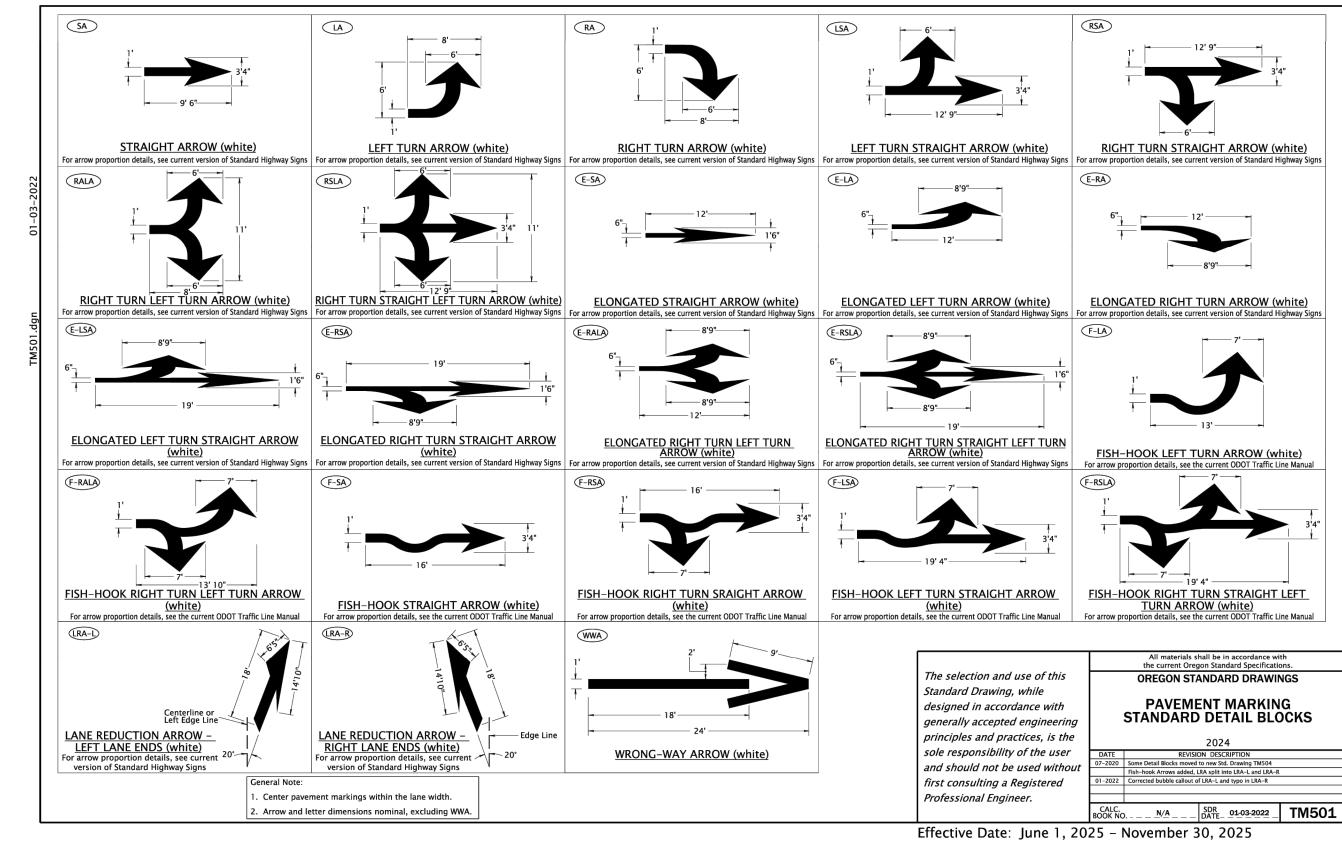
REFLECTORS WITH 8" WHITE LINE

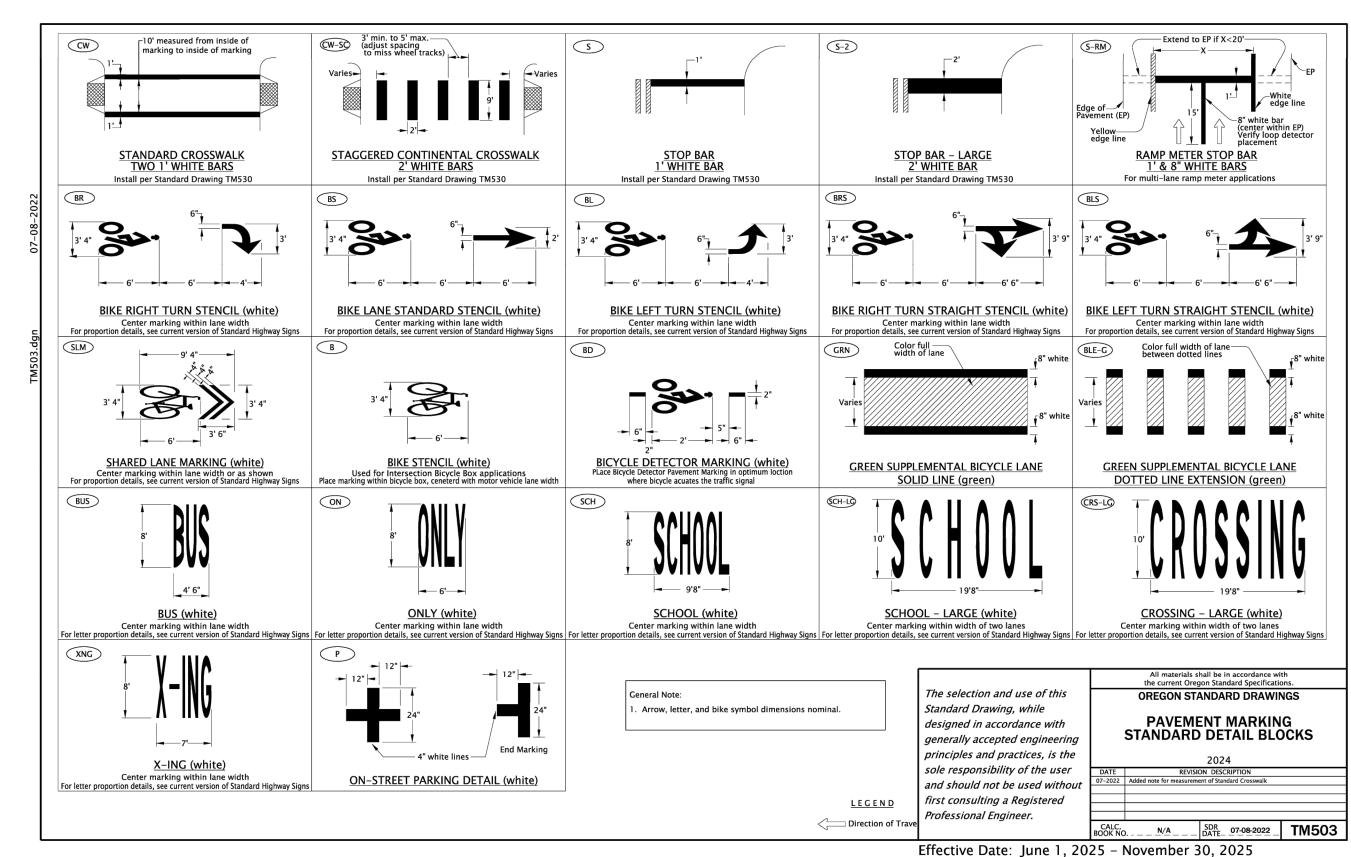
MEDIAN SIDE 40' > 40' > /

Thru Traffic Side 💳

YELLOW LINE POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINE

LEGEND





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**HAPPY VALLEY 2025 STREET IMPROVEMENTS** CIP-02-25 **ODOT STANDARD CHANNELIZATION DETAILS** 

18558 DIGITALLY SIGNED OREGON . RENEWS: 12/31/2026 ORIGINAL COPY OF DIGITALLY SIGNED OCUMENT AVAILABLE UPON REQUEST 250032

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REFLECTORS WITH 8" WHITE LINE

<u>DOUBLE NO-PASS POSITIONING GUIDE</u> <u>REFLECTORS WITH TWO 4" YELLOW LINES</u>

TWO WAY LEFT TURN POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES

20' 20'

- և For Centerline or Left Turn Lane

Thru Traffic Side

Bi-Directional Type I Reflector

4" Space

**REFLECTORS WITH 8" WHITE LINE** 

DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES

Increasing Stationing

NO-PASS RIGHT POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES

40'-40'-

4" Yellow Bi-Directional Type I Reflector

40' - 40' -

4 For Centerline

IARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES

20' > 20' > /

Thru Traffic Side 💳

YELLOW LINE POSITIONING GUID REFLECTORS WITH 4" YELLOW LIN

MEDIAN SIDE (typ. raised median)

4" Yellow Bi-Directional Type I Reflector

- 2" Space

The selection and use of this

designed in accordance with

generally accepted engineering

principles and practices, is the

sole responsibility of the user

and should not be used without

Effective Date: June 1, 2025 - November 30, 2025

**PACE Engineers** 

p. 503.597.3222

www.paceengrs.com

4500 Kruse Way, Suite 250

Lake Oswego, OR 97035

first consulting a Registered

Professional Engineer.

Standard Drawing, while

NARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES

Increasing Stationing

NO-PASS LEFT POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES

All materials shall be in accordance with

OREGON STANDARD DRAWINGS

PAVEMENT MARKING

STANDARD DETAIL BLOCKS

CALC. BOOK NO. \_ \_ N/A \_ \_ SDR DATE 01-03-2022 TM502

**→** 15' **←** 

2020 Changed min. width of TM/B from 6' to 4. 2022 Removed "LANE" from W-2/R-20R title

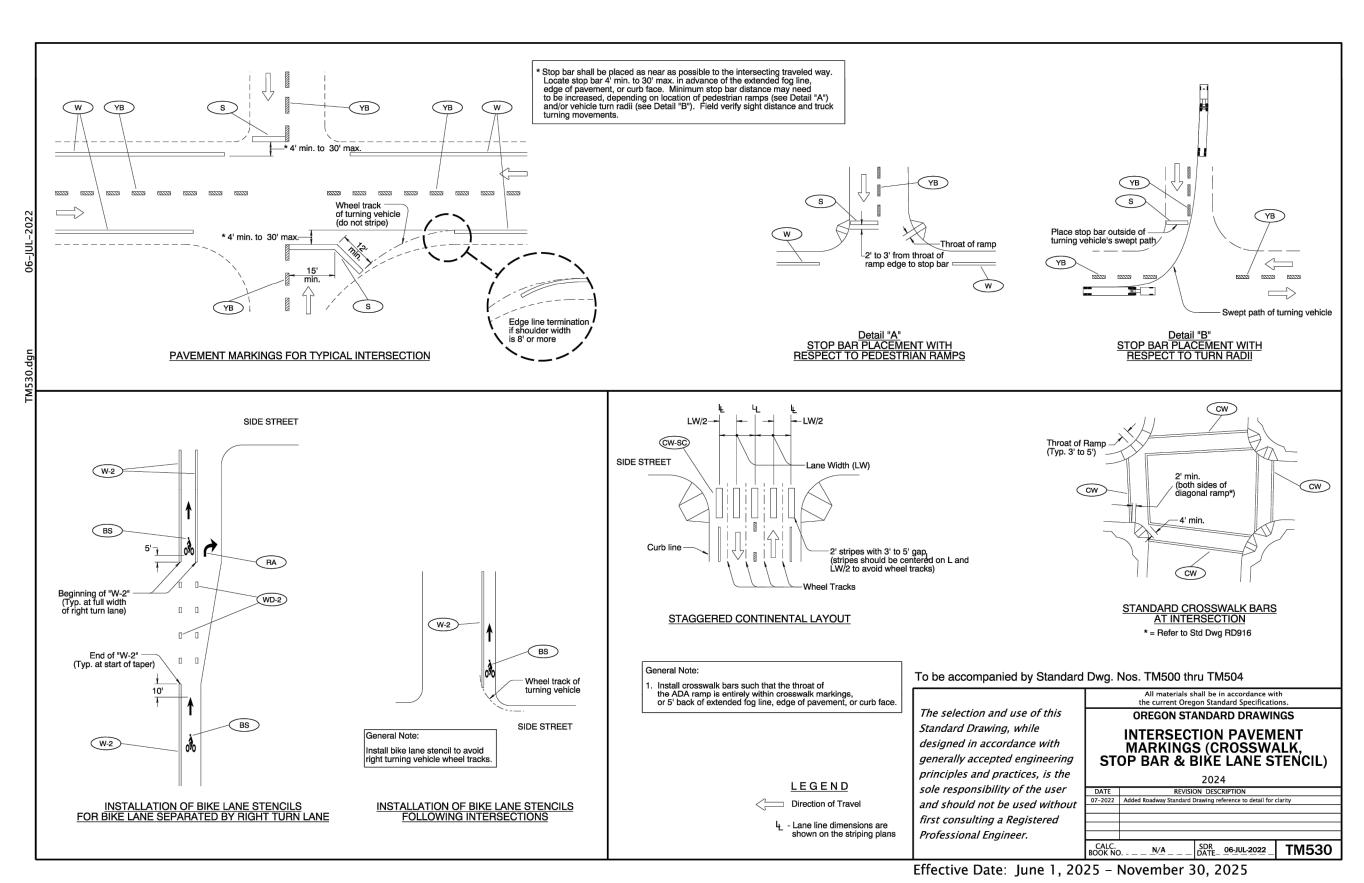


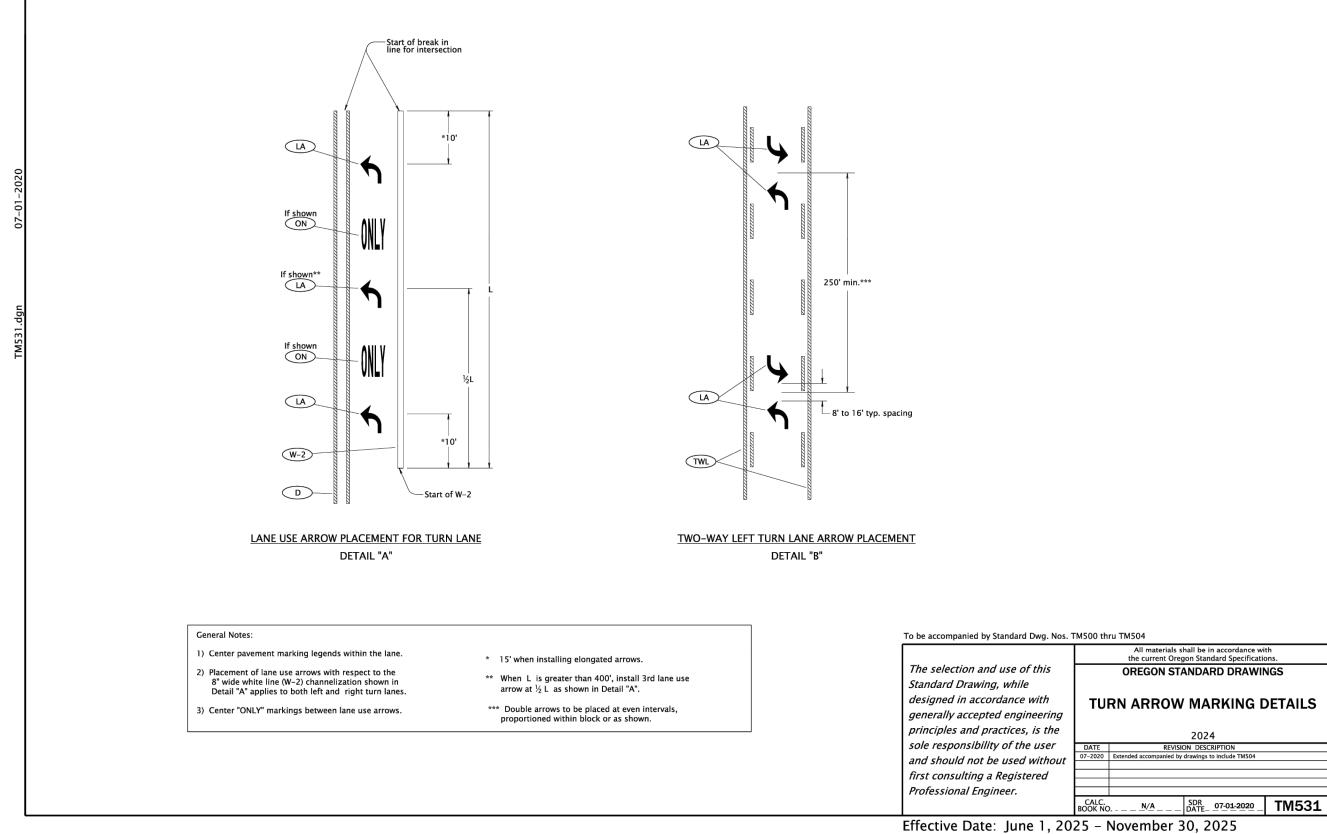
**CITY OF HAPPY VALLEY ENGINEERING DEPARTMENT 16000 SE MISTY DRIVE HAPPY VALLEY, OR 97086** 

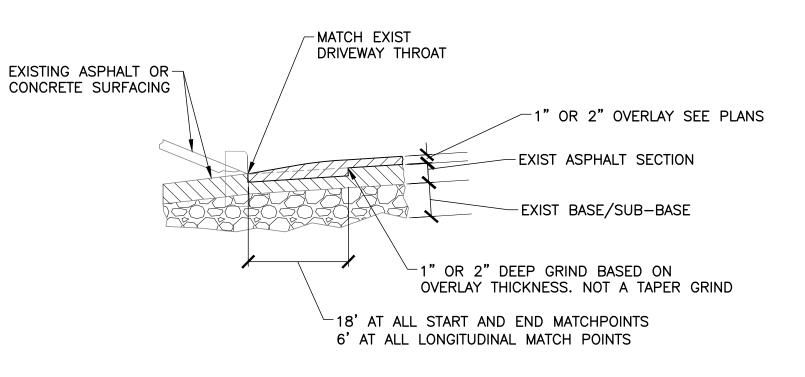
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JUNE 2025 AS SHOWN

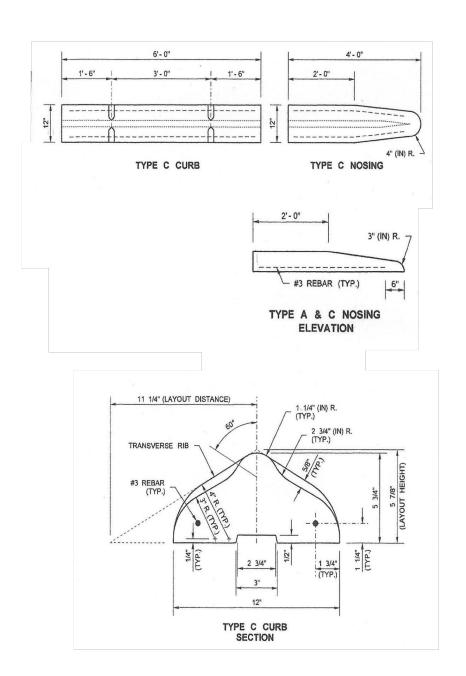
PACE PROJECT NO. DWG NAME: P250032-CHAN-DET.D VG SHEET **C13.0** OF **21** 







STANDARD BUTT JOINT AT GRADE







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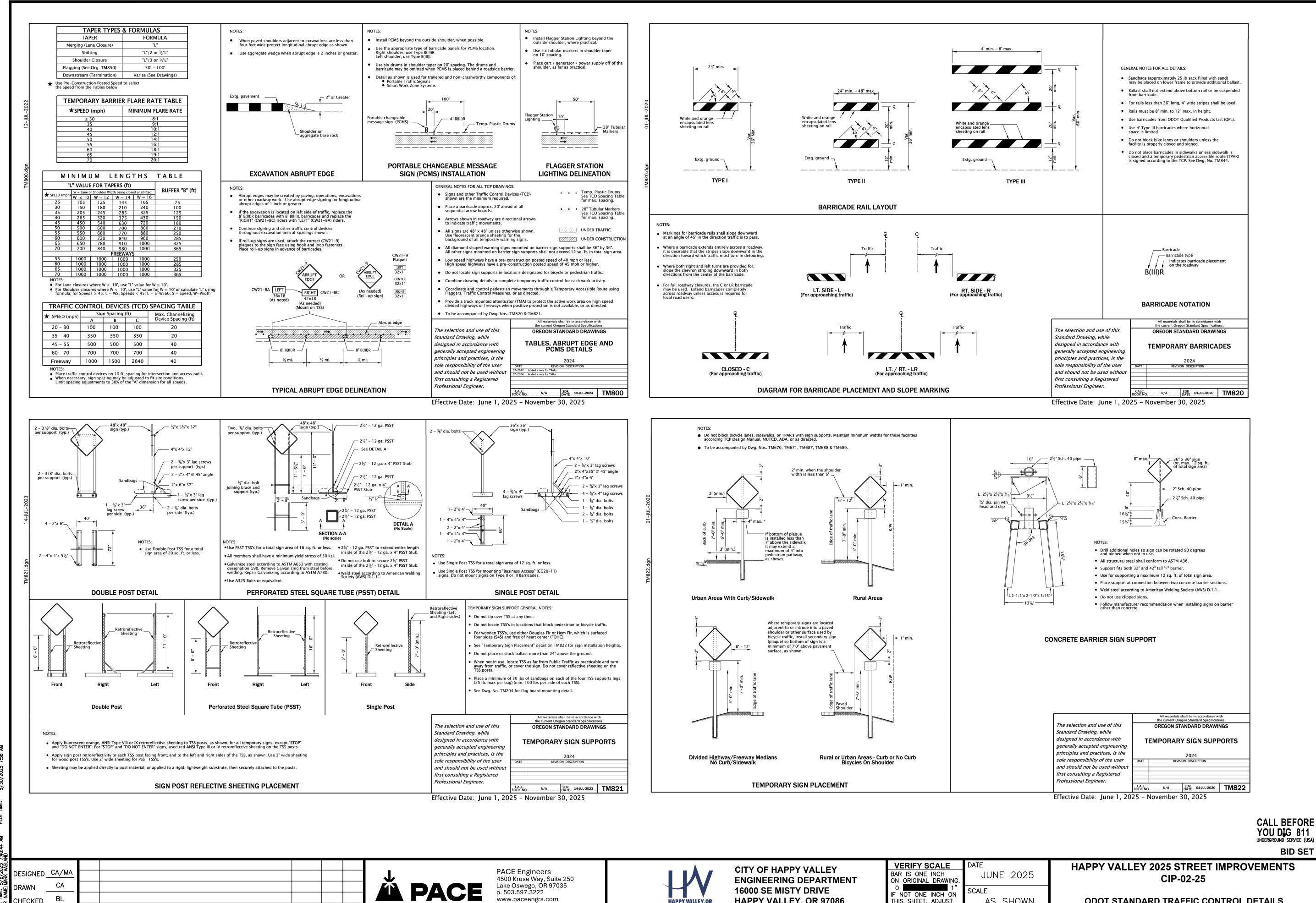
16000 SE MISTY DRIVE **HAPPY VALLEY, OR 97086** 

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JUNE 2025 AS SHOWN **HAPPY VALLEY 2025 STREET IMPROVEMENTS** CIP-02-25 **ODOT STANDARD CHANNELIZATION DETAILS** 

PACE PROJECT NO. 250032 DWG NAME: P250032-CHAN-DET.D SHEET C14.0 OF 21

**CITY OF HAPPY VALLEY ENGINEERING DEPARTMENT** 



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18558

OREGON

ODOT STANDARD TRAFFIC CONTROL DETAILS

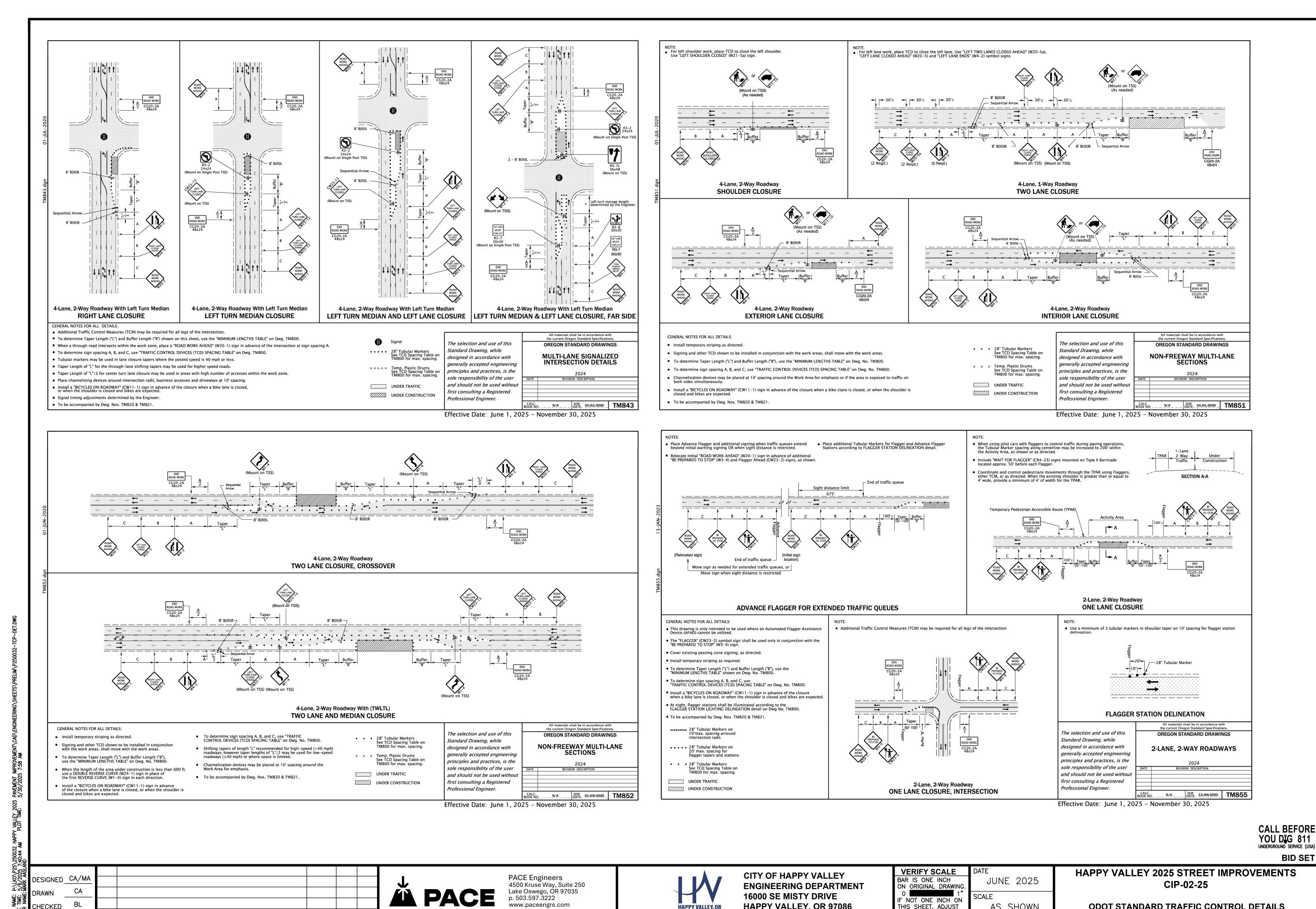
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**HAPPY VALLEY, OR 97086** 

AS SHOWN



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16000 SE MISTY DRIVE

**HAPPY VALLEY, OR 97086** 

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ODOT STANDARD TRAFFIC CONTROL DETAILS

PACE PROJECT NO. DWG NAME: P250032-TCP-DET.DV SHEET\_C16.0 OF \_21

**BID SET** 

THE IMPLEMENTATION OF THESE ESC PLANS AND CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED BY THE LOCAL JURISDICTION, AND VEGETATION/LANDSCAPING IS ESTABLISHED. THE OWNER SHALL BE

IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD. NO MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.

CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS OR VIOLATE APPLICABLE STANDARDS.

THE ESC FACILITIES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR THE SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.

THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. CONTRACTOR IS REQUIRED TO KEEP WRITTEN INSPECTION LOGS.

AT NO TIME SHALL THE SEDIMENT BE ALLOWED TO ACCUMULATE MORE THAN 1/3 THE BARRIER HEIGHT. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATIONS SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.

STABILIZED GRAVEL ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE

STORM DRAIN INLETS, BASINS AND AREA DRAINS SHALL BE PROTECTED UNTIL PAVEMENT SURFACES ARE COMPLETED AND/OR VEGETATION IS RE-ESTABLISHED.

12 IF THERE ARE EXPOSED SOILS OR SOILS NOT FULLY ESTABLISHED FROM OCTOBER 1ST THROUGH APRIL 30TH, THE WET WEATHER EROSION PREVENTION MEASURES WILL BE IN EFFECT. SEE THE EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN

13 THE OWNER SHALL REMOVE ESC MEASURES WHEN VEGETATION IS FULLY ESTABLISHED.

ALL EROSION CONTROL MEASURES SHALL COMPLY WITH LOCAL, STATE AND FEDERAL REGULATIONS.

### INSPECTION AND MAINTENANCE

INSPECT DAILY ON ACTIVE SITES, ONCE EVERY TWO WEEKS ON INACTIVE SITES, AND WITHIN 24 HOURS FOLLOWING A 0.5 INCH RAIN EVENT.

IMMEDIATELY REPAIR ANY DAMAGE.

REMOVE ACCUMULATED SEDIMENT ONCE IT HAS REACHED 1/3 THE BARRIER HEIGHT OR A MAXIMUM OF 10 INCHES,

INSPECT FOR CHANNEL FORMATION PARALLEL TO THE FENCE, WHICH INDICATES THAT THE GEOTEXTILE IS

ACTING AS A FLOW BARRIER.

6 CHECK FOR UNDERCUTTING OR PIPING UNDER FENCE

# TEMPORARY GRASSES AND PERMANENT VEGETATIVE COVER

TEMPORARY GRASS COVER MEASURES MUST BE FULLY ESTABLISHED BY NOVEMBER 1 OR OTHER COVER MEASURES WILL HAVE TO BE IMPLEMENTED UNTIL ADEQUATE GRASS COVERAGE IS ACHIEVED. TO ESTABLISH AN ADEQUATE GRASS STAND FOR CONTROLLING EROSION BY NOVEMBER 1, IT IS RECOMMENDED THAT SEEDING AND MULCHING OCCUR BY SEPTEMBER 1. (ANY SEEDING PLANNED AFTER SEPTEMBER 1 MUST BE PRE-GERMINATED

HYDROMULCH SHALL BE APPLIED WITH GRASS SEED AT A RATE OF 2000 LB/ACRE ON SLOPES STEEPER THAN 10 PERCENT, HYDROSEED AND MULCH SHALL BE APPLIED WITH A BONDING AGENT (TACKIFIER). APPLICATION RATE AND METHODOLOGY TO BE IN ACCORDANCE WITH SEED SUPPLIER RECOMMENDATIONS.

SEEDING-RECOMMENDED EROSION CONTROL GRASS SEED MIXES SHALL FOLLOW SEEDING GUIDELINES AS PER CLACKAMAS COUNTY WES EROSION PREVENTION PLANNING & DESIGN MANUAL. SIMILAR MIXES DESIGNED TO ACHIEVE EROSION CONTROL MAY BE SUBSTITUTED IF APPROVED BY JURISDICTION.

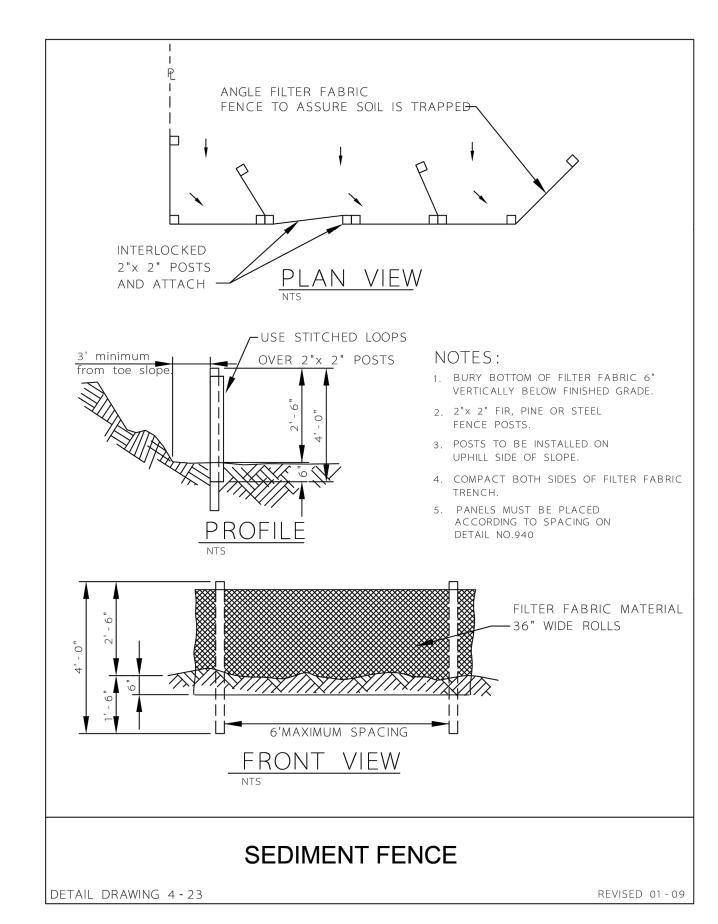
FERTILIZATION FOR GRASS SEED - IN ACCORDANCE WITH SUPPLIER'S RECOMMENDATIONS.

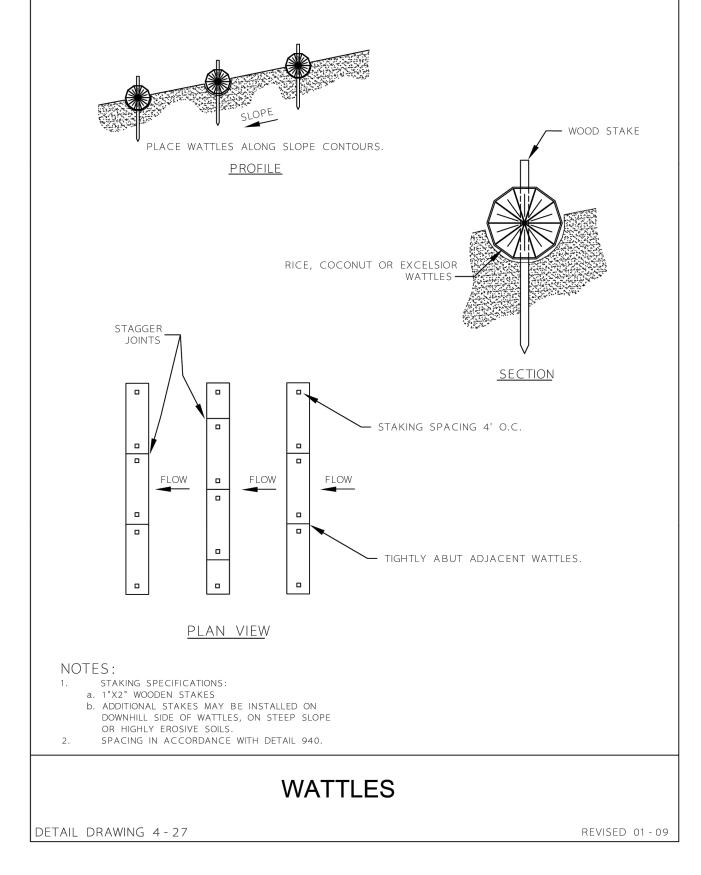
WATERING-SEEDING SHALL BE SUPPLIED WITH ADEQUATE MOISTURE TO ESTABLISH GRASS.

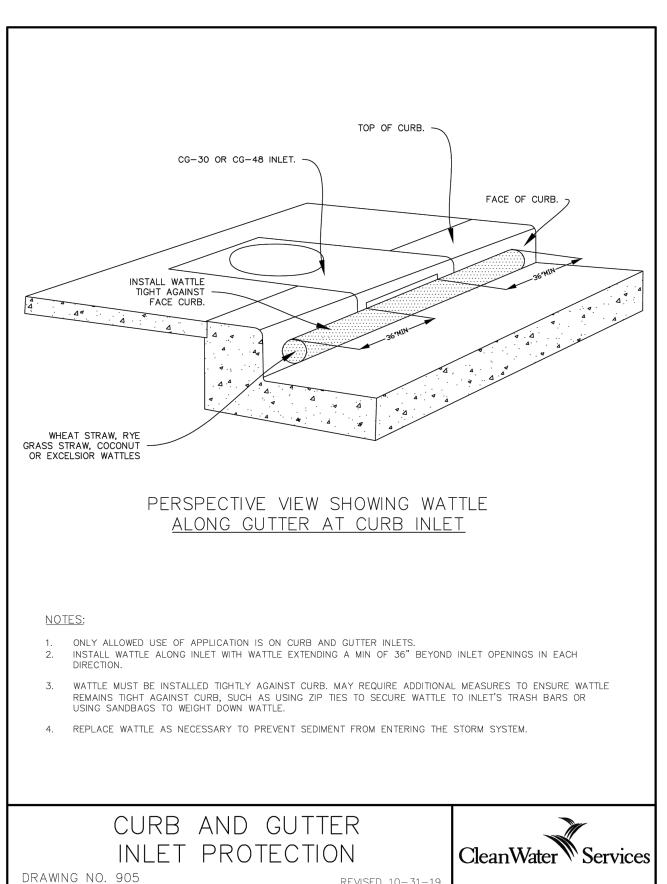
SUPPLY WATER AS NEEDED, ESPECIALLY IN ABNORMALLY HOT OR DRY WEATHER OR ON ADVERSE SITES. WATER APPLICATION RATES SHOULD BE CONTROLLED TO PROVIDE ADEQUATE MOISTURE WITHOUT CAUSING RUNOFF.

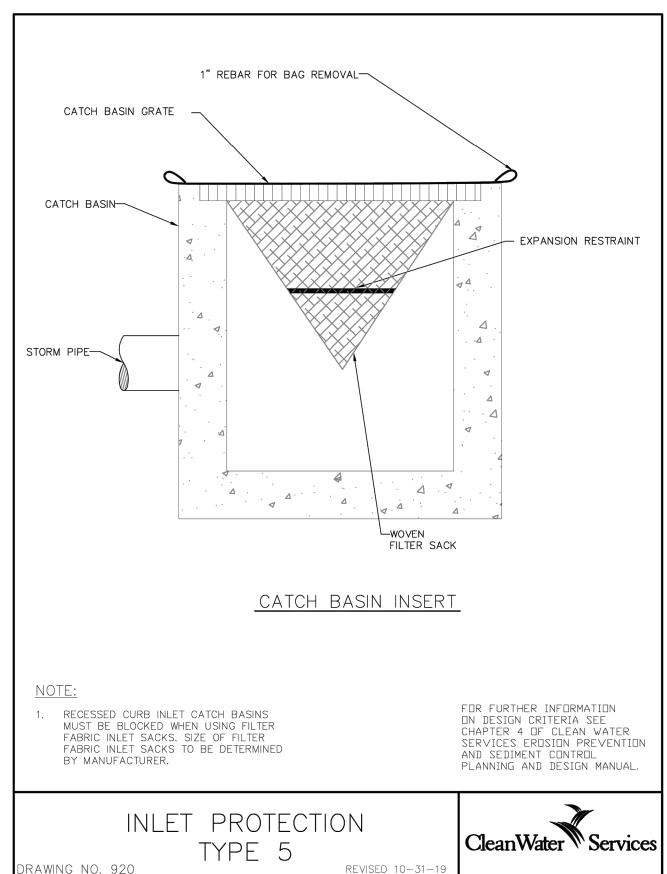
RE-SEEDING - AREAS WHICH FAIL TO ESTABLISH GRASS COVER ADEQUATE TO PREVENT EROSION SHALL BE RE-SEEDED AS SOON AS SUCH AREAS ARE IDENTIFIED, AND ALL APPROPRIATE MEASURES TAKEN TO ESTABLISH ADEQUATE COVER.

AT THE END OF SITE CONSTRUCTION, PAVING APPROVED PERMANENT SITE LANDSCAPING OR ESTABLISHMENT OF A HEALTHY STAND OF GRASS (OR ALTERNATIVE VEGETATION AS APPROVED) MUST OCCUR PRIOR TO REMOVAL OF SITE EROSION CONTROL MEASURES.











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JUNE 2025 AS SHOWN

**HAPPY VALLEY 2025 STREET IMPROVEMENTS** CIP-02-25

**EROSION CONTROL STANDARD NOTES & DETAILS** 

FEDERAL REGULATIONS.

RESPONSIBLE FOR MAINTENANCE AFTER THE PROJECT IS ACCEPTED. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY MARKED DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE MARKINGS SHALL BE

THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL

ANTICIPATED SITE CONDITIONS. DURING CONSTRUCTION PERIOD, THESE ESC FACILITIES

PROJECT.

10 PAVEMENT SURFACES AND VEGETATION ARE TO BE PLACED AS RAPIDLY AS POSSIBLE.

SEEDING OR HYDRO-SEEDING SHALL BE PERFORMED NO LATER THAN SEPTEMBER 1

MANUAL (CHAPTER 4) FOR REQUIREMENTS.

15 INSTALL WATTLES OR BIOBAGS AROUND EDGE OF EXPOSED BASE FOR SIDEWALK & ADA RAMP WORK AREAS.

REPLACE DETERIORATED OR CLOGGED GEOTEXTILE.