TACOMA PUBLIC WORKS VERTICAL DATUMS FIXED DATUM TIDAL DATUM EPOCH 1983-2001 G11 NGS ELEV 17.454 (1973) - NGS BENCH MARK (VARIES ON A 19 YEAR CYCLE) CITY OF TACOMA ELEV 17.45 - MEAN HIGH WATER - MEAN TIDE LEVEL NGVD29 & CITY OF TACOMA DATUM 0.00 NAVD88 - MEAN LOW WATER DATUM 0.00 CORPS OF ENGINEERS & (TIDAL DATUM 0.00) PORT OF TACOMA DATUM 0.00 -MHHW: MEAN HIGHER HIGH WATER MLLW: MEAN LOWER LOW WATER "OLD CITY DATUM" 0.00 -(PRIOR TO JULY 1, 1990) TIDAL INFORMATION REVISED OCTOBER 7, 2016 JEFF WEBSTER PLS CHIEF SURVEYOR UTILIZING NATIONAL GEODETIC SURVEY TIDAL ELEVATION DATA FOR BENCH MARK CITY OF TACOMA PUBLIC WORKS DEPARTMENT "TIDAL 22 1933" VM: 13315 STATION ID: 9446484

GENERAL CONSTRUCTION SEQUENCE:

- ARRANGE NECESSARY PRE-CONSTRUCTION MEETINGS WITH THE CITY OF TACOMA CONSTRUCTION DIVISION AND BUILDING AND LAND USE SERVICE, TACOMA POWER, TACOMA WATER, ARCHITECT, AND ENGINEER. STAKE PROJECT LIMITS PRIOR TO BEGINNING CONSTRUCTION.
- NOTIFY CITY INSPECTOR IN WRITING ABOUT SCHEDULED UTILITY AND ROAD CLOSURES AT LEAST 14 DAYS PRIOR TO CONSTRUCTION. DAMAGE TO ANY OF THE PUBLIC UTILITIES AS A RESULT OF THE CONSTRUCTION OF THIS PROJECT SHALL BE REPAIRED BY THE
- INSTALL ALL APPLICABLE TESC FACILITIES. MAINTAIN ALL TESC FACILITIES DURING THE LENGTH OF THE CONSTRUCTION PROCESS.
- ADDITIONAL FACILITIES MAY BE REQUIRED AS FIELD CONDITIONS INSTALL ALL NEW PAVEMENT, CHANNELIZATION AND SIGNAGE.
- DEMOLISH EXISTING PAVEMENT. REMOVE TESC FACILITIES ONLY AFTER OBTAINING FINAL APPROVAL
- FROM CITY INSPECTOR.

TRAFFIC TO REMAIN OPEN ON ALEXANDER AVENUE DURING CONSTRUCTION.

ELEVATION DATUM

VERTICAL DATUM: CITY OF TACOMA (NGVD 29) BENCHMARK: 3 INCH BRASS DISK ON MILWAUKEE WAY, SOUTH OF E. 11TH AVENUE. BENCHMARK NO. 2863 ELEVATION = 12.117'

BASIS OF BEARING

BASIS OF BEARINGS FOR THIS SURVEY IS THE CITY OF TACOMA DATUM, NAD 83(91) WASHINGTON SOUTH

GENERAL SURVEY NOTE

SURVEY OUTSIDE OF THE RIGHT OF WAY PROJECT LIMITS SHOWN AS BACKGROUND INFORMATION.

PROJECT CONTACT INFORMATION

	<u>UTILITY CONTACTS</u>						
OWNER - PORT OF TACOMA	UTILITY	REGULATORY AGENCY	CONTACT	PHONE NUMBER			
STAN RYTER, SENIOR PROJECT MANAGER EMAIL: sryter@portoftacoma.com ENGINEER — KPFF CONSULTING ENGINEERS SCOTT KUEBLER, PROJECT MANAGER STEVE KINGSLEY, PROJECT ENGINEER PHONE: (253) 396-0150 EMAIL: scott.kuebler@kpff.com	STORM WATER SANITARY SEWER POWER WATER GAS TELEPHONE CABLE	CITY OF TACOMA CITY OF TACOMA TACOMA POWER TACOMA WATER PSE/PILCHUCK QWEST AT&T BROADBAND	ENVIRONMENTAL SERVICES ENVIRONMENTAL SERVICES JOHN MARTINSEN KAREN GERKEN GRANT WHITLEY TERRY BRENTIN JOY BATEMAN MARTIN MCELROY	(253) 591–5588 (253) 591–5588 (253) 502–8659 (253) 502–8736 (253) 502–8746 (253) 502–6242 (253) 597–5100 (253) 845–4867			
steve.kingsley@kpff.com	FIRE PROTECTION CONST.	CITY OF TACOMA CITY OF TACOMA	CARL ANDERSON LARRY CRISWELL	(253) 591–5503 (253) 591–5787			

PORT OF TACOMA WAPATO CREEK BRIDGE AT PARCEL 15 DRIVEWAY AND CHANNELIZATION IMPROVEMENTS

ALEXANDER AVENUE TACOMA. WASHINGTON

GENERAL PLAN NOTES

ABBREVIATIONS

BOTTOM OF CURB BACK OF WALK

CURB & GUTTER

CATCH BASIN CENTERLINE

CLEANOUT

CONCRETE

DRIVEWAY EAST, EASTING

EXISTING

FINISH FLOOR

FLOW LINE

HIGH POINT

LINEAR FOOT

LOW POINT MECHANICAL

MANHOLE

INVERT ELEVATION

NORTH, NORTHING

POINT OF CURVATURE

POINT OF TANGENCY

RETURN TO OWNER

RIGHT-OF-WAY

SANITARY SEWER

STORM DRAIN

TOP OF CURB

UNDERGROUND

WATER/WEST

SOUTH

STATION

SIDEWALK **TELEPHONE**

TYPICAL

WITH

POINT OF COMBINED CURVATURE

POINT OF REVERSED CURVATURE

POLYVINYL CHLORIDE/POINT OF

S 88° 50° 25.38" E

6854.697

NOT TO SCALE

PROPERTY LINE

VERTICAL CURB

CONSTRUCTION DIAMETER

DUCTILE IRON PIPE

CONST

D/W

EX/EXIST

- COORDINATE ALL WORK WITH ON-SITE DOCUMENTS. FOR ON-SITE WORK, REFER TO THE BUILDING AND SITE DEVELOPMENT PERMITS THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS AND ANY OTHER NEEDED
- ACTIONS TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC 3. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2018 WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) STANDARD
- SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION AS MODIFIED FOR USE BY THE CITY OF TACOMA AND THE CITY OF TACOMA STANDARD PLANS. 4. A COPY OF THE APPROVED PLANS AND SPECIFICATIONS SHALL BE ON-SITE WHENEVER CONSTRUCTION IS IN PROGRESS
- THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY
- 7. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF UTILITIES BY CONTACTING A UTILITY LOCATE SERVICE AND SHALL PROVIDE SUFFICIENT NOTIFICATION TO THE AFFECTED UTILITY COMPANIES PRIOR TO STARTING WORK. COORDINATE WORK FOR EXISTING UTILITIES WITH CONTACTS SHOWN IN THE UTILITY CONTACTS TABLE. CONTACT UNDERGROUND UTILITIES LOCATION AT 1-800-424-5555 AT LEAST 48 HOURS BEFORE COMMENCEMENT OF CONSTRUCTION.
- 8. THE PROJECT HAS WORK OVER AN EXISTING 36" STEEL WATER MAIN OWNED BY TACOMA WATER. PLEASE PROVIDE 72 HOURS ADVANCE NOTICE PRIOR TO BEGINNING WORK CONTACT JIM GOODMAN AT TACOMA WATER SUPPLY (253)-502-8667
- 9. THE CONTRACTOR SHALL NOTIFY THE TACOMA FIRE DEPARTMENT (253) 591-5737 24 HOURS IN ADVANCE OF ALL WATER SERVICE INTERRUPTIONS. HYDRANT SHUTOFFS, AND STREET CLOSURES OR OTHER ACCESS BLOCKAGE. THE CONTRACTOR SHALL ALSO NOTIFY THE FIRE DEPARTMENT OF ALL NEW, RELOCATED, OR
- 10. THE CONTRACTOR SHALL MAINTAIN EMERGENCY VEHICLE ACCESS ON ALL AFFECTED STREETS AT ALL TIMES.
- 11. MAINTAIN AND PROTECT ALL MANHOLES, CATCH BASINS, FIRE HYDRANTS, MONITORING WELLS, WATER VALVES, PIPING, SURVEY MONUMENTS, TRAFFIC CONTROL BOXES, WATER METERS AND ENGINEER OTHER IMPROVEMENTS UNLESS OTHERWISE NOTED ON THE PLANS. CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY THE CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST TO THE OWNER.
- 12. THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 24 MONTHS FROM THE DATE OF CITY APPROVAL. THE CITY RESERVES THE RIGHT TO REQUIRE FROM WHAT IS DEPICTED ON THESE PLANS.
- REQUIREMENTS FOR THIS PROJECT. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED AND APPROVED PRIOR TO COMMENCING WORK 14. CONTRACTOR SHALL VERIFY ALL UTILITY POINTS OF CONNECTIONS TO EXISTING UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- 16. THE CONSTRUCTION BASELINE ON THE PLANS IS LOCATED ON THE BRASS DISKS FOUND WITHIN THE CENTER OF ALEXANDER AVENUE: ALL DIMENSIONS, STATIONS
- AND OFFSETS ARE BASED ON THE CONSTRUCTION BASELINE UNLESS NOTED OTHERWISE. 17. LIMITS OF PAVEMENT REMOVAL ARE SHOWN ON THE PLAN FOR BID PURPOSES. EXACT SAWCUT AND PAVEMENT REMOVAL LIMITS WILL BE DETERMINED BY THE CITY
- OF TACOMA CONSTRUCTION INSPECTOR IN THE FIELD.
- 18. RESTORATION SHALL BE IN ACCORDANCE WITH THE CITY OF TACOMA ROW RESTORATION POLICY.
- 19. THE ENGINEER OF RECORD SHALL PROVIDE AN ENGINEER'S CERTIFICATION TO THE CITY OF TACOMA AFTER FACILITY INSTALLATION AND PRIOR TO PERMIT FINAL INSPECTION AND/OR CLOSEOUT. THE ENGINEER'S CERTIFICATION SHALL INCLUDE
- a. THE PERMIT NUMBER
- b. STATEMENTS TO ATTEST:
- i. THAT ALL STORMWATER FACILITIES HAVE BEEN INSTALLED ACCORDING TO THE APPROVED PERMIT DOCUMENTS. CHANGES TO THE APPROVED PERMIT SET THAT ARE REQUIRED DURING CONSTRUCTION SHALL BE SUBMITTED TO BLUS FOR ESSE TO REVIEW AND APPROVAL DURING THE CONSTRUCTION PHASE AND PRIOR TO THE CHANGE BEING CONSTRUCTED.
- ii. AS-BUILT DRAWINGS HAVE BEEN PROVIDED TO THE CITY ELECTRONICALLY. THESE SHALL BE PROFESSIONALLY DRAFTED ENGINEERING DRAWINGS THAT ARE STAMPED, SIGNED, AND DATED BY A WASHINGTON STATE LICENSED ENGINEER. THE DRAWINGS MUST ACCURATELY REPRESENT THE PROJECT AS CONSTRUCTED. iii. THE OPERATIONS AND MAINTENANCE MANUAL IS LOCATED ONSITE
- THE ENGINEER'S CERTIFICATION SHALL BE SUBMITTED TO ENVIRONMENTAL SERVICES / PLAN REVIEW LEAD/ 326 EAST D STREET / TACOMA, WA 98421. FOR SITE AND BUILDING PERMITS SEND A COPY OF THE CERTIFICATION TO BUILDING AND LAND USE SERVICES 747 MARKET STREET, ROOM 345, TACOMA, WA 98402.

SHEET INDEX:

AS SHOWN

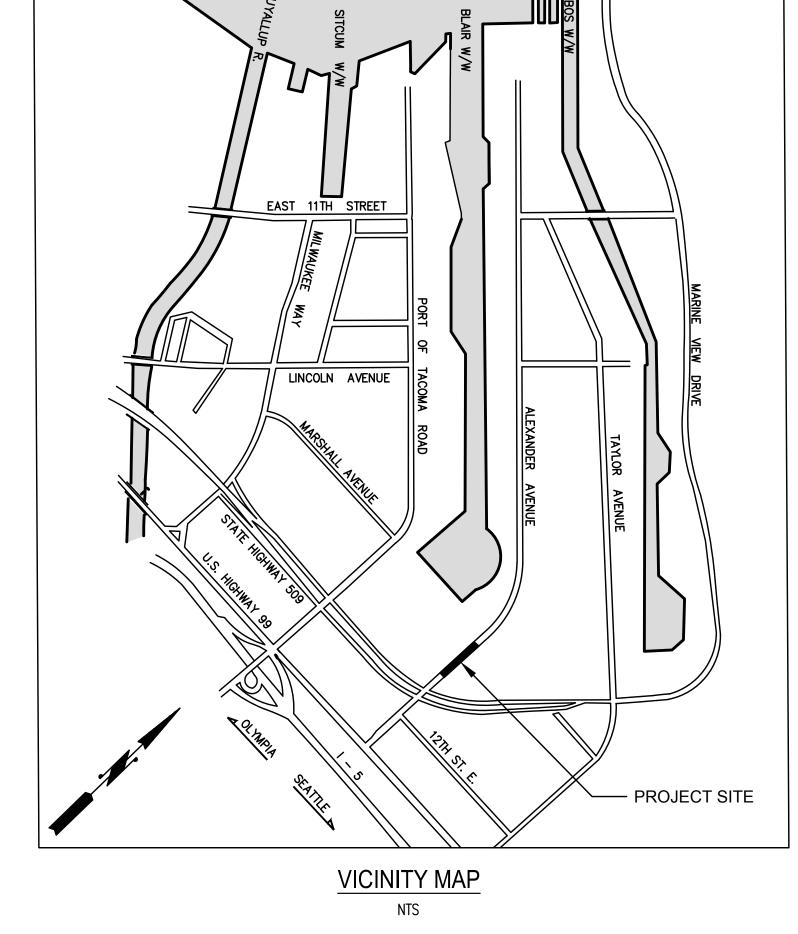
SWK

- COVER SHEET SURVEY SURVEY
- DEMOLITION AND TESC PLAN DEMOLITION AND TESC NOTES AND DETAILS
- PAVING PLAN DRIVEWAY SECTION

GRAPHIC SCALE

1 inch = 200 ft. HORIZ

- CHANNELIZATION AND SIGNAGE PLAN
- CHANNELIZATION AND SIGNAGE DETAILS 10. GENERAL NOTES



TRAFFIC CONTROL NOTES

LOCATION: ALEXANDER AVENUE

THE FOLLOWING SPECIAL TRAFFIC CONTROLS SHALL SUPPLEMENT SECTION 1-07.23 OF THE STANDARD SPECIFICATIONS.

- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A TRAFFIC CONTROL PLAN TO THE CITY THAT MEETS THE CITY OF TACOMA TRAFFIC CONTROL HANDBOOK AND RIGHT-OF-WAY DESIGN MANUAL. CONTACT TRAFFIC DEPARTMENT. PHONE NUMBER (253) 591-5554. FOR SPECIFIC TRAFFIC CONTROL REQUIREMENTS FOR THIS PROJECT. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED AND APPROVED PRIOR TO
- 2. WHEN NECESSARY, AND JUSTIFIED, SINGLE LANES OF TRAFFIC MAY BE CLOSED DURING SPECIFIED HOURS OF THE DAY. THE DETERMINATION OF THESE HOURS SHALL BE IN CONSULTATION WITH AND SUBJECT TO THE APPROVAL OF THE CITY TRAFFIC ENGINEER AND PORT OF TACOMA. PROVIDED THAT LOCAL ACCESS IS MAINTAINED AT ALL TIMES WITH A MINIMUM OF A 12-FOOT WIDE ACCESS LANE FOR EACH DIRECTION OF TRAFFIC. THE CONTRACTOR SHALL COORDINATE ANY LANE CLOSURES AND COOPERATE WITH THE VARIOUS BUSINESSES AND/OR RESIDENCES ADJACENT TO THE PROJECT SITE. A MINIMUM OF ONE ACCESS SHALL BE MAINTAINED TO ALL PROPERTIES AND DIRVEWAYS ON ALEXANDER AVENUE AT ALL TIMES.

THREE (3) WORKING DAYS PRIOR TO ANY LANE CLOSURE, THE CONTRACTOR SHALL NOTIFY:

TACOMA PUBLIC WORKS ENGINEERING DIVISION TACOMA PUBLIC WORKS STREETS AND GROUNDS (253-591-5495)TACOMA PUBLIC WORKS SOLID WASTE (253-591-5544)TACOMA FIRE DEPARMENT (253-591-5733) TACOMA POLICE DEPARTMENT (253-591-5951)LESA COMMUNICATION CENTER (253-798-4721-0pt.#3) TACOMA PUBLIC SCHOOLS TRANSPORTATION OFFICE (253-571-1853) (253-581-8109)PIERCE TRANSIT

15+00 20+00 35+000 — STA: 35+44.87 BRASS DISK SCRIBE X N: 706290.465 E: 1175345.203 ELEV = 11.13

> PRIOR TO SCHEDULING OF THE PRE-CONSTRUCTION MEETING AND ISSUANCE OF THE WORK ORDER PERMIT. A BOND SHALL BE SUBMITTED BY THE PERMIT APPLICANT FOR THE VALUE OF THE SCOPE OF WORK TO BE PERFORMED AS ILLUSTRATED BY THE APPROVED WORK ORDER PLANS IN ACCORDANCE WITH T.M.C. 10.22.070, SECTION F.



CALL 48 HOUR 07 North 31st Street, Suite 100 Tacoma, Washington 98407 253) 396-0150 Fax (253) 396-0162 1-800-424-5555



CITY MONUMENT #553

N: 703885.587

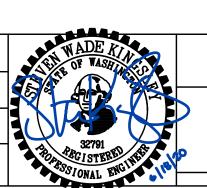
E: 1168411.589

STA: 10+00

N: 703746.863 E: 1175264.875 ELEV = 13.80

FOUND BRASS DISK

CONSTRUCTION 06/18/20 CMB RRL FIELD BOOKS REVISION DATE APPD

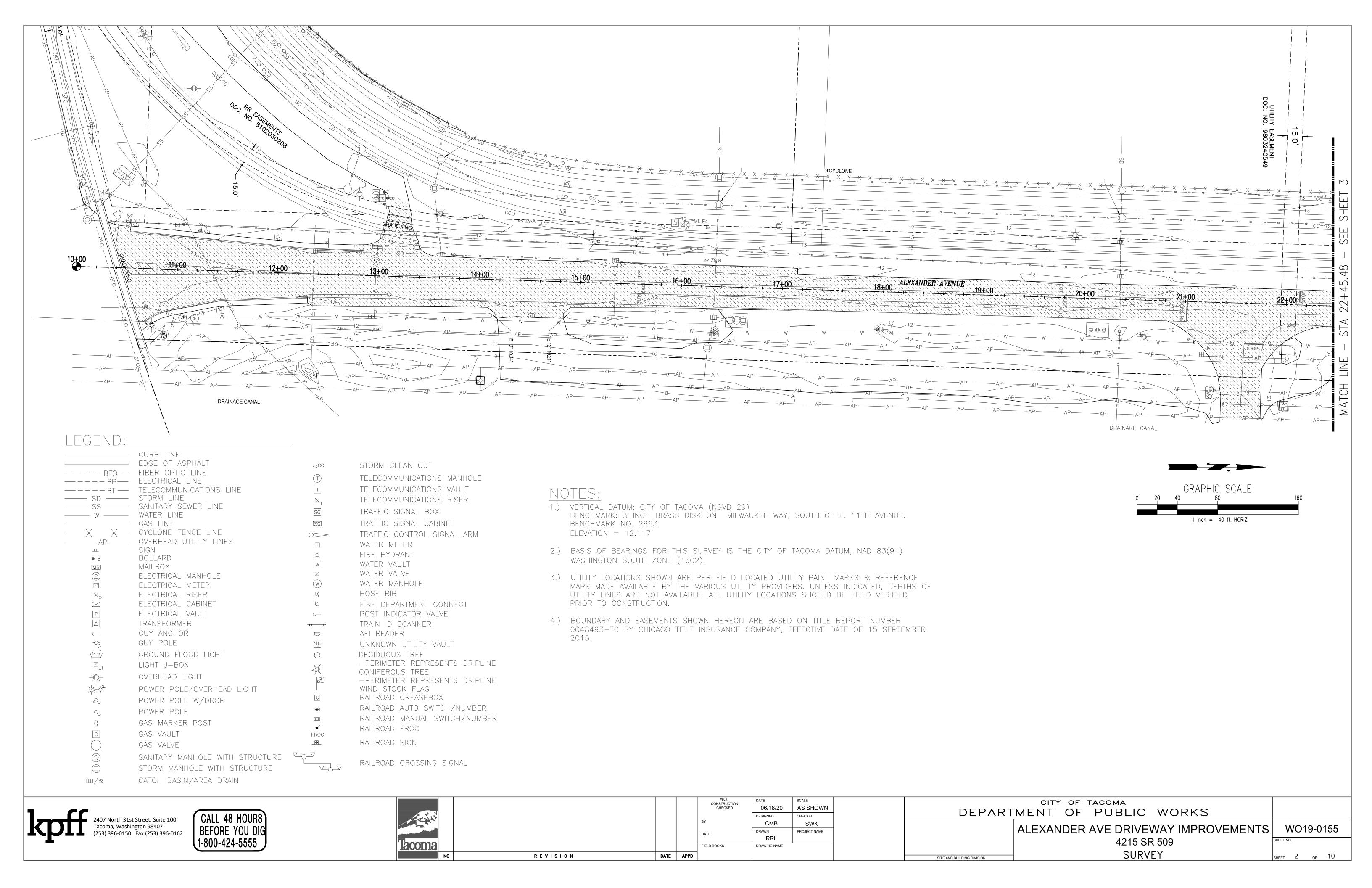


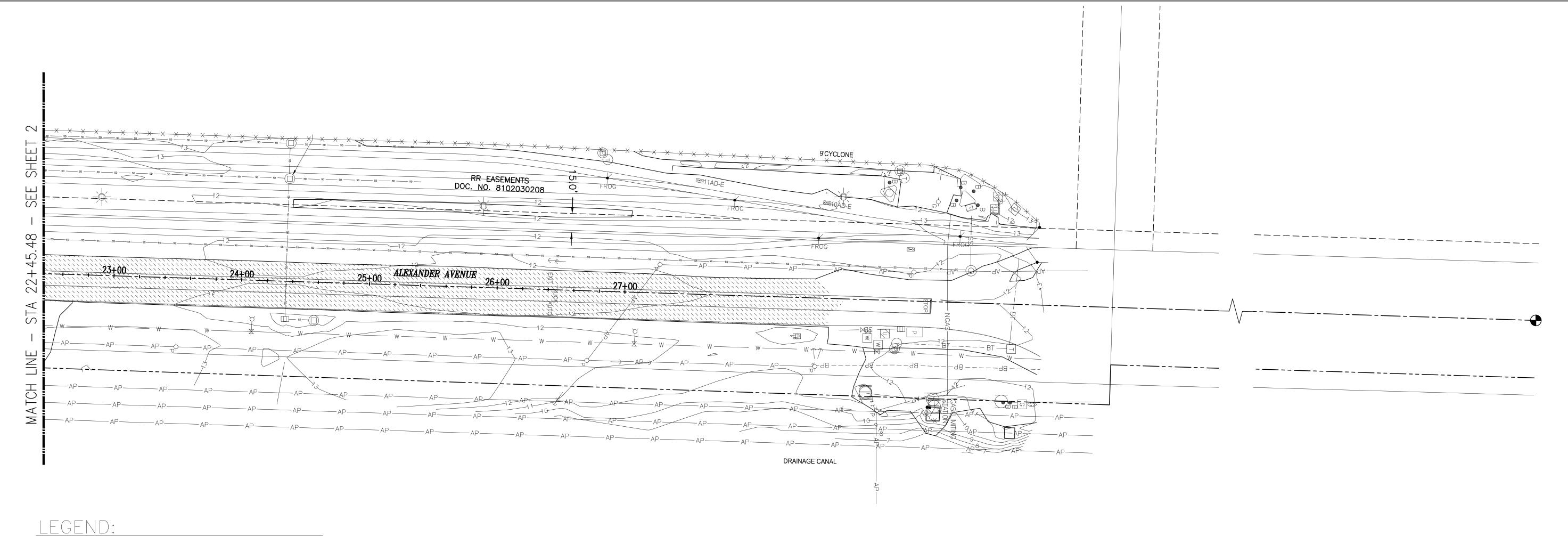
SITE AND BUILDING DIVISION

CITY OF TACOMA DEPARTMENT OF PUBLIC WORKS

ALEXANDER AVE DRIVEWAY IMPROVEMENTS WO19-0155 4215 SR 509

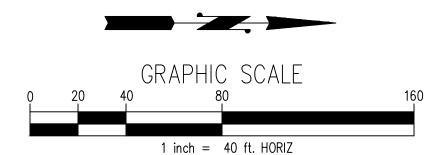
COVER SHEET _{DET} 1 OF 10





---- CURB LINE EDGE OF ASPHALT STORM CLEAN OUT TELECOMMUNICATIONS MANHOLE TELECOMMUNICATIONS VAULT ——— SD ——— STORM LINE TELECOMMUNICATIONS RISER SG TRAFFIC SIGNAL BOX ----- W ----- WATER LINE TRAFFIC SIGNAL CABINET GAS LINE SG CYCLONE FENCE LINE TRAFFIC CONTROL SIGNAL ARM WATER METER \blacksquare SIGN FIRE HYDRANT BOLLARD WATER VAULT MAILBOX MB WATER VALVE ELECTRICAL MANHOLE WATER MANHOLE ELECTRICAL METER HOSE BIB ELECTRICAL RISER ELECTRICAL CABINET [P] FIRE DEPARTMENT CONNECT P ELECTRICAL VAULT POST INDICATOR VALVE TRANSFORMER TRAIN ID SCANNER ━━ \leftarrow GUY ANCHOR AEI READER GUY POLE -O-G UNKNOWN UTILITY VAULT GROUND FLOOD LIGHT \odot DECIDUOUS TREE -PERIMETER REPRESENTS DRIPLINE \square_{LT} LIGHT J-BOX CONIFEROUS TREE OVERHEAD LIGHT -PERIMETER REPRESENTS DRIPLINE POWER POLE/OVERHEAD LIGHT WIND STOCK FLAG RAILROAD GREASEBOX POWER POLE W/DROP RAILROAD AUTO SWITCH/NUMBER POWER POLE RAILROAD MANUAL SWITCH/NUMBER GAS MARKER POST RAILROAD FROG GAS VAULT FROG RAILROAD SIGN ____(•X• GAS VALVE SANITARY MANHOLE WITH STRUCTURE V-Q-V RAILROAD CROSSING SIGNAL ∇ STORM MANHOLE WITH STRUCTURE

- 1.) VERTICAL DATUM: CITY OF TACOMA (NGVD 29) BENCHMARK: 3 INCH BRASS DISK ON MILWAUKEE WAY, SOUTH OF E. 11TH AVENUE. BENCHMARK NO. 2863 ELEVATION = 12.117
- 2.) BASIS OF BEARINGS FOR THIS SURVEY IS THE CITY OF TACOMA DATUM, NAD 83(91) WASHINGTON SOUTH ZONE (4602).
- 3.) UTILITY LOCATIONS SHOWN ARE PER FIELD LOCATED UTILITY PAINT MARKS & REFERENCE MAPS MADE AVAILABLE BY THE VARIOUS UTILITY PROVIDERS. UNLESS INDICATED, DEPTHS OF UTILITY LINES ARE NOT AVAILABLE. ALL UTILITY LOCATIONS SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- 4.) BOUNDARY AND EASEMENTS SHOWN HEREON ARE BASED ON TITLE REPORT NUMBER 0048493-TC BY CHICAGO TITLE INSURANCE COMPANY, EFFECTIVE DATE OF 15 SEPTEMBER

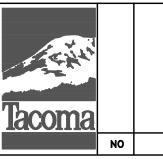




 $\square \square / \varnothing$

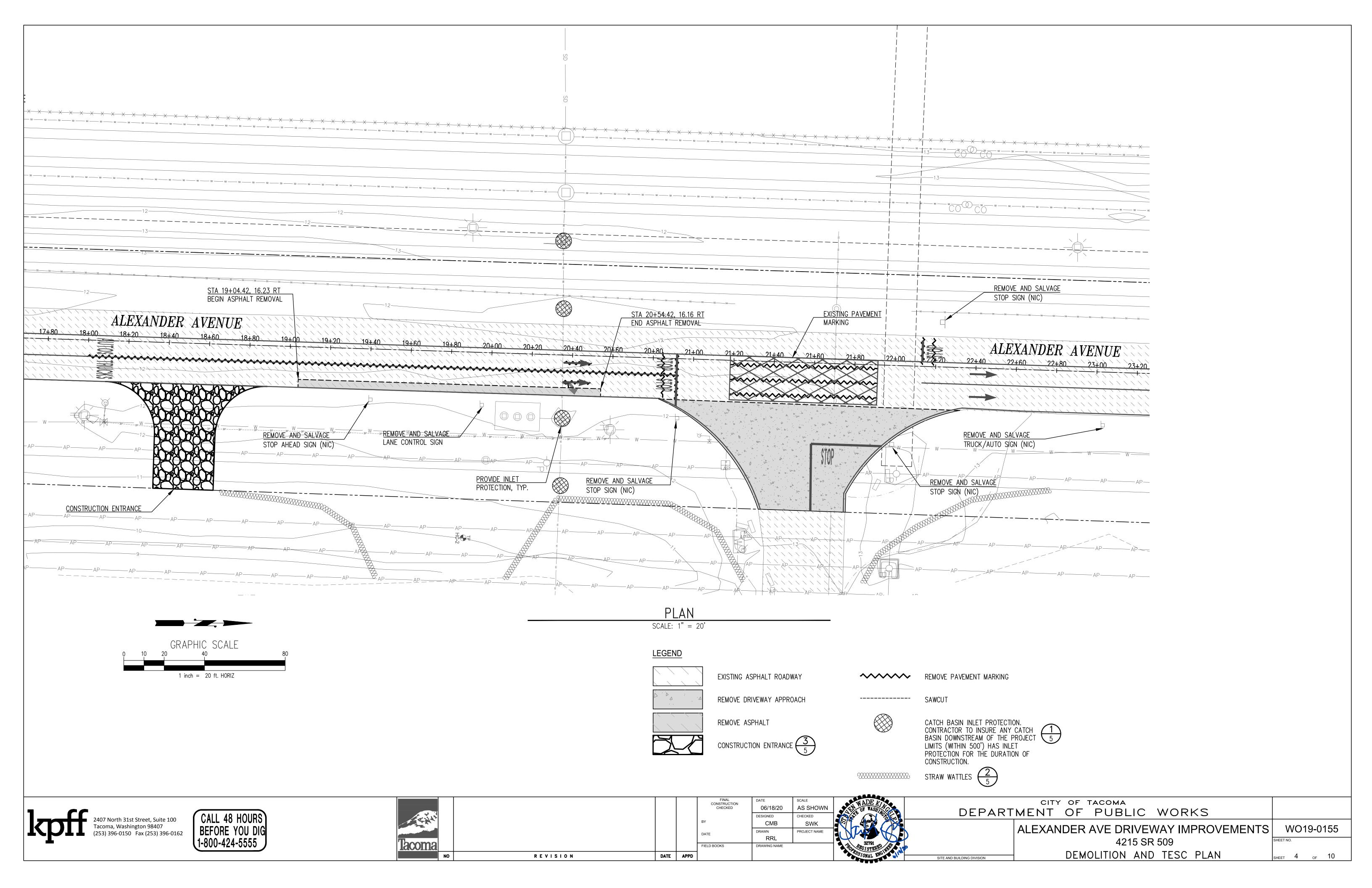


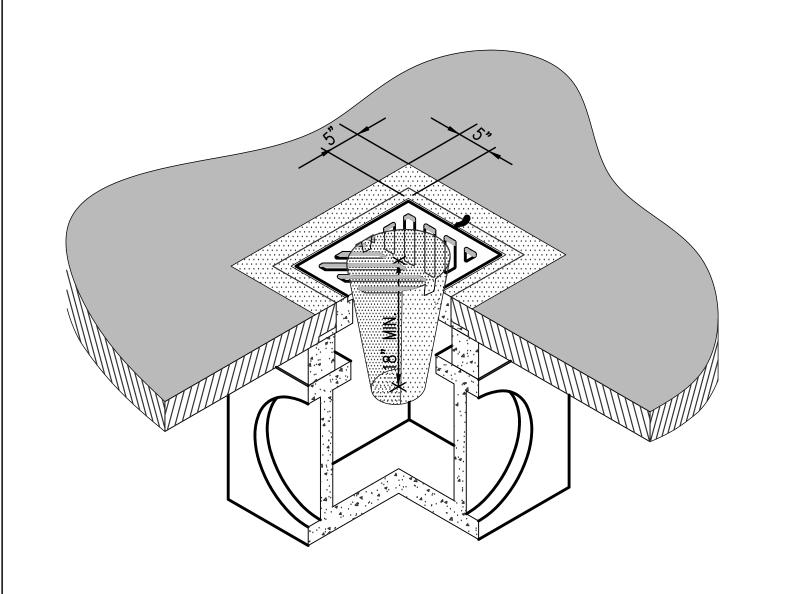
CATCH BASIN/AREA DRAIN



	NO	REVISION	DATE	APPD			
<u>ma_</u>					FIELD BOOKS	DRAWING NAME	
					DATE	RRL	PROJECTIVAN
- N						DRAWN	PROJECT NAM
CHA,					BY	CMB	SWK
1						DESIGNED	CHECKED
					CONSTRUCTION CHECKED	06/18/20	AS SHO
					FINAL	DATE	SCALE

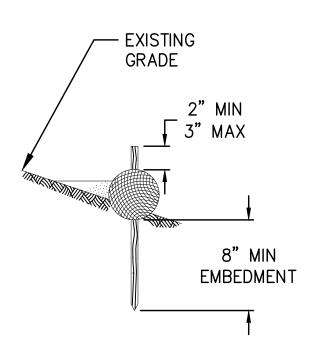
	CITY OF TACOMA				
DEPART	MENT OF PUBLIC WORKS				
	ALEXANDER AVE DRIVEWAY IMPROVEMENTS	W	' O19)-O´	158
	4215 SR 509	SHEET NO.			
ND BUILDING DIVISION	SURVEY	SHEET	3	OF	10





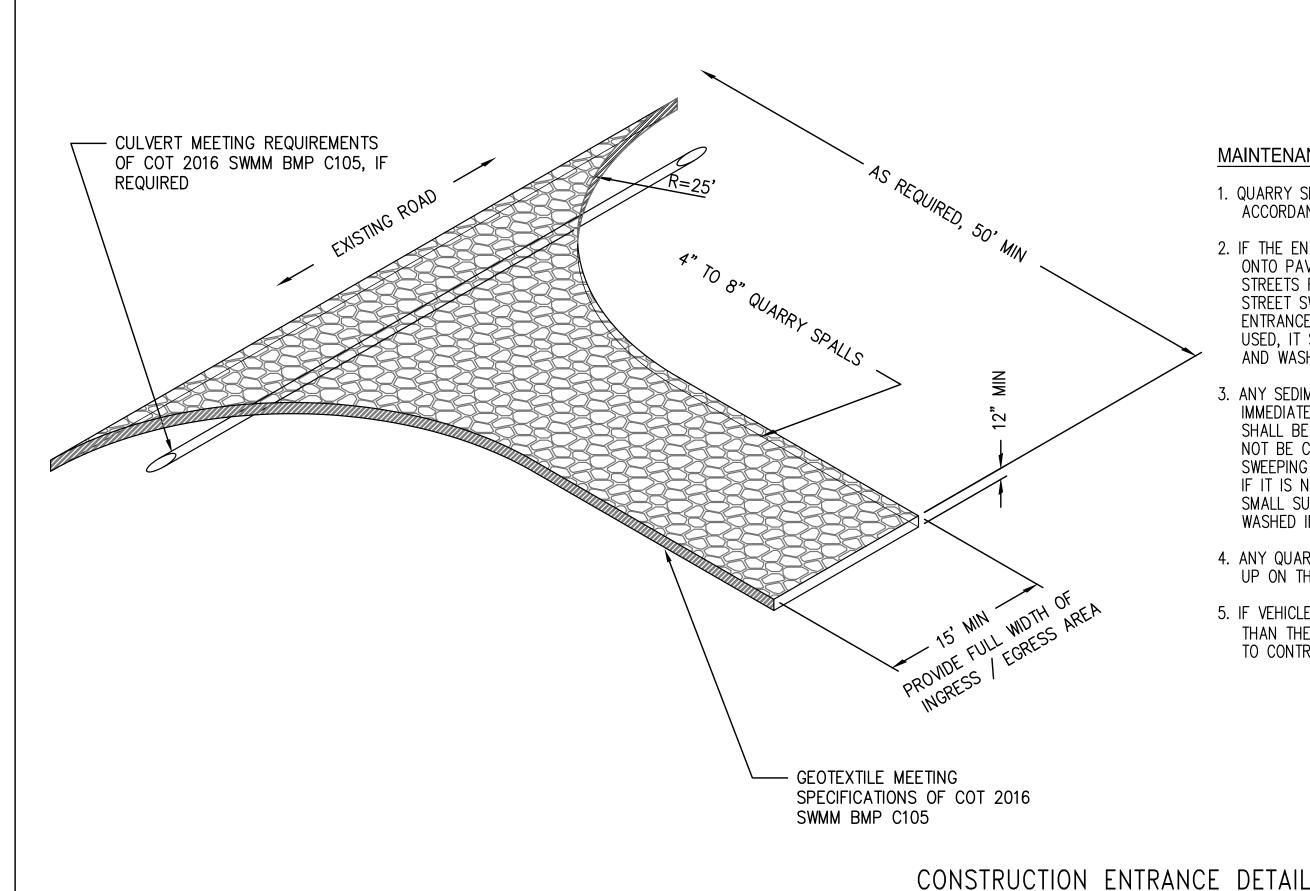
NOTES:

- 1. INSERT SHALL BE INSTALLED IN ALL OPERATIONAL CATCH BASINS WITHIN 500 FEET OF WORK LIMITS PRIOR TO CLEARING AND GRADING ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN.
- FILTERS SHALL BE INSPECTED AFTER EACH STORM EVENT AND CLEANED OR REPLACED WHEN IT IS 1/3 FULL.
- SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING INTO APPROPRIATE DISPOSAL LOCATION, AND REINSERTING IT INTO THE CATCH BASIN.



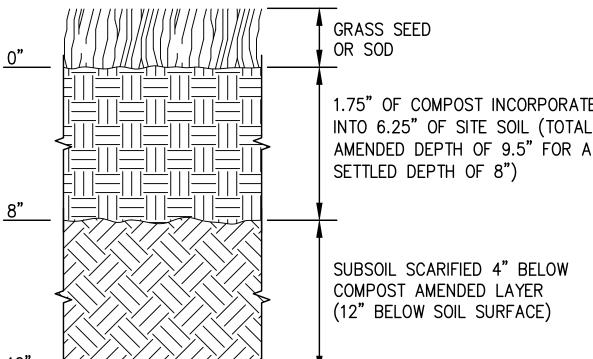
INLET PROTECTION DETAIL SCALE: NTS

STRAW WATTLE DETAIL SCALE: NTS



MAINTENANCE STANDARDS:

- 1. QUARRY SPALLS SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.
- 2. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING, AN INCREASE IN THE DIMENSIONS OF THE ENTRANCE, OR THE INSTALLATION OF A WHEEL WASH. IF WASHING IS USED. IT SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK. AND WASH WATER SHALL DRAIN TO A SEDIMENT TRAP OR POND.
- 3. ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON-SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREETS, THE CONSTRUCTION OF A SMALL SUMP SHALL BE CONSIDERED. THE SEDIMENT WOULD THEN BE WASHED INTO THE SUMP.
- 4. ANY QUARRY SPALLS THAT ARE LOOSENED FROM THE PAD AND END UP ON THE ROADWAY SHALL BE REMOVED IMMEDIATELY.
- 5. IF VEHICLES ARE ENTERING OR EXITING THE SITE AT POINTS OTHER THAN THE CONSTRUCTION ENTRANCE(S), FENCING SHALL BE INSTALLED TO CONTROL TRAFFIC.

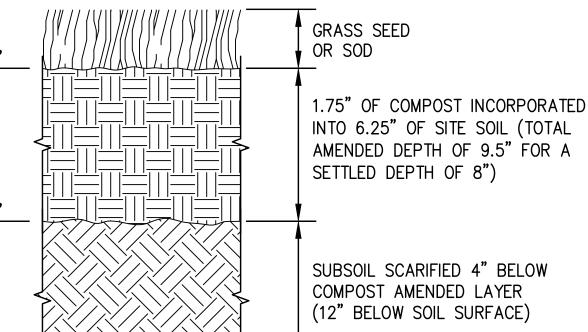


NOTES:

- 1. AMEND EXISTING SITE TOPSOIL, OR SUBSOIL EITHER AT PRE-APPROVED RATE OR AT CALCULATED RATE BASED ON TEST OF THE SOIL AND AMENDMENTS. ALL SOIL AREAS DISTURBED OR COMPACTED DURING CONSTRUCTION, AND NOT COVERED BY BUILDINGS OR PAVEMENT. SHALL BE AMENDED WITH COMPOST AS DESCRIBED BELOW.
- SCARIFY OR TILL SUBGRADE TO 8 INCHES DEPTH (OR TO DEPTH NEEDED TO ACHIEVE A TOTAL DEPTH OF 12 INCHES OF UNCOMPACTED SOIL AFTER CALCULATED AMOUNT OF AMENDMENT IS ADDED). ENTIRE SURFACE SHOULD BE DISTURBED BY SCARIFICATION. DO NOT SCARIFY WITHIN DRIP LINE OF EXISTING TREES TO BE RETAINED OR WHERE SCARIFICATION WOULD DAMAGE TREE ROOTS OR AS DETERMINED BY THE ENGINEER.
- PREAPPOVED RATE: PLACE 1.75 INCHES OF COMPOSTED MATERIAL AND ROTOTILL INTO 6.25 INCHES OF EXISTING SITE SOILS (A TOTAL AMENDED DEPTH OF ABOUT 9.5 INCHES, FOR A SETTLED DEPTH OF 8 INCHES).
- 4. CALCULATED RATE: PLACE CALCULATED AMOUNT OF COMPOSTED MATERIAL OR APPROVED ORGANIC MATERIAL AND ROTOTILL INTO DEPTH OF SOIL NEEDED TO ACHIEVE 8 INCHES OF SETTLED SOIL AT 5% ORGANIC CONTENT.
- 5. WATER OR ROLL TO COMPACT TO 85% OF MAXIMUM DRY DENSITY. RAKE TO LEVEL AND REMOVE SURFACE ROCKS LARGER THAN 1 INCH DIAMETER.
- 6. TO PREVENT UNEVEN SETTLING, DO NOT COMPOST—AMEND SOILS WITHIN 3 FEET ON CENTER OF UTILITY INFRASTRUCTURE (POLES, VAULTS, METERS ETC. WITHIN ONE FOOT OF PAVEMENT EDGE, CURBS AND SIDEWALKS; SOIL SHOULD BE COMPACTED TO 90% MAX MODIFIED PROCTOR DENSITY (ASTM D1557) TO ENSURE A FIRM SURFACE.

DISTURBED AREA SOIL AMENDMENT

SCALE: NTS



EROSION & SEDIMENT CONTROL NOTES:

DEMOLITION NOTES

OTHERWISE NOTED.

MANAGEMENT MANUAL.

APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

EXTENTS OF ASPHALT REMOVAL ARE APPROXIMATE, ACTUAL REMOVAL LIMITS

WILL BE DELINEATED BY A CONSTRUCTION DIVISION INSPECTOR

2. ALL DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS

3. DISTURBED AREAS WHICH ARE RESTORED AS LAWN OR AS VEGETATED AREAS,

4. SITE FURNISIHINGS ENCOUNTERED IN THE PUBLIC ROW (CONCRETE PLANTERS,

OFFERED TO THE OWNER (CITY OF TACOMA) FOR SALVAGE PRIOR TO

ITEMS SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR

BIKE RACKS, TRASH CANS, ETC.) & IDENTIFIED ON THIS PLAN SHALL BE

DISPOSAL. IF DECLINED BY THE OWNER (CITY OF TACOMA), ALL DEMOLISHED

SHALL BE COVERED WITH TOPSOIL AND MULCH IN ACCORDANCE WITH BEST

MANAGEMENT PRACTICE L613 OF THE CITY OF TACOMA 2016 STORMWATER

- 2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED. AT THE DISCRETION OF PORT ENVIRONMENTAL STAFF SWPP MEASURES OBSERVED AS INADEQUATE WILL BE BROUGHT TO THE CONTRACTORS ATTENTION FOR REVISION/MODIFCATION. PORT ENVIRONMENTAL STAFF; ANITA FICHTHORN (253) 495-2834, AFICHTHORN@NWSEAPORTALLIANCE.COM
- 3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
- 4. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM OR ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD. THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
- 6. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- 7. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 48 HOURS FOLLOWING A STORM EVENT.
- 8. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- 9. STABILIZED CONSTRUCTION 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 PROJECT.
- 10. IF DEWATERING IS ANTICIPATED OR ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT A SOURCE CONTROL REPRESENTATIVE WITH THE CITY OF TACOMA AT 253-591-5588.

7 North 31st Street, Suite 100 Tacoma, Washington 98407

253) 396-0150 Fax (253) 396-0162

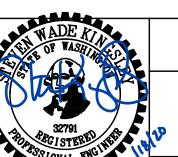
CALL 48 HOURS 1-800-424-5555



REVISION DATE APPD

CONSTRUCTION CHECKED 06/18/20 AS SHOWN CMB SWK DRAWN RRL FIELD BOOKS

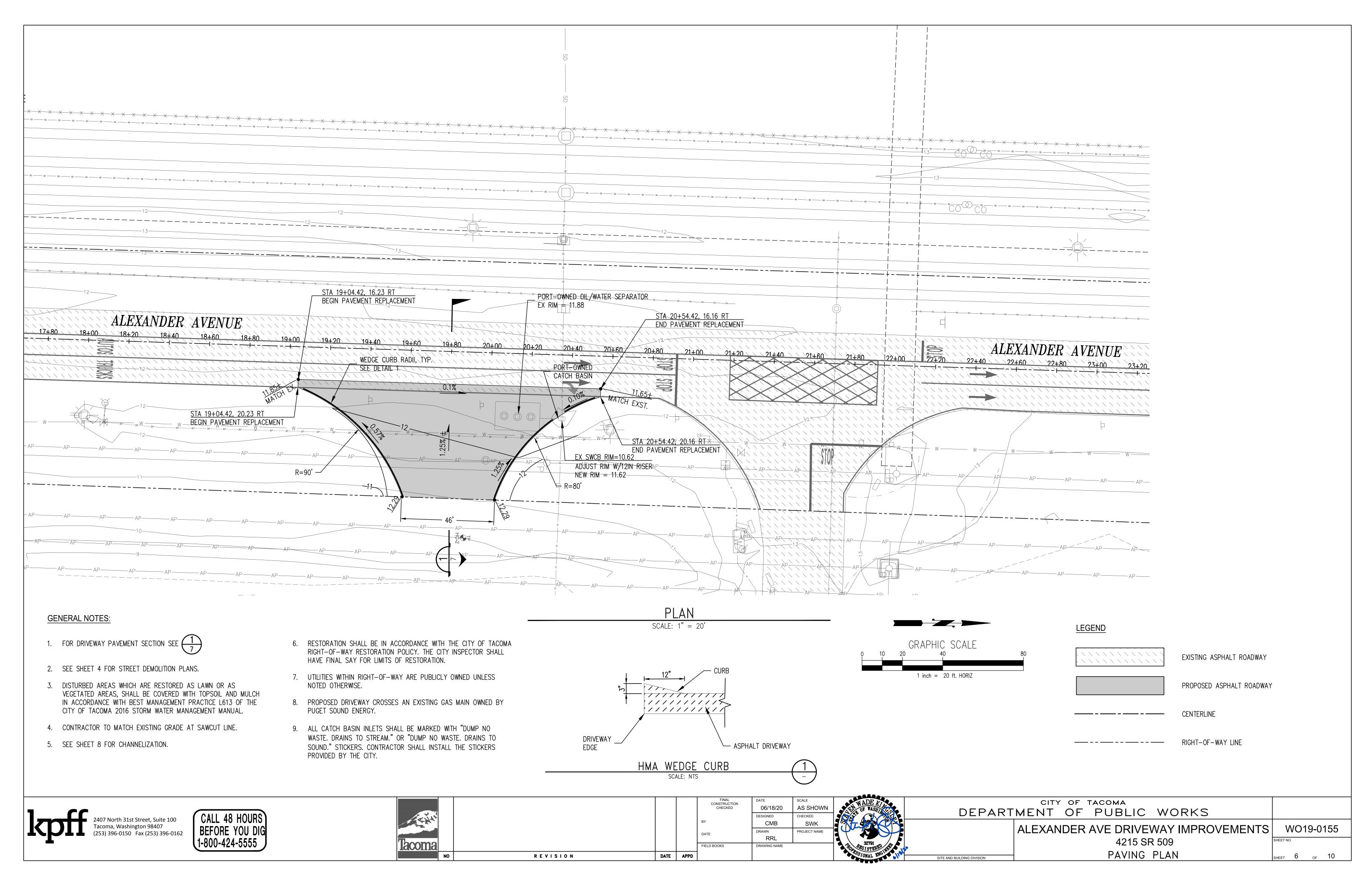


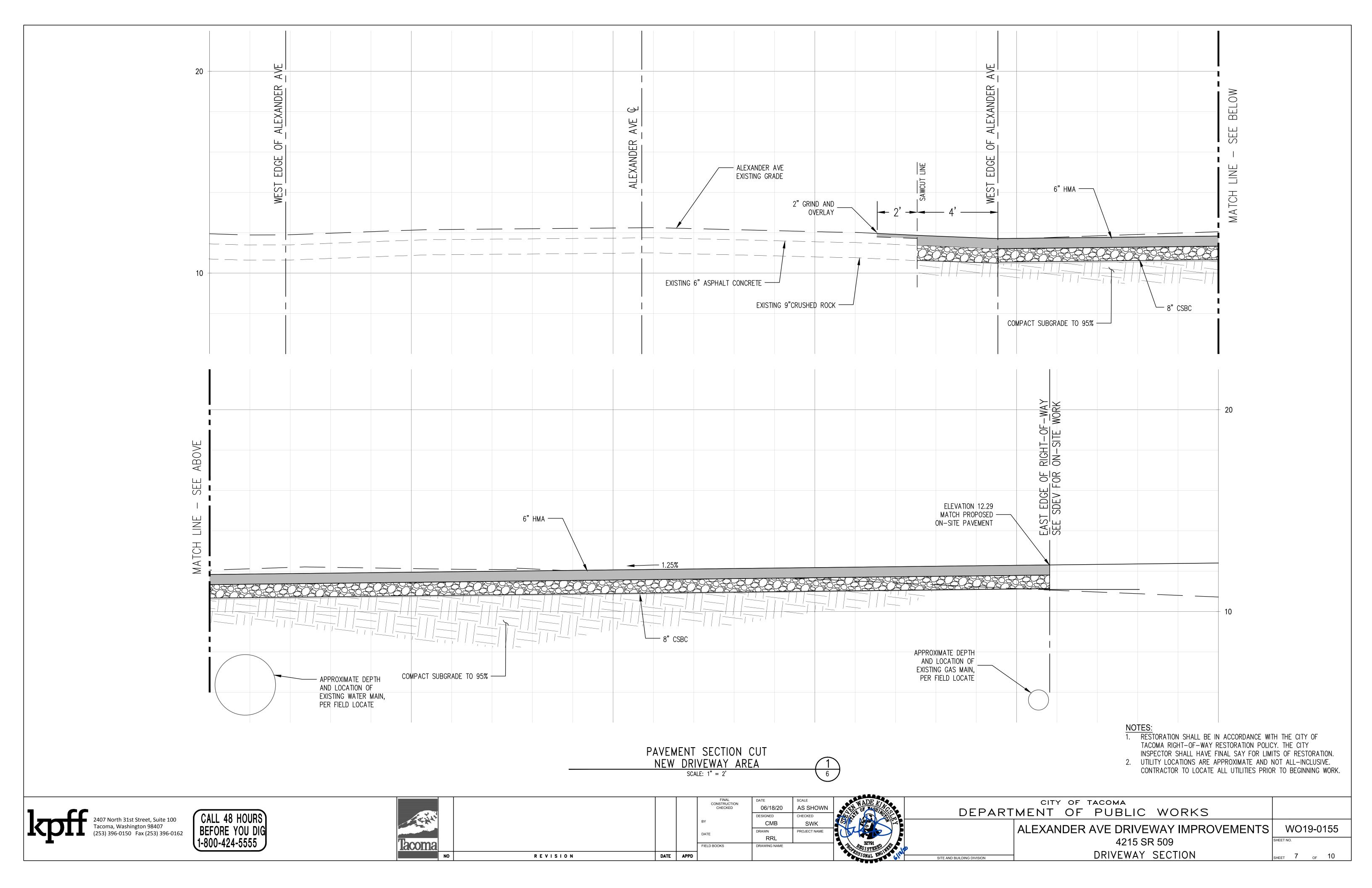


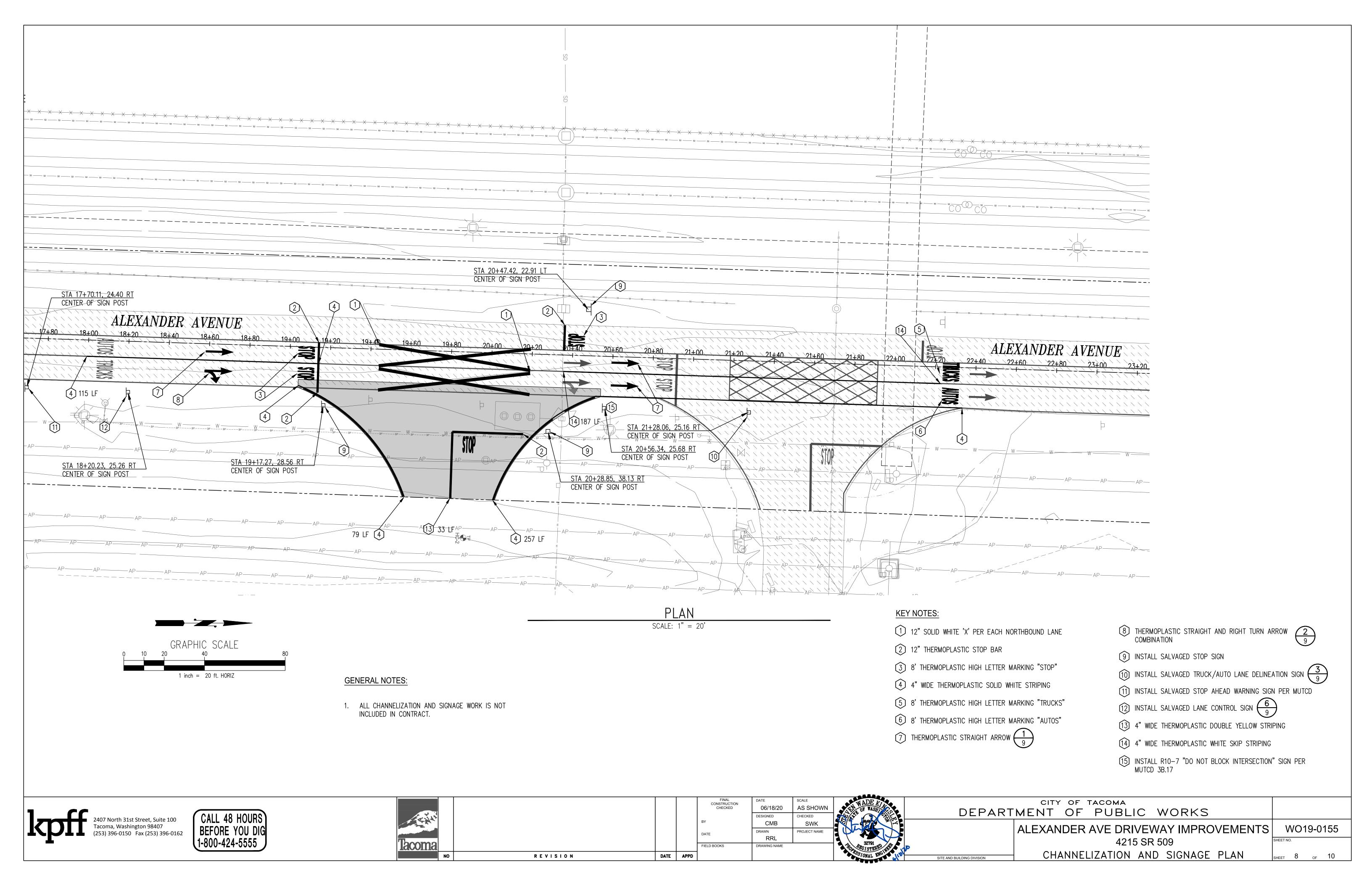
CITY OF TACOMA DEPARTMENT OF PUBLIC WORKS

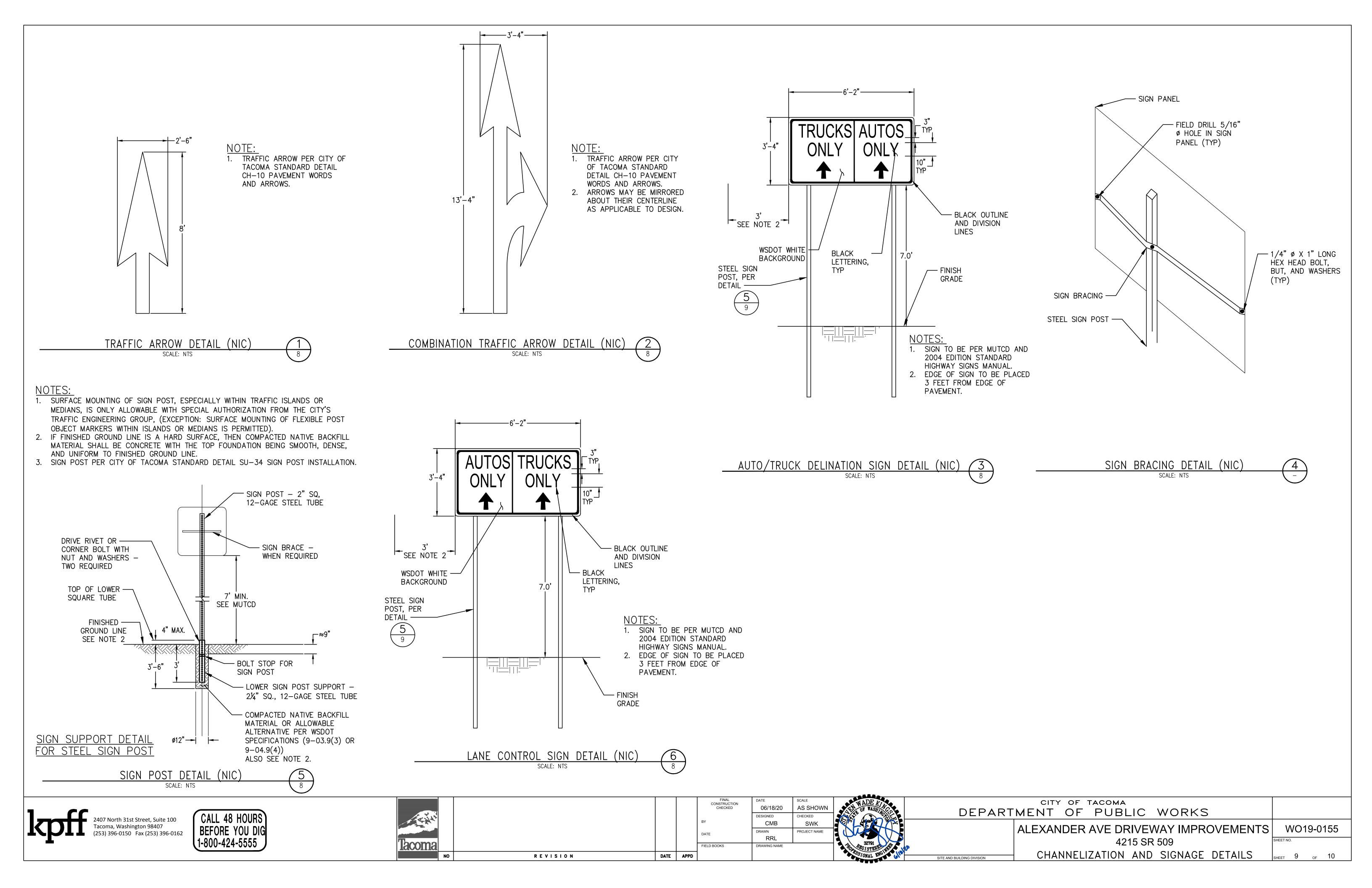
> ALEXANDER AVE DRIVEWAY IMPROVEMENTS WO19-0155 4215 SR 509

DEMOLITION AND TESC NOTES AND DETAILS









<u>GENERAL</u>

- A. The following special provisions are to be used in conjunction with the City of Tacoma Special Provisions, City of Tacoma Standard Plans and City of Tacoma Right—of—Way Design Manual, "2014 Standard Specifications for Road, Bridge and Municipal Construction" and "Standard Plans for Road, Bridge and Municipal Construction" as prepared by the Washington State Department of Transportation (WSDOT).
- B. Any inconsistency between these work order drawings and the 2014 Standard Specifications or the WSDOT Standard Plans shall be resolved by the following order of precedence (e.g., 1 presiding over 2, 3, and so forth):
 - Approved Work Order Drawings
 - 2. City of Tacoma Special Provisions, including APWA General Special Provisions, as applicable
 - 3. City of Tacoma Right-of-Way Design Manual
 - 4. 2014 Standard Specifications
 - 5. City of Tacoma Standard Plans
 - 6. WSDOT Standard Plans
- C. Any revisions to these plans must be reviewed and approved by the City of Tacoma prior to any implementation in the field.
- D. Contractors shall familiarize themselves with the site and shall bring any discrepancies to the attention of the Engineer prior to undertaking the affected work.
- E. Any discrepancy in these drawings, specifications, these notes, and the site conditions shall be reported to the Engineer, who shall correct such discrepancy in writing after reviewing any changes. Any work done by the Contractor after the discovery of such discrepancy shall be done at the Contractor's risk. The Contractor shall verify and coordinate the dimensions among all drawings prior to proceeding with any work.
- F. A pre-construction meeting shall be held at the City of Tacoma with the applicant, contractor, and City inspectors prior to issuance of a permit.

ADDITIONAL PERMITS

- A. Separate permits are required for on—site work including all retaining walls, grading, and erosion control. Adherence to all conditions of these permits is required as a part of this plan.
- B. Separate permits are required for sidewalk installation as well as curb and gutter removal and driveway construction when constructed at building permit stage.
- C. Separate storm and sanitary sewer connection permits are required for connections to the wastewater or stormwater systems.

<u>UTILITIES</u>

- A. The existing underground utilities shown hereon are based upon existing record drawings and are not guaranteed to be accurate, nor all—inclusive.
- B. All utilities must be verified prior to construction. If the project requires any excavation, the developer/contractor is required to call the Utility Underground Location Center at (800) 424-5555 at least two days before starting such excavation in accordance with RCW 19.122.
- C. It shall be the Contractor's responsibility to protect, in place, all utilities and/or structures whether shown or not shown on this plan. Damage due to the Contractor's operations shall be repaired at the Contractor's expense.

EXCAVATION

A. If workers enter any trench or other excavation four feet or more in depth that does not meet the open pit requirements of Section 2-09.3(3), it shall be shored and cribbed. All trench safety systems shall meet the requirements of the Washington Industrial Safety and Health Act, Chapter 49.17 RCW. The Contractor alone shall be responsible for all worker safety, and neither the City of Tacoma nor the Engineer of record assumes any responsibility.

PAVEMENT PREPARATION / RESTORATION

- A. Additional removal and replacement of pavement may be required to provide proper transition/crown as directed by the City of Tacoma Inspector in the field.
- B. The street sections shown on this plan are designed to be placed upon a firm and unyielding base.
- C. Subgrade compaction shall be tested by a professional geotechnical consultant prior to placing base material.
- D. Pavement restoration shall be constructed in accordance with the City of Tacoma Restoration policy and applicable Standard Plans.
- E. All permanent traffic channelization, such as but not limited to legends, raised pavement markings, paint, and signage, shall be restored to current Tacoma Standards
- F. Final restoration limits shall be determined in the field by the City of Tacoma Inspector.
- G. Pavement Preparation and Restoration shall meet all applicable requirements of City of Tacoma Right—of—Way Design Manual Chapter 4 Sections 5.4 and 5.5.

PERMEABLE PAVEMENTS

- A. Permeable Pavements including pavers, porous asphalt and pervious concrete may be approved for use within the right of way.
- B. Installation shall be in accordance with the approved permit documents and all applicable requirements as outlined in the documents referenced in the GENERAL section
- C. Permeable pavers shall be designed and installed in accordance with manufacturer's recommendations, per approved permit drawings and the requirements of the City of Tacoma Right-of-Way Design Manual.

HOT MIX ASPHALT

- A. Standard hot mix asphalt shall be HMA CL 1/2 inch PG 64-22.
- B. Porous asphalt shall be Class 1/2" PG 70-22ER polymer modified or higher grade.
- C. Mix design shall be based on Standard Plan PD-01-Pavement Design Standards and PD-02 Pavement Design Worksheet.
- D. Section 5-04.3(8)A 'Acceptance Sampling and Testing' of the Standard Specifications is deleted.
- E. All standard hot mix asphalt shall be compacted to a minimum of 92 percent of the maximum density as determined by AASHTO T209. All standard hot mix asphalt utilized shall be considered compactable. The level of compaction attained will be determined as the average of not less than 5 nuclear density gauge tests taken on the day the mix is placed (after completion of the finish rolling) at randomly selected locations within each lot. The quantity represented by each lot will be no greater than a single day's production or approximately 400 tons, whichever is less.
- F. All testing results shall be provided to the City within 48 hours of the test.
- G. Control lots not meeting the minimum density standard shall be removed and replaced with satisfactory material.
- H. In addition to the randomly selected locations for test of the control lot, the City Inspector reserves the right to test any area which appears defective and to require further compaction of areas that fall below acceptable density readings.
- I. These additional tests shall not impact the compaction evaluation of the entire control lot.
- J. Hot mix asphalt pavement shall not be placed on any traveled way between October 1 and April 1 without written approval from a Science & Engineering Assistant

I-800-424-5555

K. No traffic shall be allowed on any newly placed pavement without the approval of the City Inspector.

CONCRETE

A. Concrete pavement mix design shall be based on Standard Plan PD-01-Pavement Design Standards.

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Tacoma, Washington 98407

B. Cold Weather Concrete Work. The following requirements for placing concrete shall be in effect from November 1 to April 1:

RIGHT-OF-WAY PERMITTING GENERAL NOTES

- The Engineer shall be notified at least 24 hours prior to any concrete placement.
- Weather permitting, all concrete placement shall be completed no later than 2:00 p.m. each day.

Where forms have been placed and the subgrade has been subjected to severe frost, no concrete shall be placed until the ground is completely thawed. At that time, the forms shall be adjusted and subgrade repaired as determined by the Engineer.

- C. Curing of concrete shall be in accordance with Section 5-05.3(13) of the Standard Specifications.
- D. The slump for standard concrete used for sidewalks shall not exceed four inches \pm one inch.
- E. Sidewalks and curb ramps shall be constructed in accordance with ADA Standards for Accessible Design, 28 CFR, Part 35 and as supplemented by the Public Works Right of Way Accessibility Guidelines (PROWAG).

SANITARY AND STORM SEWERS

A. 7-08.3(2)G Jointing of Dissimilar Pipe:

Dissimilar pipe shall be joined by use of rigid couplings manufactured by Romac Industries, Inc., or City of Tacoma approved equal.

B. 7-08.3(2)F Plugs and Connections:

Rigid Couplings, manufactured by Romac Industries, Inc., or City of Tacoma approved equal, shall be used at any pipe joint in which bell and spigot or fused joints are not

Flexible couplings are not permitted.

- C Section 7-04 of the Standard Specification is deleted. Storm sewers shall meet all the requirements of sanitary sewers.
- D. Sewers and appurtenances shall be cleaned and tested after backfilling by either exfiltration or low-pressure air method at the option of the Contractor, except where the ground water table is such that the Engineer may require the infiltration test.
- E. All wastewater and stormwater pipes shall be video inspected by City Forces prior to paving where paving occurs over sewers. All other sewers will be video inspected prior to final acceptance.
- F. All abandoned pipes encountered during construction and new stormwater and wastewater stub outs shall be sealed with a watertight pipe plug.
- G. All frames and grates for standard catch basin inlets on this project shall be "vaned" type and shall conform to that shown on WSDOT Standard Plan No. B-30.30-01 and B-30.40-01.
- H. Where existing catch basins are modified, grates may be required to be replaced with vaned grates. Environmental Services will make the final determination based on the condition of the existing grate and structure.
- I. Recycled concrete shall not be used for pipe zone backfill.
- J. New connections to brick manholes may be allowed on a case by case basis. Manhole replacement may be required by the Environmental Services Department based

upon the condition of the existing manhole.

MISCELLANEOUS

- A. Any fence or structure replaced and/or relocated shall be maintained to remain functional.
- B. Independent quality assurance sampling and testing will be provided by a certified independent laboratory for all improvements within the right-of-way. All special inspection reports shall be forwarded to the Site Development Group on a monthly basis, and / or as requested by the City of Tacoma inspector.
- C. The Contractor shall only use those hydrants designated by the agency in charge of water distribution and in strict accordance with its requirements for hydrant use,

Water applied by the Contractor shall not be from residential sources.

GRADING, EXCAVATION, AND EROSION CONTROL NOTES

- A. All work is to be done in accordance with the approved grading plan, soils report, the most current WSDOT Standard Specifications For Road, Bridge And Municipal Construction and the current City of Tacoma Stormwater Management Manual.
- B. When construction operations are such that debris from the work is deposited on the streets, the Contractor shall immediately remove any deposits or debris which may accumulate on the roadway surface. If the Contractor fails to keep the streets free from deposits and debris resulting from the work, the Contractor shall, upon order of the City of Tacoma Inspector, provide facilities for, and remove all clay, dirt, or other deposits from the tires or between wheels before trucks or other equipment will be allowed to travel over paved streets. Should the Contractor fail or refuse to clean the streets in question, or the trucks or equipment in question, the City of Tacoma Inspector may order the work suspended at the Contractor's risk until compliance with the Contractor's obligations is assured, or the City of Tacoma Inspector may order the streets in question cleaned by others and such costs incurred by the City in achieving compliance with these requirements, including cleaning of the streets, shall be deducted from the work order account.
- C. The Contractor shall protect existing drainage structures using acceptable methods and materials as shown on this plan. If the methods and materials as shown on this plan are not adequate, the City of Tacoma Inspector may require additional/alternative methods for erosion control and/or protection of existing drainage structures. Additional or alternative methods shall be submitted by the design engineer and accepted by the City of Tacoma Inspector. Any damage caused to the City of Tacoma stormwater system as a result of the work outlined on this plan shall be the sole responsibility of the Contractor. Resolving said damage may include, but not be limited to, the cleaning of the drainage system in question by the Contractor.
- D. Watering provisions when applicable must be in place to prevent dust from becoming air borne. Violation of this condition will result in a stop work order until corrected.
- E. Fill that will support a street section or other structures shall be placed under the inspection of a Washington State licensed Geotechnical Engineer. Soil to be placed shall be tested and compacted to 95 percent of its maximum density. Engineer shall document existing site conditions, soil and its placement and allowable bearing capacity submitted. Standard requirements for cuts and fill are contained in the WSDOT Standard Specifications For Road, Bridges, and Municipal Construction.
- F. A stormwater pollution prevention plan (SWPPP) is required for all work order projects. The plan must be in accordance with the current City Tacoma Stormwater Management Manual.

HYDROSEEDING

- A. All areas that are cleared and grubbed, graded, excavated or filled are subject to stabilization. Any of these areas that are left unpaved or unlandscaped shall be hydroseeded or otherwise fully stabilized under the direction and approval of the Construction Inspector.
- B. Hydroseeding may occur only during the periods of April 1 though May 31 or September 1 though October 15. Hydroseeding may be allowed during the months of June through August if irrigation is provided.
- C. Monitor and maintain hydroseeded areas throughout the winter wet season to ensure that no erosion occurs.

EROSION CONTROL MEASURES

A. Minimum Erosion Control measures shall include:

- 1. Construction entrance.
- Perimeter erosion/sedimentation control.
- Protection of catch basins.
- 4. Stabilization of exposed soils.
- B. All erosion control shall be in place prior to clearing. The contractor shall call the City of Tacoma Inspector for initial erosion control inspection prior to start of work,
- C. Erosion control measures shall be maintained at all times to the approval of the City of Tacoma Inspector.

- D. Should temporary erosion and sedimentation control measures, as shown on plans become inadequate, the contractor shall install facilities as necessary to protect adjacent properties and the City of Tacoma drainage system, meeting approval of the City of Tacoma Inspector.
- E. No permits to perform grading, excavation, or filling during the period from October 1st through March 31 shall be issued. EXCEPTION: The City may approve a grading, excavation, or filling plan prepared by a licensed Civil or Geotechnical Engineer which specifically addresses the winter rain season and the associated erosion problems, and issue a permit based on such plan.
- F. Call for inspection of the City of Tacoma Inspector upon completion of:
 - 1. Staking of clearing limits.
 - 2. Installation of erosion control and prior to site grading.
 - 3. Prior to removal of erosion control devices.

G. All material removed from site shall be placed only at a permitted site.

- H. Verify location of destination of material prior to exportation.
- L. Traffic control provisions as approved by the City Traffic Engineer shall be adhered to at all times.
- I. Trees to be removed shall be clearly marked for removal.
- J. Trees to be saved shall be fenced with barricade fence at the drip line (outer edge of tree branches) to keep construction vehicles from compacting root zone and killing trees. This fencing shall be maintained until construction ends. Tree protection measures to be installed with initial TESC measures and shall be maintained throughout the duration of site work. Refer to City of Tacoma Std. Plans

RECORD DRAWINGS CRITERIA FOR ACCEPTANCE OF ALL PRIVATE WORK ORDERS

- A. All revisions to the approved plans must be approved by the City of Tacoma prior to implementation of the changes.
- B. A determination at the time of proposal shall be made whether the revision can be addressed with red line drawings submitted as a part of the record drawings or will require formal submission for approval.
- C. Record drawings shall show the station, offset, centerline and gutter flowline elevations, to nearest 0.01 foot; for all horizontal and vertical roadway alignment changes, at the intersection end of radius points and at the beginning and end of new paving.
- D. Record drawings shall show the station, offset, invert, and rim elevations to the nearest 0.01 foot for all stormwater and wastewater structures. (i.e.: manholes, catch basins, etc.)
- E. After any new stormwater and/or wastewater pipes have been cleaned and the manholes channeled, the main(s) shall be televised for video inspection to provide a record of the constructed conditions and for the wastewater system to verify side sewer connection locations. The City of Tacoma will coordinate this inspection.
- F. The property side ends of the side sewers shall be marked in the field by means of a 2-inch by 4-inch board and locate wire that extends from the flow line of the side sewer to at least 1 foot above the finished lot grade. Record drawings shall show all side sewers and shall locate them by measurements from permanent objects. (i.e.: curb, property corner, etc.) In addition, the depth of all side sewers shall be noted on the record drawings and locate board.
- G. Record drawings shall be received and accepted prior to issuing utility connection permits or release of performance bonds.
- H. Record drawings shall show vertical and horizontal datum for survey monuments (existing or new construction) within the limits of the project.
- I. Record drawings shall consist of a clean set of approved work order drawings with all changes noted above shown in red ink.
- J. Record drawings, including the Engineer's Certification, as applicable, must be submitted within 30 days of substantial completion or City survey crews will collect the necessary data and bill against the work order.

MONUMENT REMOVAL PERMIT PROCESS

"No survey monument shall be removed or destroyed (the physical disturbance or covering of a monument such that the survey point is no longer visible or readily accessible) before a permit is obtained from the Department of Natural Resources (DNR)." WAC 332-120-030(2) states "It shall be the responsibility of those performing construction work

or other activity (including road and street resurfacing projects) to adequately search the records and the physical area of the proposed construction work or other activity for the purpose of locating and referencing any known or existing survey monuments." Construction shall not commence until WAC outlined in Chapter 332—120 is complied

STAKING REQUIREMENTS

WASTEWATER AND STORMWATER

A. Clearing stakes if needed.

- B. Stakes every 50 feet plus grade breaks. Try to maintain 12 foot offsets in streets and 8 foot offsets in alleys.
- C. Double offsets at manholes and catch basins (ahead and back stakes at angle points).
- D. Catch basin station shall be to the centerline of the basin. Catch basin offsets shall be to the face of the curb.

RESIDENTIAL STREETS

A. Clearing stakes as needed.

- B. Slope stakes every 50 feet and grade breaks if cuts or fills exceed 2 feet.
- C. Curb stakes every 50 feet and grade breaks, on 4 foot offset to the face of curb. Curb stakes are set to the top of curb grade (Blue Tops). D. Also stake the beginning and end of all approaches.
- E. No centerline of street grades unless the street grade is warped. If street grades are needed, set blue tops for each course.

ARTERIAL STREETS

A. Clearing stakes as needed.

- B. Slope stakes every 50 feet and grade breaks if cuts or fills exceed 2 feet.
- C. Curb stakes every 50 feet and grade breaks, on 4 foot offset to the face of curb.
- D. Curb stakes are set to the top of curb grade (Blue Tops). Also stake the beginning and end of all approaches.
- E. Stake centerline and quarterline grade every 50 feet and grade breaks at grade for each course.

<u>ALLEYS</u>

A. Stake both sides every 50 feet and grade breaks, on a 2 foot offset to the edge of paving, with a cut of fill to edge of paving on high side and flow line on low side. **SIDEWALKS**

A. Offsets for walks are set on 50' intervals and grade breaks normally at 2 foot to edge of walk and at edge of walk grade (Blue Tops).

B. Sidewalk alignment is normally at 5 feet from the face of curb. No walk grades are needed if curbs are built.

HORIZONTAL AND VERTICAL CURVES

A. Grade stakes must be set every 25 feet and grade breaks with a minimum of 3 stakes for each curve. Radius points on street Returns.

CITY OF TACOMA

DEPARTMENT OF PUBLIC WORKS

REVISED: 01-07-2016

REVISION

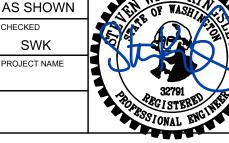
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SWK

DESIGNED

CONSTRUCTION



ALEXANDER AVE DRIVEWAY IMPROVEMENTS 4215 SR 509 GENERAL NOTES

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