

This Plan has been Reviewed & Complies w/	
By	Date
Building: <i>DWN</i>	8-21-13
Planning: <i>ZCP</i>	8/21/13
Engineering: <i>KQL</i>	8/26/13
Parks: <i>MP</i>	8-22-13

Lake Oswego - Tigard Water Partnership

Lake Oswego - Tigard Water Treatment Plant Expansion

ABBREVIATED PLAN SET FOR PUBLIC IMPROVEMENTS/PUBLIC WORKS PERMIT
COMMENTS IN RED PROVIDED BY BROWN AND CALDWELL FOR CLARITY
APRIL 2013



GENERAL - VOLUME 6

- G-1 COVER SHEET
G-2 LOCATION AND VICINITY MAP
G-3 LIST OF DRAWINGS - 1
G-4 LIST OF DRAWINGS - 2
G-5 LIST OF DRAWINGS - 3
G-6 LIST OF DRAWINGS - 4
G-6A LIST OF DRAWINGS - 5
G-6B LIST OF DRAWINGS - 6
G-7 STANDARD SYMBOLS - 1
G-8 STANDARD SYMBOLS - 2
G-9 ABBREVIATIONS
G-10 PROCESS FLOW DIAGRAM - CONSTRUCTED
G-11 PROCESS FLOW DIAGRAM - WATER QUALITY SAMPLE LOCATIONS
G-12 DESIGN CRITERIA - 1
G-13 DESIGN CRITERIA - 2
G-14 HYDRAULIC PROFILES
G-15 PIPE SCHEDULE
G-16 SITE KEY PLAN
G-17 FACILITY KEY PLAN
G-18 CONSTRUCTION SEQUENCING - FLOW CHART - 1
G-19 CONSTRUCTION SEQUENCING - FLOW CHART - 2
G-20 CONSTRUCTION SEQUENCING - PFD - EXISTING PLANT
G-21 CONSTRUCTION SEQUENCING - PHASE A - PFD
G-22 CONSTRUCTION SEQUENCING - PHASE A - DEMOLITION
G-23 CONSTRUCTION SEQUENCING - PHASE A - CONSTRUCTION
G-24 CONSTRUCTION SEQUENCING - PHASE A - TEMPORARY FACILITIES
G-25 CONSTRUCTION SEQUENCING - PHASE B - PFD
G-26 CONSTRUCTION SEQUENCING - PHASE B - DEMOLITION
G-27 CONSTRUCTION SEQUENCING - PHASE B - CONSTRUCTION
G-28 CONSTRUCTION SEQUENCING - PHASE B - TEMPORARY FACILITIES
G-29 CONSTRUCTION SEQUENCING - PHASE C - PFD
G-30 CONSTRUCTION SEQUENCING - PHASE C - DEMOLITION
G-31 CONSTRUCTION SEQUENCING - PHASE C - CONSTRUCTION
G-32 INTERACTIVE 3-D MODEL - AREA 11 - BALLASTED FLOCCULATION
G-33 INTERACTIVE 3-D MODEL - AREA 12 - OZONE CONTACTORS
G-34 INTERACTIVE 3-D MODEL - AREA 13 - FILTRATION
G-35 INTERACTIVE 3-D MODEL - AREA 14 - CLEARWELL AND FINISHED WATER PUMP STATION
G-36 INTERACTIVE 3-D MODEL - AREA 15 - ELECTRICAL BUILDING
G-37 INTERACTIVE 3-D MODEL - AREA 16 - WASHWATER HANDLING
G-38 INTERACTIVE 3-D MODEL - AREA 17 - GRAVITY THICKENER AND SOLIDS STORAGE TANK
G-39 INTERACTIVE 3-D MODEL - AREA 18 - MECHANICAL DEWATERING BUILDING
G-40 INTERACTIVE 3-D MODEL - AREA 20 & 21 - CHEMICAL BUILDING & OZONE GENERATION ROOM
G-41 INTERACTIVE 3-D MODEL - AREA 23 ADMINISTRATION BUILDING

DEMOLITION

- GD-1 SYMBOLS AND NOTES
D-1 SITE PLAN
D-2 PHASE A - SITE CLEARING & GRUBBING - AREA A
D-3 PHASE A - SITE CLEARING & GRUBBING - AREA B
D-4 PHASE A - SITE CLEARING & GRUBBING - AREA C
D-5 PHASE A - SITE CLEARING & GRUBBING - AREA D
D-6 PHASE A - SITE CIVIL
D-7 PHASE A - LIME BUILDING & SILO - PLAN
D-8 PHASE A - LIME BUILDING & SILO - SECTIONS
D-9
D-10 PHASE A - BASIN DRAIN PUMP STATION DETAILS
D-11 PHASE A - LAGOON #1 AND #2 - PLAN
D-12 PHASE A - LAGOONS #1 AND #2 - SECTIONS AND DETAILS
D-13 PHASE B - SITE CIVIL AND PROCESS DRAIN PUMP DETAILS
D-14 PHASE B - ALUM STORAGE AREA - PLAN
D-15 PHASE B - ALUM STORAGE AREA - SECTIONS & DETAILS - 1
D-16 PHASE B - ALUM STORAGE AREA - SECTIONS & DETAILS - 2
D-17 PHASE B - SETTLING BASINS - PLAN
D-18 PHASE B - SETTLING BASINS - DETAILS
D-19 PHASE B - FLASH MIX BASIN - DETAILS
D-20 PHASE C - SITE CIVIL - 1
D-21 PHASE C - SITE CIVIL - 2
D-22 PHASE C - FILTERS - PLAN
D-23 PHASE C - FILTERS - SECTIONS
D-24 PHASE C - OPERATIONS BUILDING FIRST FLOOR PLAN
D-25 PHASE C - OPERATIONS BUILDING SECOND FLOOR PLAN
D-26 PHASE C - OPERATIONS BUILDING THIRD FLOOR PLAN
D-27 PHASE C - OPERATIONS BUILDING SECTION
D-28 PHASE C - OPERATIONS BUILDING DETAILS
D-29 PHASE C - OPERATIONS BUILDING SURGE TANK
D-30 PHASE C - LAGOON RECYCLE & DECANT PUMP STATION
D-31 PHASE C - LAGOON #3 & #4 DETAILS

TEMPORARY

- T-1 PHASE A - SITE CIVIL
T-2 PHASE A - LAGOON RECYCLE AND DECANT PUMP STATIONS CONTROLS RELOCATION
T-3 PHASE A - PIPING CONNECTION DETAILS - 1
T-4 PHASE A - PIPING CONNECTION DETAILS - 2
T-5 PHASE A - PIPING CONNECTION DETAILS - 3
T-6 PHASE A - CHEMICAL BUILDING CLOSURE WALL
T-7 PHASE A - BALLASTED FLOCCULATION CLOSURE WALL PLAN
T-8 PHASE A - BALLASTED FLOCCULATION CLOSURE WALL DETAILS
T-9 PHASE B - SITE CIVIL
T-10
T-11 PHASE B - ALUM ROOM PLAN
T-12 PHASE B - FILTER BULKHEAD PLAN AND SECTION

EROSION CONTROL

- GEC-1 COVER
GEC-2 NOTES
GEC-3 DETAILS - 1
EC-1 EXISTING SITE PLAN - AREA A
EC-2 EXISTING SITE PLAN - AREA B
EC-3 EXISTING SITE PLAN - AREA C
EC-4 EXISTING SITE PLAN - AREA D
EC-5 CONSTRUCTION PLAN - AREA A
EC-6 CONSTRUCTION PLAN - AREA B
EC-7 CONSTRUCTION PLAN - AREA C
EC-8 CONSTRUCTION PLAN - AREA D

CIVIL

- GC-1 SYMBOLS AND NOTES
GC-2 CIVIL STANDARD DETAILS - 1
GC-3 CIVIL STANDARD DETAILS - 2
GC-4 CIVIL STANDARD DETAILS - 3
GC-5 CIVIL STANDARD DETAILS - 4
GC-6 CIVIL STANDARD DETAILS - 5
GC-7 CIVIL STANDARD DETAILS - 6
GC-8 CIVIL STANDARD DETAILS - 7
GC-9 CIVIL STANDARD DETAILS - 8
GC-10 CIVIL STANDARD DETAILS - 9
GC-11 CORROSION DETAILS
GC-12 PROJECT SPECIFIC DETAILS - 1
GC-13 PROJECT SPECIFIC DETAILS - 2
10C-1 OVERALL EXISTING SITE PLAN
10C-2 CONTRACTOR STAGING AND STORAGE PLAN
10C-3 OVERALL SITE PLAN
10C-4 GEOTECHNICAL AND SURVEY CONTROL
10C-5 EXISTING SITE PLAN - AREA A
10C-6 EXISTING SITE PLAN - AREA B
10C-7 EXISTING SITE PLAN - AREA C
10C-8 EXISTING SITE PLAN - AREA D
10C-9 HORIZONTAL CONTROL PLAN - AREA A
10C-10 HORIZONTAL CONTROL PLAN - AREA B
10C-11 HORIZONTAL CONTROL PLAN - AREA C
10C-12 HORIZONTAL CONTROL PLAN - AREA D
10C-13 GRADING AND DRAINAGE PLAN - AREA A
10C-14 GRADING AND DRAINAGE PLAN - AREA B
10C-15 GRADING AND DRAINAGE PLAN - AREA C
10C-16 GRADING AND DRAINAGE PLAN - AREA D
10C-17 YARD PIPING PLAN - AREA A
10C-18 YARD PIPING PLAN - AREA B
10C-19 YARD PIPING PLAN - AREA C
10C-20 YARD PIPING PLAN - AREA D
10C-21 YARD PIPING PILE PLAN
10C-22 YARD PIPING COORDINATE TABLES - 1
10C-23 YARD PIPING COORDINATE TABLES - 2
10C-24 YARD PIPING PROFILE - 1
10C-25 YARD PIPING PROFILE - 2
10C-26 YARD PIPING PROFILE - 3
10C-27 YARD PIPING PROFILE - 4
10C-28 YARD PIPING PROFILE - 5
10C-29 ROAD PROFILES - 1
10C-30 ROAD PROFILES - 2
10C-31 SITE SECTIONS - 1
10C-32 SITE SECTIONS - 2
10C-33 SITE SECTIONS - 3
10C-34 SITE SECTIONS - 4
10C-35 SURGE TANK

INSTRUMENTATION

- GI-1 SYMBOLS AND NOMENCLATURE - I
GI-2 SYMBOLS AND NOMENCLATURE - II
GI-3 INSTRUMENT INSTALLATION DETAILS - 1
GI-4 INSTRUMENT INSTALLATION DETAILS - 2
GI-5 CONTROL SYSTEM BLOCK DIAGRAM
10I-1 FLOOR DRAIN PUMP STATION P&ID
10I-2 PROCESS DRAIN PUMP STATION P&ID
10I-3 FINISHED WATER PIPELINE SURGE TANK P&ID
10I-4 NOT USED
10I-5 FLOOR DRAIN AND ANALYZER DRAIN FACILITY SUMP PUMP STATIONS P&ID
11I-1 BALLASTED FLOC - BASIN NO 1 P&ID - 1
11I-2 BALLASTED FLOC - BASIN NO 1 P&ID - 2
11I-3 BALLASTED FLOC - BASIN NO 2 P&ID - 1
11I-4 BALLASTED FLOC - BASIN NO 2 P&ID - 2
11I-5 BALLASTED FLOC - HCS SYSTEM P&ID
11I-6 BALLASTED COAGULATION - SAND SLURRY FEED SYSTEM P&ID
12I-1 OZONE SIDESTREAM INJECTION PUMPS P&ID
12I-2 OZONE SIDESTREAM INJECTION SKIDS P&ID
12I-3 OZONE CONTACTOR P&ID
12I-4 OZONATED WATER CHANNEL P&ID
12I-5 OZONE CONTACTORS AMBIENT OZONE AND O2 MONITORING P&ID
13I-1 FILTRATION - OVERVIEW P&ID - 1
13I-2 FILTRATION - OVERVIEW P&ID - 2
13I-3 FILTRATION - FILTER NO 1 P&ID
13I-4 FILTRATION - FILTER NO 2 P&ID
13I-5 FILTRATION - FILTER NO 3 P&ID
13I-6 FILTRATION - FILTER NO 4 P&ID
13I-7 FILTRATION - FILTER NO 5 P&ID
13I-8 FILTRATION - FILTER NO 6 P&ID
13I-9 FILTRATION - FILTER NO 1 ANALYZER P&ID
13I-10 FILTRATION - FILTER NO 2 ANALYZER P&ID
13I-11 FILTRATION - FILTER NO 3 ANALYZER P&ID
13I-12 FILTRATION - FILTER NO 4 ANALYZER P&ID
13I-13 FILTRATION - FILTER NO 5 ANALYZER P&ID
13I-14 FILTRATION - FILTER NO 6 ANALYZER P&ID
13I-15 FILTRATION - COMBINED FILTERED WATER ANALYZER PANEL P&ID
14I-1 CLEARWELL AND FINISHED WATER PUMP STATION - RAW WATER FLOW METERING P&ID
14I-2 CLEARWELL AND FINISHED WATER PUMP STATION - PUMP DIFFUSION RAPID MIXING P&ID
14I-3 CLEARWELL AND FINISHED WATER PUMP STATION - CT BASIN AND CLEARWELL P&ID
14I-4 CLEARWELL AND FINISHED WATER PUMP STATION - FINISHED WATER PUMPS P&ID - 1
14I-5 CLEARWELL AND FINISHED WATER PUMP STATION - FINISHED WATER PUMPS P&ID - 2
14I-6 CLEARWELL AND FINISHED WATER PUMP STATION - FINISHED WATER QUALITY P&ID
14I-7 CLEARWELL AND FINISHED WATER PUMP STATION - PLANT AND UTILITY WATER P&ID
14I-8 CLEARWELL AND FINISHED WATER PUMP STATION - FILTER BACKWASH PUMPS P&ID
15I-1 AIR SCOUR BLOWERS P&ID
15I-2 AIR COMPRESSORS NO 1 & NO 2 P&ID
16I-1 WASHWATER EQUALIZATION BASIN P&ID
16I-2 WASHWATER EQUALIZATION BASIN - WASHWATER RECYCLE PUMPS P&ID
17I-1 GRAVITY THICKENER AND SOLIDS STORAGE TANK - GRAVITY THICKENER P&ID
17I-2 GRAVITY THICKENER AND SOLIDS STORAGE TANK STATION - THICKENED SOLIDS TANK AND PUMP P&ID
18I-1 MECHANICAL DEWATERING BUILDING - SCREW PRESS NO 1 P&ID
18I-2 MECHANICAL DEWATERING BUILDING - SCREW PRESS NO 2 P&ID
18I-3 MECHANICAL DEWATERING BUILDING - MECHANICAL DEWATERING DRY POLYMER MAKE-UP SYSTEM P&ID
18I-4 MECHANICAL DEWATERING BUILDING - MECHANICAL DEWATERING POLYMER FEED PUMPS P&ID
19I-1 OVERFLOW BASINS P&ID
20I-1 LIQUID ALUM SYSTEM STORAGE TANK P&ID
20I-2 LIQUID ALUM FEED P&ID
20I-3 SECONDARY COAGULANT STORAGE P&ID
20I-4 SECONDARY COAGULANT FEED P&ID
20I-5 BALLASTED FLOCCULATION DRY POLYMER MAKE-UP P&ID
20I-6 BALLASTED FLOCCULATION POLYMER FEED P&ID

INSTRUMENTATION

- 20I-7 FILTER AID POLYMER MAKE-UP SYSTEM P&ID
20I-8 FILTER AID POLYMER FEED P&ID - I
20I-9 FILTER AID POLYMER FEED PUMPS P&ID - II
20I-10 SODIUM HYPOCHLORITE STORAGE P&ID
20I-11 SODIUM HYPOCHLORITE FEED P&ID
20I-12 CAUSTIC SODA STORAGE P&ID
20I-13 CAUSTIC SODA FEED P&ID
20I-14 CALCIUM THIOSULFATE STORAGE P&ID
20I-15 CALCIUM THIOSULFATE FEED P&ID
21I-1 NITROGEN BOOST SYSTEM P&ID
21I-2 OZONE FEED GAS SYSTEM P&ID
21I-3 OZONE GENERATOR NO 1 P&ID
21I-4 OZONE GENERATOR NO 2 P&ID
21I-5 OZONE GAS HEADER P&ID
21I-6 OZONE COOLING WATER SYSTEM NO 1 P&ID
21I-7 OZONE COOLING WATER SYSTEM NO 2 P&ID
21I-8 OZONE DESTRUCT NO 1 P&ID
21I-9 OZONE DESTRUCT NO 2 P&ID
21I-10 OZONE WORKSTATION ROOM AMBIENT OZONE AND O2 MONITORING P&ID
22I-1 LIQUID OXYGEN STORAGE TANK P&ID
22I-2 LIQUID OXYGEN VAPORIZATION SYSTEM P&ID

LANDSCAPE

- 10L-1 LEGENDS AND NOTES HARDSCAPE AND MATERIALS
10L-2 HARDSCAPE AND MATERIALS OVERALL PLAN
10L-3 HARDSCAPE AND MATERIALS PLAN AREA A
10L-4 HARDSCAPE AND MATERIALS PLAN AREA B
10L-5 HARDSCAPE AND MATERIALS PLAN AREA C
10L-6 HARDSCAPE AND MATERIALS PLAN AREA D
10L-7 LEGENDS AND NOTES IRRIGATION
10L-8 IRRIGATION OVERALL PLAN
10L-9 IRRIGATION PLAN AREA A
10L-10 IRRIGATION PLAN AREA B
10L-11 IRRIGATION PLAN AREA C
10L-12 IRRIGATION PLAN AREA D
10L-13 LEGENDS AND NOTES PLANTING - 1
10L-14 LEGENDS AND NOTES PLANTING - 2
10L-15 PLANTING OVERALL PLAN
10L-16 PLANTING PLAN AREA A
10L-17 PLANTING PLAN AREA B
10L-18 PLANTING PLAN AREA C
10L-19 PLANTING PLAN AREA D
10L-20 HARDSCAPE DETAILS - 1
10L-21 HARDSCAPE DETAILS - 2
10L-22 HARDSCAPE DETAILS - 3
10L-23 HARDSCAPE DETAILS - 4
10L-24 HARDSCAPE DETAILS - 5
10L-25 HARDSCAPE DETAILS - KENTHORPE RAINGARDEN - 1
10L-26 HARDSCAPE DETAILS - KENTHORPE RAINGARDEN - 2
10L-27 HARDSCAPE DETAILS - ADMINISTRATION BUILDING ENTRANCE AREA - 1
10L-28 HARDSCAPE DETAILS - ADMINISTRATION BUILDING ENTRANCE AREA - 2
10L-29 HARDSCAPE DETAILS - KENTHORPE PEDESTRIAN ACCESS AREA - 1
10L-30 HARDSCAPE DETAILS - KENTHORPE PEDESTRIAN ACCESS AREA - 2
10L-31 HARDSCAPE DETAILS - MAPLETON TRAIL & EMERGENCY ACCESS ROAD - 1
10L-32 IRRIGATION DETAILS - 1
10L-33 IRRIGATION DETAILS - 2
10L-34 PLANTING DETAILS - 1
10L-35 PLANTING DETAILS - 2
10L-36 PLANTING DETAILS - 3

ARCHITECTURAL - VOLUME 7

- GA-1 GENERAL - CODES - ALL FACILITIES
GA-2 GENERAL - CODE PLAN - SITE PLAN
GA-3 ADMIN & OPERATIONS - 23 CODE PLAN - NON-PROCESS
GA-4 AREA 11 & 13 - GALLERY CODE PLAN - PROCESS FACILITIES
GA-5 AREA 11, 16, 20 & 21 - GRADE CODE PLAN - PROCESS FACILITIES
GA-6 AREA 11, 20 & 21 - FILTER DECK CODE PLAN - PROCESS FACILITIES
GA-7 AREA 14 & 15 CODE PLAN - PROCESS FACILITIES
GA-8 AREA 17 & 18 CODE PLAN - PROCESS FACILITIES
GA-9 STOREFRONT TYPES - PROCESS AREAS
GA-10 STOREFRONT TYPES - AREA 23
GA-11 DOOR SCHEDULES & TYPES
GA-12 DOOR SCHEDULES & TYPES
GA-13 DETAILS - EXTERIOR WALL TYPES - 1
GA-14 DETAILS - EXTERIOR WALL TYPES - 2
GA-15 DETAILS - INTERIOR WALL TYPES
GA-16 DETAILS - HORIZONTAL ASSEMBLIES
GA-17 DETAILS - DOORS - 1
GA-18 DETAILS - DOORS - 2
GA-19 DETAILS - WINDOWS - 1
GA-20 DETAILS - WINDOWS - 2
GA-21 DETAILS - LOUVERS
GA-22 DETAILS - EXTERIOR - 1
GA-23 DETAILS - EXTERIOR - 2
GA-24 DETAILS - EXTERIOR - 3
GA-25 DETAILS - EXTERIOR - 4
GA-26 DETAILS - EXTERIOR - 5
GA-27 NOT USED
GA-28 NOT USED
GA-29 NOT USED
GA-30 DETAILS - EXTERIOR - AREA 23 - 1
GA-31 DETAILS - EXTERIOR - AREA 23 - 2
GA-32 DETAILS - EXTERIOR - AREA 23 - 3
GA-33 DETAILS - EXTERIOR - AREA 23 - 4
GA-34 NOT USED
GA-35 NOT USED
GA-36 NOT USED
GA-37 NOT USED
GA-38 NOT USED
GA-39 NOT USED
GA-40 DETAILS - INTERIOR - 1
GA-41 DETAILS - INTERIOR - 2
GA-42 DETAILS - INTERIOR - 3
10A-1 ARCHITECTURAL SITE PLAN - SITE SECURITY WALLS
10A-2 ARCHITECTURAL ELEVATIONS - SITE SECURITY WALLS-1
10A-3 ARCHITECTURAL ELEVATIONS - SITE SECURITY WALLS-2
10A-4 ARCHITECTURAL DETAILS - SITE SECURITY WALLS
11A-1 BALLASTED FLOCCULATION - OVERALL PLAN

In addition to the highlighted sheets this drawing package includes:
- Permit application (sheets 1-2)
- General notes (sheets 5-6)
- 90% drawings (sheets 7-54)
- Storm drainage report (sheets 55-140)

PUBLIC IMPROVEMENTS/PUBLIC WORKS PERMIT REVIEW COPY. MARKUPS IN RED TO PROVIDE ADDITIONAL CLARIFICATION

PLOT DATE: September 10, 2008, 1:55PM USER: pntkrz FILE: C:\Documents and Settings\pntkrz\Desktop\136564 TITLE: BLOCK-2007.dwg



LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" SCALE ACCORDINGLY)
DESIGNED: J GROUNDS
DRAWN: A NISHIHARA
CHECKED: A PETERS
CHECKED: J GROUNDS
APPROVED: P KREFT

Table with 5 columns: REV, DESCRIPTION, BY, APP. Contains revision history entries.

PUBLIC IMPROVEMENTS/PUBLIC WORKS PERMIT REVIEW



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

GENERAL LIST OF DRAWINGS - 1

Table with 2 columns: PROJECT NUMBER, SCALE, DRAWING/FIGURE NUMBER, #### OF. Values: WORK ORDER 206, NO SCALE, G-3, #### OF

DEVELOPER
 LAKE OSWEGO - TIGARD WATER PARTNERSHIP
 CONTACT: JOEL KOMAREK
 PO BOX 369
 LAKE OSWEGO, OR 97034
 PHONE: 503-697-6588
 FAX: 503-534-5225

ENGINEERING FIRM
 MWH AMERICAS, INC
 CONTACT: JUDE GROUNDS, P.E.
 806 SW BROADWAY, SUITE 200
 PORTLAND, OR 97204

EXISTING SITE CONDITIONS
 THE EXISTING SITE CONSISTS OF A PAVED PARKING AREA, THE CURRENT WTP, AND AN AREA OF FORMERLY RESIDENTIAL LOTS SOUTH OF THE PLANT AND NORTH OF MAPLETON, ALL LOCATED APPROXIMATELY A QUARTER MILE SOUTHWEST FROM THE WILLAMETTE RIVER. THE PLANT WAS ORIGINALLY BUILT IN 1968 AND HAS UNDERGONE NUMEROUS UPGRADES. SOIL CONDITIONS CONSIST OF SOFT TO STIFF SILT AND SANDY SILT ABOVE THE WATER TABLE, MEDIUM DENSE SILTY SAND BELOW THE WATER TABLE FOLLOWED DENSE TO VERY DENSE GRAVEL.

DEVELOPED CONDITIONS
 MOST OF THE EXISTING WTP WILL BE DEMOLISHED AND REPLACED WITH AN EXPANDED FACILITY. PAVED AREAS WILL BE EXPANDED, BUT STORMWATER FACILITIES WILL ALSO BE IMPROVED.

NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE
 CLEARING (SUMMER 2013)
 MAJOR FACILITY AND UTILITY INSTALLATION (SUMMER 2013 TO SPRING 2015)
 SITE GRADING (SUMMER 2015)
 PAVING CONSTRUCTION (FALL 2015)
 FINAL STABILIZATION (FALL 2016)

TOTAL PROJECT SITE AREA = 9.24 ACRES
 TOTAL DISTURBED AREA = ~ 8.18 ACRES

RECEIVING WATER BODIES
 WILLAMETTE RIVER

PERMITTEE'S SITE INSPECTOR:
 COMPANY / AGENCY: _____
 PHONE: _____
 FAX: _____
 EMAIL: _____
 DESCRIPTION OF EXPERIENCE _____

INSPECTION FREQUENCY:

SITE CONDITION	MINIMUM FREQUENCY
1. ACTIVE PERIOD	DAILY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOWMELT, IS OCCURRING.
2. PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE IN ACCESSIBILITY.	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
3. INACTIVE PERIODS GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS.	ONCE EVERY TWO (2) WEEKS
4. PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER	INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.

- HOLD A PRE-CON MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE EC INSPECTOR.
- ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200 C PERMIT.
- INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200 C PERMIT REQUIREMENTS.
- CHANGES TO THE APPROVED ESC PLAN MUST BE SUBMITTED TO DEQ IN THE FORM OF AN ACTION PLAN.

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200C PERMIT. THIS ESC AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200 C PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200 C PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN

GENERAL EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES

1. EROSION CONTROL IS REQUIRED FOR THIS PROJECT. EROSION CONTROL MEASURES (OR ESC FACILITIES) MUST BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE CLACKAMAS COUNTY EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLANNING AND DESIGN MANUAL. SELECTED STANDARD DRAWINGS FROM THE EROSION CONTROL MANUAL ARE REPRODUCED IN THIS SET. HOWEVER, A CURRENT EROSION CONTROL MANUAL MUST BE KEPT ON SITE FOR INSTALLATION AND MAINTENANCE SPECIFICATIONS, AND FOR GUIDANCE IN PREPARING ALTERNATIVE EROSION CONTROL.
2. APPROVAL OF THE ESCP DOES NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE APPROVED EROSION CONTROL BEST MANAGEMENT PRACTICES ARE CONSTRUCTED AND MAINTAINED TO CONTAIN SEDIMENT AND POLLUTANTS ON THE CONSTRUCTION SITE. THE IMPLEMENTATION OF THE ESCP AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THE ESCP FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED, AND (WHERE NECESSARY) VEGETATION AND LANDSCAPING IS ESTABLISHED.
3. ALL ESC FACILITIES SHOWN SHALL BE INSTALLED AS PER THE DETAIL DRAWINGS IN THE CLACKAMAS COUNTY EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
4. ESC MEASURES SHALL NOT BE REMOVED UNTIL PERMANENT LANDSCAPING HAS BEEN INSTALLED AND A FINAL INSPECTION HAS BEEN REQUESTED AND APPROVED BY A CITY INSPECTOR.
5. INSPECTIONS MAY BE REQUESTED BY TELEPHONING THE INSPECTION REQUEST NUMBER ONE DAY PRIOR TO THE TIME OF INSPECTION.
6. THE IMPLEMENTATION OF THIS ESCP 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.
7. A SIGN WITH THE CITY'S EROSION CONTROL HOTLINE NUMBER (503-722-5509), PROJECT ADDRESS, AND PERMIT NUMBER SHALL BE POSTED AT A LOCATION CLEARLY VISIBLE FROM THE RIGHT OF WAY AND MAINTAINED UNTIL THE PROJECT COMPLETION.

AT BEGINNING OF CONSTRUCTION

8. ESC FACILITIES MUST BE INSTALLED BEFORE CONSTRUCTION CAN OCCUR WITHIN THAT WORK AREA. NO WORK MAY OCCUR OUTSIDE OF THE APPROVED DISTURBANCE AREAS.
9. RUMBLE STRIPS AND HAND BRUSHING (WHEN NEEDED) IS REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES SUCH AS STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED (WHERE NECESSARY) AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT.

THE ESC FACILITIES SHOWN ON THE 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, ROADWAYS OR VIOLATE APPLICABLE WATER STANDARDS OR LEAVE THE WORK SITE.

11. TEMPORARY ESC FACILITIES SHALL BE INSTALLED, INSPECTED, AND APPROVED BY A CITY INSPECTOR BEFORE STARTING GROUND-DISTURBING ACTIVITIES.
12. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

DURING CONSTRUCTION

13. THE ESC FACILITIES SHOWN ON THE PLAN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR THE UNEXPECTED STORM EVENTS OR CHANGES IN CONDITIONS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
14. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
15. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A WEEK OR WITHIN 24 HOUR FOLLOWING A STORM EVENT.
16. A DURABLE AND TEMPORARY HAUL ROUTE SHALL BE SELECTED AND DESIGNED TO BE EFFECTIVE IN PREVENTING EROSION, WHEEL RUTTING AND EXCESSIVE COMPACTION. THE ACCESS WAY, INCLUDING ALL IMPORTED MATERIAL, MUST BE REMOVED AFTER CONSTRUCTION.
17. STORM WATER INLETS THAT ARE FUNCTIONING DURING THE COURSE OF CONSTRUCTION SHALL BE PROTECTED BY APPROVED SEDIMENT CONTROL MEASURES SO THAT SEDIMENT-LADEN WATER CAN NOT ENTER THE INLETS WITH FIRST BEING FILTERED.
18. AT NO TIME SHALL MORE THAN 50% OF THE CATCH BASINS'S CAPACITY BE ALLOWED TO ACCUMULATE WITH SEDIMENT. 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.
19. ANY STOCKPILED SOILS MUST BE SECURED AND PROTECTED THROUGHOUT THE PROJECT WITH SOIL STABILIZATION MEASURES INCLUDING SEDIMENT BARRIERS AND PLASTIC SHEETING. THE CONTRACTOR IS ACCOUNTABLE FOR THE PROTECTION OF ALL STOCKPILES ON THE SITE, AND THOSE TRANSPORTED FROM THE SITE. DEPOSITION OF SOIL MAY BE SUBJECT TO ADDITIONAL REGULATION REQUIRING PERMIT, REVIEW OR EROSION AND SEDIMENT CONTROL.
20. ANY SOIL TRACKED ONTO THE STREET FROM ESTABLISHED CONSTRUCTION ENTRANCES MUST BE SWEEPED UP AND DISPOSED OF ON SITE. PUBLIC RIGHT OF WAY STREETS MUST NOT BE WASHED TO REMOVED TRACKED SOIL.
21. A DAILY EROSION CONTROL INSPECTION LOG MUST BE KEPT ON SITE FOR REVIEW BY CITY INSPECTION STAFF. THE LOG SHALL CONFORM TO THE PROJECT.

AFTER CONSTRUCTION

22. EROSION CONTROL MEASURES SHALL CONTINUE TO BE MONITORED, IMPROVED, AND MAINTAINED ON COMPLETED STAGES OF WORK UNTIL ALL PROJECT WORK AREAS ARE STABLE.
23. A VEGETATION PLAN MAY NEED TO BE IMPLEMENTED WHEN NECESSARY. PLANTINGS SHALL FOLLOW THE GUIDANCE SET FORTH IN THE CLACKAMAS COUNTY EPSC.
24. 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 DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.

SEDIMENT FENCE NOTES

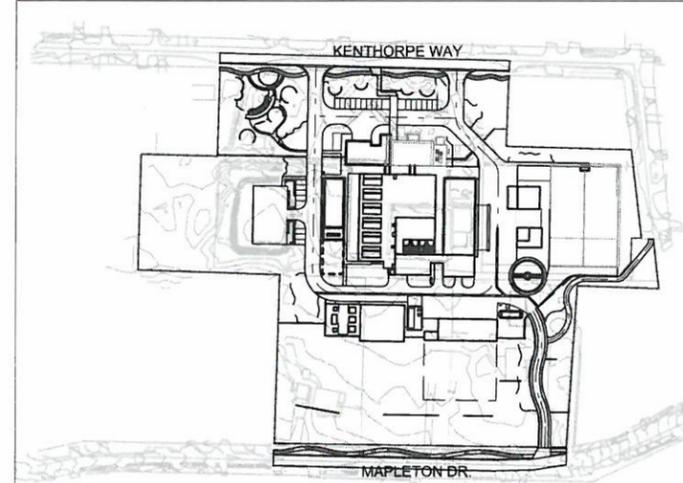
25. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE STITCHED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST, OR OVERLAP 2-INCH X 2-INCH POSTS.
26. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS. THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24 INCHES.
27. THE FILTER FABRIC SHALL HAVE A MINIMUM VERTICAL BURIAL OF 6 INCHES. ALL EXCAVATED MATERIAL FROM THE FILTER FABRIC INSTALLATION SHALL BE BACKFILLED AND COMPACTED ALONG THE ENTIRE DISTURBED AREA.
28. STANDARD HEAVY DUTY FILTER FABRIC SHALL HAVE MANUFACTURED STITCHED LOOPS FOR 2 INCH X 2 INCH POST INSTALLATION. STITCHED LOOPS SHALL BE INSTALLED ON THE UPHILL SIDE OF THE SLOPE.
29. FILTER FABRIC FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY PROTECTED AND STABILIZED.
30. FILTER FABRIC FENCES SHALL BE INSPECTED BY THE CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

ESCP DRAWING STANDARD NOTES

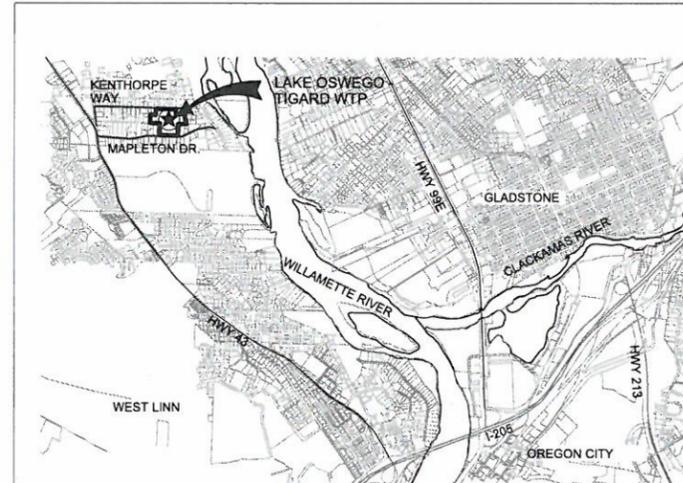
1. HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.8.c.i.(3))
2. ALL INSPECTIONS (PROVIDED BY OWNER) MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQ'S.
3. INSPECTION LOGS MUST BE KEPT (PROVIDED BY OWNER) IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQ'S.
4. RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, RETAIN THE ESCP AT THE CONSTRUCTION SITE OR AT ANOTHER LOCATION. (SCHEDULE B.2.a)
5. ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE EPSC IS A VIOLATION OF THE PERMIT. (SCHEDULE A.8.a)
6. THE ESCP MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQ'S FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, UPGRADE THESE MEASURES AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS. (SCHEDULE A.8.c.ii.(1)(c))
7. SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT. (SCHEDULE A.12.c.ii)
8. PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SCHEDULE A.8.c.ii.(1)(D))
9. IDENTIFY, MARK, AND PROTECT (BY FENCING OFF OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SIT AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SCHEDULE A.8.c.(1) & (2))
10. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SCHEDULE A.7.b.iii(1) AND A.7.b.iii(3))
11. EROSION AND SEDIMENT CONTROL MEASURES INCLUDING PERIMETER SEDIMENT CONTROL MUST BE IN PLACE BEFORE VEGETATION IS DISTURBED AND MUST REMAIN IN PLACE AND BE MAINTAINED, REPAIRED, AND PROMPTLY IMPLEMENTED FOLLOWING PROCEDURES ESTABLISHED FOR THE DURATION OF CONSTRUCTION, INCLUDING PROTECTION FOR ACTIVE STORM DRAIN INLETS AND CATCH BASINS AND APPROPRIATE NON-STORMWATER POLLUTION CONTROLS. (SCHEDULE A.7.d.i AND a.8.c)
12. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.c.i.(6))
13. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS. (SCHEDULE A.8.c.ii.(2))
14. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.c.ii.(7))

15. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMP'S SUCH AS: GRAVELED (OR PAVED) EXITS AND PARKING AREAS. GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR US AN EXIT TIRE WASH. THESE BMP'S MUST BE IN PLACE PRIOR TO LAND DISTURBING ACTIVITIES. (SCHEDULE A.7.d.ii.(1) AND A.8.c.(4))
16. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SCHEDULE A.7.d.ii(3))
17. USE BMP'S TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS: VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, LEFTOVER PAINTS, SOLVENTS, AND GLUES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.e.i.(2))
18. IMPLEMENT THE FOLLOWING BMP'S WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCHEDULE A.7.e.iii.)
19. USE WATER, SOIL BINDING AGENT OR OTHER DUST CONTROL TECHNIQUES AS NEEDED TO AVOID WIND-BLOWN SOIL. (SCHEDULE A.7.b.iii.)
20. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.9.b.iii)
21. IF A STORMWATER TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SCHEDULE A.9.d)
22. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SCHEDULE A.7.b)
23. AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMP'S MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATER OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SCHEDULE A.7.e.ii.(2))
24. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND DURING WET WEATHER. (SCHEDULE A.7.a.i)
25. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SCHEDULE A.9.c.i.)
26. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT, AND BEFORE BMP REMOVAL (SCHEDULE A.9.c.ii)
27. CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY 50%. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY 50% AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.c.iii & iv)
28. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A REOCCURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME. (SCHEDULE A.9.b.ii)
29. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SCHEDULE A.9.b.ii)
30. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.f.i)
31. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.f.ii)

PROVIDE PERMANENT EROSION CONTROL MEASURES ON ALL EXPOSED AREAS. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. HOWEVER, DO NOT REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AS EXPOSED AREAS BECOME STABILIZED, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. PROPERLY DISPOSE OF CONSTRUCTION MATERIALS AND WASTE, INCLUDING SEDIMENT RETAINED BY TEMPORARY BMP'S (SCHEDULE A.7.b.ii(2) AND A.8.c.iii)



LOCATION MAP
NTS



VICINITY MAP
NTS

PROJECT LOCATION
 4260 KENTHORPE WAY
 WEST LINN, OR 97068

EROSION & SEDIMENT CONTROL DRAWING LIST

NO.	DESCRIPTION	NO.	DESCRIPTION
GEC-1	COVER	EC-4	EXISTING SITE PLAN - AREA D
GEC-2	NOTES	EC-5	CONSTRUCTION PLAN - AREA A
GEC-3	DETAILS-I	EC-6	CONSTRUCTION PLAN - AREA B
EC-1	EXISTING SITE PLAN - AREA A	EC-7	CONSTRUCTION PLAN - AREA C
EC-2	EXISTING SITE PLAN - AREA B	EC-8	CONSTRUCTION PLAN - AREA D
EC-3	EXISTING SITE PLAN - AREA C		

ATTENTION EXCAVATORS:
 OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.



LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)
 DESIGNED: A ODELL
 DRAWN: A ODELL
 CHECKED: -
 CHECKED: -
 APPROVED: -

REVISIONS

REV.	DESCRIPTION	BY	APP.

PUBLIC IMPROVEMENTS/ PUBLIC WORKS PERMIT REVIEW



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

EROSION & SEDIMENT CONTROL PLANS

General Notes (1 of 2)

FILENAME 138554-TITLE BLOCK
 PROJECT NUMBER (PROJECT #)
 SCALE
 NO SCALE
 DRAWING/FIGURE NUMBER
GEC-1

PLOT DATE: September 10, 2008 - 1:56PM USER: abram FILE: C:\work\m\138554\138554-TITLE BLOCK.dwg

LOCAL AGENCY SPECIFIC EROSION CONTROL NOTES:

- DURING WET WEATHER PERIOD (OCTOBER 1 - MAY 31), TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORK DAY.
- ALL ACTIVE INLETS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. UNLESS OTHERWISE APPROVED, A SURFACE MOUNTED AND ATTACHABLE U-SHAPED FILTER BAG IS REQUIRED FOR ALL CURB INLET CATCH BASINS.
- PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BMP'S THAT MUST BE INSTALLED ARE GRAVEL CONSTRUCTION ENTRANCE, PERIMETER SEDIMENT CONTROL, AND INLET PROTECTION. THESE BMP'S MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT.
- IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAN SEPTEMBER 1ST; THE TYPE AND PERCENTAGES OF SEED IN THE MIX ARE AS IDENTIFIED ON THE PLANS OR AS SPECIFIED BY THE DESIGN ENGINEER.
- ALL PUMPING OF SEDIMENT LADEN WATER MUST BE DISCHARGED OVER AN UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT CONTROL BMP (I.E. FILTER BAG).

STORM DRAINAGE GENERAL NOTES:

- THE CONTRACTOR SHALL VIDEO INSPECT AND MANDREL ALL CONVEYANCE LINES. PROVIDE VIDEOS AND REPORTS TO THE ENGINEER A MINIMUM OF 10 DAYS PRIOR TO PLACEMENT OF TOP LIFT OF PAVEMENT OR OTHER FINISHED SURFACES OTHER THAN LANDSCAPING. STORM DRAINS SHALL BE TESTED FOR DEFLECTION IN ACCORDANCE WITH DIVISION 601.03.11 AND VIDEO INSPECTED IN ACCORDANCE WITH DIVISION 601.103.12 OF THE WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. ALL TESTS SHALL BE WITNESSED BY THE ENGINEER AND A REPRESENTATIVE OF THE CITY.
- ALL REQUESTS FOR ALTERNATIVE MATERIALS SHALL BE SUBMITTED TO THE ENGINEER AND THE CITY OF WEST LINN IN WRITING. THE ENGINEER MAY REQUIRE A MINIMUM OF 5 WORKING DAYS TO REVIEW AND COMMENT ON ALL SUCH REQUESTS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY CONFLICTS WITH THESE PLANS UPON DISCOVERY.
- THE CONTRACTOR SHALL NOT ALLOW ANY WASHWATER OR DEBRIS TO ENTER NEW PIPES OR CHANNELS DURING CONSTRUCTION.
- ALL PIPE BEDDING AND BACKFILL SHALL CONFORM TO THE CITY OF WEST LINN STANDARDS FOR WORK INSIDE THE CITY RIGHT OF WAY AND TO THE PROJECT TECHNICAL SPECIFICATIONS. U.P.C. STANDARDS AND THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT FOR WORK ON PRIVATE PROPERTY. GRANULAR BACKFILL (3/4 - 0) IS TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD AND NATIVE MATERIAL SHALL BE COMPACTED TO 95% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL.
- ALL MANHOLE AND CLEANOUT RIMS ARE APPROXIMATE AND SHALL BE INSTALLED TO THE FINAL PAVEMENT GRADE. ALL ATTEMPTS SHALL BE MADE TO PREVENT PONDING OF WATER ON THE PAVEMENT. THE CONTRACTOR SHALL WASH THE ENTIRE PAVING AREA AND REPAIR ANY POINTS OF PONDING PRIOR TO THE TOP LIFT OF PAVEMENT. CONTACT THE DESIGN ENGINEER IF A SOLUTION IS NOT APPARENT FOR PONDING IN THE PAVEMENT.
- ALL CONNECTIONS NOT MADE AT MANHOLES OR CATCHBASINS SHALL USE A WYE FITTING. GUTTER INLETS SHALL BE POURED IN-PLACE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI. FRAME SHALL BE FABRICATED OF STRUCTURAL STEEL ASTM A-7, A-38, A373.
- ALL PUBLIC PIPE SHALL BE RIBBED PVC (ASTM D3034) OR CONCRETE. ALL PRIVATE PIPE SHALL BE PVC (ASTM D3034) OR CPE SMOOTH WALL INTERIOR/CORRUGATED EXTERIOR (AASHTO M252) OR OTHER MATERIAL AS SELECTED BY CONTRACTOR FROM THE CITY OR UNIFORM PLUMBING CODE (U.P.C) APPROVED LIST AND SUBJECT TO THE APPROVAL OF THE ENGINEER AND PLUMBING INSPECTOR. EIGHT INCH TO 24-INCH STORM DRAIN PIPE IS PREFERRED TO BE SEAMLESS RIBBED PVC PIPE CONFORMING TO ASTM F794. WHERE LARGER PIPE IS REQUIRED OR LACK OF COVER PREVENTS USE OF RIBBED PVC PIPE, PIPE SHALL BE CLASS 3 NON-REINFORCED CONCRETE PIPE CONFORMING TO AWWA C151 CLASS 52. RUBBER JOINTS ARE REQUIRED FOR ALL CONCRETE PIPE. SIX INCHES AND SMALLER STORM DRAIN PIPE SHALL CONFORM TO ASTM D3034 PVC PIPE. STORM DRAIN SERVICE LATERALS SHALL BE 4" PIPE CONFORMING TO THE SAME SPECIFICATIONS AS THE STORM DRAIN MAIN LINES. SERVICE LATERALS SHALL BE INSTALLED TO A POINT BEYOND THE PROPERTY LINE OR UTILITY EASEMENT AS SHOWN ON THE PLAN. THE SERVICE LATERAL SHALL BE PLUGGED WITH A RUBBER RING PLUG WITH THE LOCATION OF THE LATERALS MARKED WITH A 2"x4" STAKE PAINTED WHITE.
- A PLUMBING PERMIT FROM THE CITY OF WEST LINN BUILDING DEPARTMENT IS REQUIRED FOR STORM DRAINS BEYOND THE FIRST CLEANOUT.
- ALL MATERIALS, INSTALLATION TESTS, AND INSPECTIONS TO BE IN STRICT ACCORDANCE WITH THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS.
- SEE LANDSCAPE PLANS 10L-15 TO 10L-19 FOR STORMWATER SWALE PLANTINGS.
- INSTALL TRACER WIRE AS REQUIRED BY THE U.P.C AND CITY STANDARDS.

WATER SYSTEM GENERAL NOTES:

NOT USED

BMP MATRIX FOR CONSTRUCTION PHASES - REFER TO THE DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMP'S

	CLEARING	SITE GRADING	UTILITY INSTALLATION	PAVING CONSTRUCTION	FINAL STABILIZATION	WET WEATHER (OCT. 1 - MAY 31)
EROSION PREVENTION						
GROUND COVER	**X	X	X	X	X	X
HYDRAULIC APPLICATIONS						
PLASTIC SHEETING	X	X	X	X	X	X
MATting (PAVEMENT PROTECTION)	X	X	X	X	X	X
DUST CONTROL	X	X	X	X	X	X
TEMPORARY/PERMANENT SEEDING						
BUFFER ZONE	**X	X	X	X	X	X
SEDIMENT CONTROL						
SEDIMENT FENCE(PERIMETER)	**X	X	X	X	X	X
SEDIMENT FENCE (INTERIOR)			X	X	X	X
DEWATERING		X	X	X		
SEDIMENT BASIN						
WATTLES	X	X	X	X	X	
RUNOFF CONTROL						
CONSTRUCTION ENTRANCE	**X	X	X	X	X	X
PIPE SLOPE DRAIN						
INLET PROTECTION	**X	X	X	X	X	X
SURFACE ROUGHENING						
CHECK DAMS						
POLLUTION PREVENTION						
PROPER SIGNAGE	X	X	X	X	X	X
HAZ WASTE MGMT	X	X	X	X	X	X
SPILL KIT ON SITE	X	X	X	X	X	X
CONCRETE WASHOUT AREA	X	X	X	X	X	X

** SIGNIFIES BMP THAT WILL BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY.

RATIONALE STATEMENT

A COMPREHENSIVE LIST OF AVAILABLE BMP OPTIONS BASED ON DEQ'S GUIDANCE MANUAL HAS BEEN REVIEWED TO COMPLETE THIS EROSION AND SEDIMENT CONTROL PLAN. SOME OF THE ABOVE LISTED BMP'S WERE NOT CHOSEN BECAUSE THEY WERE DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS, TOPOGRAPHIC CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS, AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESC PLAN, AND ACTION PLAN WILL BE SUBMITTED.

INITIAL

STREET GENERAL NOTES:

- NEW STREET SUBGRADES ARE TO BE CLEARED OF ALL SURFACE VEGETATION AND OTHER MISCELLANEOUS STRUCTURES OR MATERIALS. GRUB IMPROVEMENT AREAS TO REMOVE ALL BURIED VEGETATIVE MATTER AND DEBRIS TO A DEPTH OF 12" BELOW SUBGRADE. PROPERLY DISPOSE OF ALL WASTE MATERIAL.
- STREET SUBGRADE WILL CONFORM TO DIVISION 501 OF THE CITY OF WEST LINN SUMMARY CONSTRUCTION SPECIFICATIONS. AREAS TO RECEIVE FILL ARE TO BE INSPECTED BY CITY OF WEST LINN PERSONNEL PRIOR TO PLACEMENT OF THE FILL. THE CONTRACTOR SHALL HAVE FILL AREAS TESTED FOR COMPACTION BY THE CERTIFIED TESTING LAB IN ACCORDANCE WITH W.L.S.C.S DIVISION 501.03.08 SUCH TESTING WILL BE AT THE CONTRACTOR'S EXPENSE.
- AGGREGATE BASE ROCK SHALL CONFORM TO THE REQUIREMENTS OF W.L.S.C.S. DIVISION 205. BASE COURSE SHALL BE 1 1/2" - 0" CRUSHED ROCK AND LEVELING COURSE SHALL BE 3/4" - 0". CITY OF WEST LINN REQUIRES A PROOF ROLL WITH A LOADED 10 YARD DUMP TRUCK OF THE SUB GRADE PRIOR TO PLACEMENT OF ROCK AND AGAIN AFTER PLACEMENT OF THE BASE ROCK AND PRIOR TO PAVING. ALL UNDERGROUND UTILITIES INCLUDING THE LATERALS, SERVICES AND POWER OR GAS CONDUITS WILL BE IN PLACE BEFORE SUBGRADE PROOF ROLL WILL TAKE PLACE.
- ASPHALT CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF W.L.S.C.S. DIVISION 505. KENTHORPE AND OLD RIVER STREETS WILL HAVE TWO 2" BASE LIFTS WHILE MAPLETON WILL HAVE 2 LIFTS OF 2.5" BASE LIFTS. THE INITIAL LIFT SHALL BE CLASS 'B' A.C. AND 2" FINAL LIFT SHALL BE CLASS 'C' A.C. MEETING THE SPECIFICATIONS OF W.L.S.C.S DIVISION 505. THE TOP LIFT OF ASPHALT CONCRETE SHALL NOT BE PLACED PRIOR TO RECEIVING PERMISSION FROM THE CITY OF WEST LINN ENGINEERING DEPARTMENT.
- SEE SHEET 10L-35 AND SUBSEQUENT SHEETS FOR CONSTRUCTION OF CURB AND GUTTER. CONTRACTOR SHALL STAMP LOCATION OF SEWER, STORM AND WATER CROSSINGS WITH AN (SS), (SD) OR A (W), A PROOF ROLL OF THE CURB LINES IS REQUIRED PRIOR TO POURING CURBS.
- ALL MATERIALS, INSTALLATION, TESTS AND INSPECTIONS TO BE IN STRICT ACCORDANCE WITH CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS.
- A STREET CONSTRUCTION ENCROACHMENT PERMIT OR SIMILAR PERMIT MAY BE REQUIRED FROM THE CITY OF WEST LINN. CONSTRUCTION PERMIT FEES OR OTHER SIMILAR FEES OR BONDING REQUIRED OF THE CONTRACTOR WILL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN.

GENERAL CONSTRUCTION NOTES:

SEE PAGE 7 SHEET GC-1 'CIVIL NOTES'

PROPOSED SEED MIX FOR EROSION CONTROL

BOTANIC NAME	COMMON NAME	APPLICATION RATE
FESTUCA RUBRA VAR. COMMUTATA	CHEWINGS FESCUE	35%
BROMIS CARINATUS	CALIFORNIA BROME	25%
ELYMUS GLAUCUS	BLUE WILD RYE	35%
LUPINUS POLYPHYLLUS	LARGE LEAF LUPINE	4%
ACHILLEA MILLEFOLIUM	YARROW	1%
TOTAL		100%

PROPOSED SEED MIX FOR EROSION CONTROL

TRITICUM AESTIVUM X ELYTRIGIA ELONGATA	REGREEN	50 LBS. PER ACRE
SOIL GUARD (BONDED FILER MATRIX)		300 LBS. PER ACRE

SANITARY SEWER GENERAL NOTES:

- SANITARY SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WEST LINN AND U.P.C STANDARDS. ALL MATERIALS, INSTALLATIONS, TESTS AND INSPECTIONS ARE TO BE MADE IN STRICT ACCORDANCE WITH CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS.
- NO DRAINAGE PIPING OR PART THEREOF, WHICH IS CONSTRUCTED OF MATERIALS OTHER THAN THOSE APPROVED FOR USE UNDER OR WITHIN A BUILDING SHALL BE INSTALLED UNDER OR WITHIN FIVE (5) FEET OF ANY BUILDING OR STRUCTURE OR PART THEREOF OR LESS THAN ONE FOOT (1') BELOW THE SURFACE OF THE GROUND.
- VACUUM, MANDREL, VIDEO AND AIR TESTING OF PUBLIC SANITARY LINES AND MANHOLES SHALL BE CONDUCTED IN ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORKS REQUIREMENTS. PRIVATE SANITARY LINES SHALL BE WATER OR AIR TESTED IN ACCORDANCE WITH CITY OF WEST LINN BUILDING DEPARTMENT AND U.P.C STANDARDS. SANITARY SEWER PIPE AND APPURTENANCES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH W.L.S.C.S. DIVISION 301.03.09 AND MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH W.L.S.C.S DIVISION 302.03.07. ALL TESTS SHALL BE WITNESSED BY THE ENGINEER AND THE CITY OF WEST LINN. CONTRACTOR IS RESPONSIBLE FOR COORDINATING TESTING SO THAT ALL TESTS SHALL BE PASSED AND THE NEW LINES SHALL BE ACCEPTED PRIOR TO CONNECTION TO EXISTING SYSTEM.
- ALL NECESSARY TESTS SHALL BE PERFORMED BY THE CONTRACTOR AND WITNESSED BY THE CITY AND ENGINEER.
- FINISHED RIM ELEVATIONS OF MANHOLES AND/OR CLEANOUTS WITHIN PAVEMENT ARE APPROXIMATE. FINAL FINISHED RIM ELEVATIONS SHALL MATCH FINISHED PAVEMENT GRADES.
- PIPE BEDDING AND BACKFILL SHALL CONFORM TO THE CITY OF WEST LINN STANDARDS FOR WORK INSIDE THE CITY RIGHT OF WAY AND TO THE PROJECT TECHNICAL SPECIFICATIONS. U.P.C. STANDARDS AND THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT FOR WORK ON PRIVATE PROPERTY AS SEEN ON TRENCH SECTIONS ON SHEET 10L-35
- THE CONTRACTOR SHALL VERIFY THAT THE MINIMUM HORIZONTAL AND VERTICAL SEPERATION BETWEEN WATER AND SEWER UTILITIES HAS BEEN MAINTAINED AS REQUIRED BY THE CITY OF WEST LINN, THE OREGON HEALTH DIVISION AND THE U.P.C.
- SANITARY SEWER PIPE SHALL BE ASTM D3034 SDR 35 AND SHALL BE GREEN IN COLOR UNLESS OTHERWISE NOTED. PIPE SHALL BE PVC SEWER PIPE CONFORMING TO ASTM D-3034 SDR 35. MINIMUM STIFFNESS SHALL BE 48 PSI AND JOINT TYPE SHALL BE ELASTOMERIC GASKET CONFORMING TO ASTM F-477.
- INSTALL CONTINUOUS INSULATED COPPER TRACER WIRE AS REQUIRED BY U.P.C
- MANHOLE BASES SHALL BE POURED IN PLACE CONCRETE BASE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI OR PRECAST. MANHOLE RISERS AND TOPS SHALL BE PRECAST SECTIONS WITH MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI. TOPS SHALL BE ECCENTRIC CONES EXCEPT WHERE INSUFFICIENT HEADROOM REQUIRES FLAT TOPS. INVERTS SHALL BE CONSTRUCTED SO AS TO PROVIDE SMOOTH FLOW-THROUGH CHARACTERISTICS AND CHANNELS MUST BE ABLE TO PASS A 7"x30" CYLINDER INTO PIPES. PVC PIPE SHALL BE CONNECTED TO MANHOLE BY MEANS OF A FLEXIBLE CONNECTION AND SHALL HAVE A SHEAR JOINT LOCATED 18" OUTSIDE OF MANHOLE. CEMENT GROUT FOR CONNECTING PVC SEWER PIPE TO MANHOLE WILL NOT BE PERMITTED.
- ALL MANHOLES LOCATED IN EASEMENT AREAS REQUIRE TAMPER PROOF LIDS AND THE LID SHALL BE SET 12 INCHES ABOVE PROPOSED GRADE.
- CLEANOUT PIPE FITTINGS AND JOINTS SHALL BE THE SAME SPECIFICATIONS AS FOR PIPE. CASTINGS ARE SHOWN ON DETAILS AND SHALL CONFORM TO ASTM A48 (GRADE 30). CLEANOUT RISERS SHALL MATCH DOWNSTREAM PIPE DIAMETER FRAMES SHALL BE SET ON 18" X 24" CONCRETE PAD.
- GRANULAR BACKFILL (3/4 - 0) IS TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD AND NATIVE MATERIAL SHALL BE COMPACTED TO 95% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL. EXCAVATION, BEDDING, AND BACKFILL SHALL BE IN ACCORDANCE WITH DIVISION 204 OF THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. BACKFILL UNDER NEW STREETS SHALL BE CLASS B AND BACKFILL IN EXISTING STREETS SHALL BE CLASS E.
- PVC SERVICE LATERALS SHALL BE 4" PIPE CONFORMING TO THE SAME SPECIFICATIONS AS THE SEWER MAINS. SERVICE LATERALS SHALL BE INSTALLED TO A POINT BEYOND THE PROPERTY LINE OF THE SEWER OR UTILITY EASEMENT AS SHOWN ON THE PLAN. THE SERVICE LATERAL SHALL BE PLUGGED WITH A RUBBER RING PLUG WITH THE LOCATION OF THE LATERAL MARKED WITH A 2"x4" STAKE PAINTED GREEN.
- A PLUMBING PERMIT FROM THE CITY OF WEST LINN BUILDING DEPARTMENT IS REQUIRED FOR SANITARY SEWER LATERALS BEYOND THE FIRST CLEANOUT.

PLOT DATE: September 10, 2008 - 1:55PM USER: abnrt
FILE: C:\pwworkdir\ms52971\318564-TITLE BLOCK.dwg



LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: A ODELL
DRAWN: A ODELL
CHECKED:
CHECKED:
APPROVED:

REVISIONS				
REV.	DESCRIPTION	BY	APP.	

PUBLIC IMPROVEMENTS/ PUBLIC WORKS PERMIT REVIEW

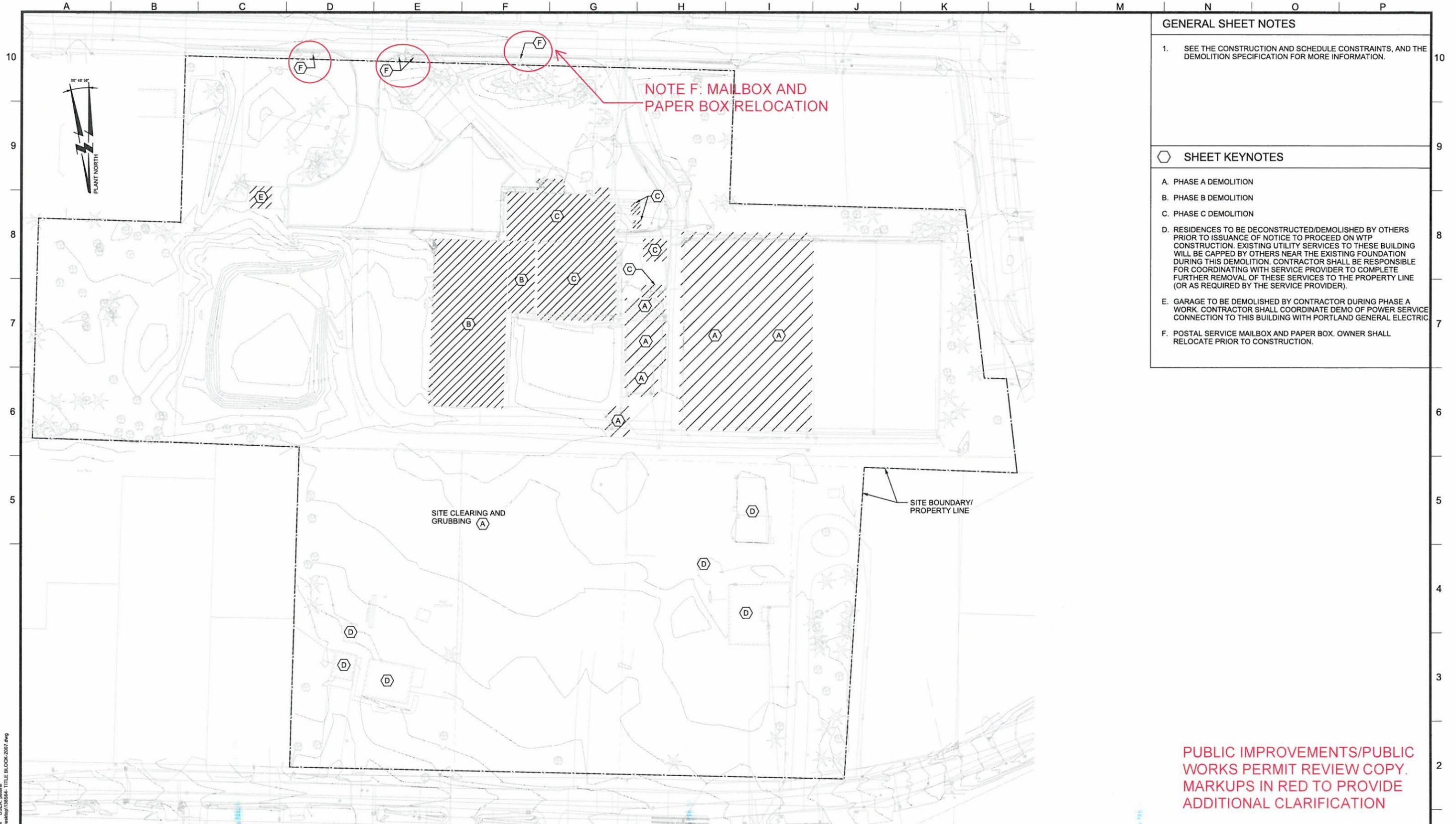


LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

EROSION & SEDIMENT CONTROL PLANS

General Notes (2 of 2)

FILENAME	138564-TITLE BLOCK
PROJECT NUMBER (PROJECT #)	
SCALE	NO SCALE
DRAWING/FIGURE NUMBER	GEC-2



- GENERAL SHEET NOTES**
- SEE THE CONSTRUCTION AND SCHEDULE CONSTRAINTS, AND THE DEMOLITION SPECIFICATION FOR MORE INFORMATION.
- SHEET KEYNOTES**
- A. PHASE A DEMOLITION
 - B. PHASE B DEMOLITION
 - C. PHASE C DEMOLITION
 - D. RESIDENCES TO BE DECONSTRUCTED/DEMOLISHED BY OTHERS PRIOR TO ISSUANCE OF NOTICE TO PROCEED ON WTP CONSTRUCTION. EXISTING UTILITY SERVICES TO THESE BUILDING WILL BE CAPPED BY OTHERS NEAR THE EXISTING FOUNDATION DURING THIS DEMOLITION. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH SERVICE PROVIDER TO COMPLETE FURTHER REMOVAL OF THESE SERVICES TO THE PROPERTY LINE (OR AS REQUIRED BY THE SERVICE PROVIDER).
 - E. GARAGE TO BE DEMOLISHED BY CONTRACTOR DURING PHASE A WORK. CONTRACTOR SHALL COORDINATE DEMO OF POWER SERVICE CONNECTION TO THIS BUILDING WITH PORTLAND GENERAL ELECTRIC.
 - F. POSTAL SERVICE MAILBOX AND PAPER BOX. OWNER SHALL RELOCATE PRIOR TO CONSTRUCTION.

PUBLIC IMPROVEMENTS/PUBLIC WORKS PERMIT REVIEW COPY. MARKUPS IN RED TO PROVIDE ADDITIONAL CLARIFICATION

PLOT DATE: September 10, 2009 - 1:55PM USER: peters FILE: C:\Documents and Settings\peters\Desktop\138564 - TITLE BLOCK.dwg



LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: A LEEDS
 DRAWN: U SURYAWANSHI
 CHECKED: A PETERS
 CHECKED: J GROUNDS
 APPROVED: P KREFT

REVISIONS				
REV.	DESCRIPTION	BY	APP.	

PUBLIC IMPROVEMENTS/PUBLIC WORKS PERMIT REVIEW



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

DEMOLITION
SITE PLAN

PROJECT NUMBER	WORK ORDER 206
SCALE	1" = 40'
DRAWING/FIGURE NUMBER	D-1
### OF	1

APPROVED: *Jude Daniel* DATE: 3/27/13
 JUDGE DANIEL GROUNDS

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
CIVIL GENERAL NOTES			CIVIL GENERAL NOTES - CONTINUED			TOPOGRAPHY AND MAPPING SYMBOLS			PIPING AND UTILITIES - CONTINUED			ROAD AND PAVING SYMBOLS			
<p>GENERAL</p> <p>1. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE FROM DAMAGE. ALL IMPROVEMENTS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE EXPEDITIOUSLY REPAIRED OR RECONSTRUCTED AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.</p> <p>2. THE CONTRACTOR SHALL PROPERLY DISPOSE OF ALL DEBRIS FROM DEMOLITION AT CONTRACTOR'S EXPENSE.</p> <p>3. ALL BUILDING COORDINATES ARE TO OUTSIDE CORNER OF COLUMN OR BUILDING.</p> <p>4. THE CONTRACTOR SHALL DISPOSE OF ALL NON-ORGANIC WASTES SUCH AS OLD GUNITE, PIPING, ROCK RUBBLE ETC... AT AN APPROVED LANDFILL OR OTHER SUITABLE DISPOSAL SITES AT THE CONTRACTOR'S EXPENSE.</p> <p>5. CONTRACTOR SHALL RESTORE ALL SURVEY MONUMENTS THAT ARE DAMAGED OR DESTROYED DURING CONSTRUCTION.</p> <p>UTILITIES</p> <p>1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES IN AND AROUND THE AREAS OF NEW CONSTRUCTION. THE CONTRACTOR SHALL POTHOLE FOR EXISTING UTILITIES PRIOR TO SUBMITTAL OF SHOP DRAWINGS, FOR POINTS OF CONNECTIONS.</p> <p>2. THE CONTRACTOR SHALL PROTECT ALL REMAINING EXISTING UTILITIES.</p> <p>3. LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS WERE OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL VERIFY ALL LOCATIONS AND ELEVATIONS AND SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT UTILITY LINES WHETHER SHOWN OR NOT SHOWN.</p> <p>4. PRIOR TO ANY CONNECTION TO AN EXISTING UTILITY, THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER.</p> <p>5. PRIOR TO ANY EXCAVATION IN THE VICINITY OF ANY EXISTING UNDERGROUND FACILITIES, INCLUDING ALL WATER, SEWER, STORM DRAIN, GAS, PETROLEUM PRODUCTS, OR OTHER PIPELINES; ALL BURIED ELECTRIC POWER, COMMUNICATIONS, OR TELEVISION CABLES; ALL TRAFFIC SIGNAL AND STREET LIGHTING FACILITIES; AND ALL ROADWAY, STATE HIGHWAY, AND RAILROAD RIGHTS-OF-WAY, THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE AUTHORITIES REPRESENTING THE OWNERS OR AGENCIES RESPONSIBLE FOR SUCH FACILITIES NOT LESS THAN 3 DAYS NOR MORE THAN 7 DAYS PRIOR TO EXCAVATION SO THAT A REPRESENTATIVE OF SAID OWNERS OR AGENCIES CAN BE PRESENT DURING SUCH WORK IF THEY SO DESIRE. IN THE CASE OF THE UNDERGROUND UTILITY SERVICE ALERT CENTER, THIS NOTICE WILL GIVE THEM TIME TO MARK THE LOCATION OF THE UTILITIES. THE CONTRACTOR SHALL ALSO NOTIFY THE REGIONAL OR LOCAL UNDERGROUND SERVICE ALERT COMPANY AT LEAST 3 DAYS, BUT NO MORE THAN 7 DAYS, PRIOR TO SUCH EXCAVATION.</p> <p>6. ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503)232-1987).</p> <p>EROSION CONTROL</p> <p>1. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN FOR WORK DURING THE CONSTRUCTION, SIGNED AND STAMPED BY A REGISTERED CIVIL ENGINEER PRIOR TO THE START OF CONSTRUCTION.</p> <p>a. ALL SLOPES SHALL BE PROTECTED FROM EROSION DURING ROUGH GRADING OPERATIONS AND THEREAFTER, UNTIL INSTALLATION OF FINAL GROUND COVER (SEE LANDSCAPE PLANS FOR FINAL GROUND COVER).</p> <p>b. ALL SLOPE PROTECTION SWALES SHALL BE CONSTRUCTED AT THE SAME TIME AS BANKS ARE GRADED.</p> <p>c. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF EROSION CONTROL MEASURES CONTAINED WITHIN THE CONTRACT SPECIFICATIONS OR AS REQUIRED BY THE CITY, DISTRICT, OR OTHER REGULATORY AUTHORITY. THE CONTRACTOR SHALL ALSO PROVIDE ANY ADDITIONAL EROSION CONTROL MEASURES (E.G. HYDROSEEDING, MULCHING OF STRAW, SAND BAGGING, DIVERSION DITCHES, ETC.) DICTATED BY FIELD CONDITIONS TO PREVENT EROSION OR THE INTRODUCTION OF DIRT, MUD, OR DEBRIS INTO EXISTING PUBLIC STREETS, WATERWAYS, OR ONTO ADJACENT PROPERTIES DURING ANY PHASE OF CONSTRUCTION OPERATIONS.</p> <p>PIPING</p> <p>1. THE CONTRACTOR SHALL COMPLY WITH THE STATE DEPARTMENT OF HEALTH SERVICES CRITERIA AND CITY'S STANDARD DETAIL WL-409 FOR THE SEPARATION OF WATER MAINS AND SANITARY SEWERS.</p> <p>2. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 36 INCHES OF COVER ON ALL PIPELINES UNLESS OTHERWISE SHOWN OR DIRECTED OR ENCASED PER S-171.</p> <p>3. STRAIGHT SLOPES SHALL BE MAINTAINED BETWEEN INVERT ELEVATIONS SHOWN OR SPECIFIED.</p> <p>4. THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES, PULL BOXES AND MANHOLES TO FINISHED GRADE UNLESS OTHERWISE SHOWN OR SPECIFIED. MANHOLES IN OPEN FIELDS SHALL BE SET ONE FOOT ABOVE GRADE. APPROXIMATE RIM ELEVATIONS ARE SHOWN ON DRAWINGS.</p> <p>5. ALL PIPE TRENCHING AND BACKFILL SHALL BE IN ACCORDANCE WITH DETAIL C-602 FOR RIGID PIPE AND C-601 FOR FLEXIBLE PIPE. THE PIPING SHOWN ON THESE PLANS SHALL BE RESTRAINED JOINT DESIGN AT ALL SLEEVE TYPE COUPLINGS.</p> <p>6. FOR PIPE WITH COVER LESS THAN 10 FEET, THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE RESTRAINED FLEXIBLE JOINTS OR SLEEVE TYPE COUPLINGS FOR EACH PIPE PENETRATING A STRUCTURE UNLESS OTHERWISE INDICATED. THE COUPLINGS AND FLEXIBLE JOINTS SHALL BE 3, 8, AND 13 FEET AWAY FROM THE STRUCTURE/CONCRETE. ALL PIPING SHALL BE RESTRAINED JOINT DESIGN UNLESS INDICATED OTHERWISE. COUPLINGS AND RESTRAINED JOINTS SHALL BE PROVIDED WHETHER SHOWN ON THE DRAWINGS OR NOT. STEEL PIPE RESTRAINED HARNESS SETS SHALL BE PROVIDED IN ACCORDANCE WITH AWWA M-11. ALL OTHER PIPES, COUPLINGS AND RESTRAINED JOINTS SHALL BE APPROVED BY THE ENGINEER. ALL RESTRAINED JOINTS SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURERS' RECOMMENDATIONS. FOR PIPE WITH COVER 10 FEET OR GREATER, PROVIDE A MINIMUM OF FOUR FLEXIBLE COUPLINGS OR JOINTS AT CONCRETE PENETRATION WITH FIRST FLEXIBLE JOINT WITHIN 3 FEET FROM STRUCTURE/CONCRETE AND SUBSEQUENT JOINTS SPACED AT 5 FEET APART.</p>			<p>PIPING (CONTINUED)</p> <p>7. PROVIDE THRUST BLOCKS ON ALL HORIZONTAL AND VERTICAL CHANGE IN DIRECTION AND DEAD END PER DETAIL C-605 FOR ALL PRESSURE PIPING (EXCEPT ON WELDED JOINT), UNLESS THE USE OF MECHANICAL RESTRAINTS ARE OTHERWISE INDICATED OR ACCEPTABLE TO THE ENGINEER.</p> <p>SURVEY AND CONTROL</p> <p>SEE SHEET 10C-4 FOR BENCHMARK INFORMATION.</p> <p>DRAINAGE SYMBOLS</p> <p> RIPRAP</p> <p> HAY BALE</p> <p> SILT FENCE</p> <p>CORROSION CONTROL SYMBOLS</p> <p> ELECTROLYSIS TEST STATION</p> <p> CATHODIC TEST STATION</p> <p> CTS CORROSION TEST STATION</p> <p> CATS CASING TEST STATION</p> <p> IJS INSULATING JOINT TEST STATION</p> <p> FPTS FOREIGN PIPELINE TEST STATION</p> <p> CSTS CURRENT SPAN TEST STATION</p> <p>GENERAL CIVIL SYMBOLS</p> <p> NEW</p> <p> EXISTING</p> <p> FUTURE</p> <p> EXISTING TO BE REMOVED OR DEMOLISHED</p> <p> CENTERLINE</p> <p> EARTH (IN SECTION)</p> <p> COMPACTED EARTH (IN SECTION)</p> <p> SLOPE ON PAVED SURFACE</p> <p> BERM SLOPE (HORZ TO VERT)</p> <p>OTHER</p> <p> TREE OF SIGNIFICANCE</p> <p> DECIDUOUS TREE</p> <p> CONIFEROUS TREE</p> <p> UNREGULATED TREE REMOVAL</p> <p> REGULATED TREE REMOVAL</p> <p> TREES TO BE PROTECTED IN PLACE</p>			<p>125 MAJOR CONTOURS</p> <p>MINOR CONTOURS</p> <p>TOP OF SLOPE</p> <p>TOE OF SLOPE</p> <p>PL PROPERTY LINE</p> <p>R/W RIGHT-OF-WAY LINE</p> <p>GB GRADE BREAK</p> <p>R RIDGE LINE</p> <p>ESMT EASEMENT LINE</p> <p>TEMP ESMT TEMPORARY EASEMENT LINE</p> <p>TRAIL OR DIRT ROAD</p> <p>FLOW LINE</p> <p>FLOOD HAZARD AREA</p> <p>EDGE OF WATER (PONDS ETC...)</p> <p>EDGE OF WETLANDS</p> <p>RAILROAD</p> <p>GUARDRAIL (PERMANENT)</p> <p>GUARDRAIL (REMOVABLE)</p> <p>VEGETATION</p> <p>WELL</p> <p>GEOTECHNICAL SYMBOLS</p> <p> SOIL BORING LOCATION</p> <p> TEST PIT LOCATION</p> <p> OBSERVATION HOLE</p> <p> MONITORING WELL</p> <p>PIPING AND UTILITIES</p> <p>UTILITIES (SINGLE LINE) SEE PIPE SCHEDULE FOR ADDITIONAL PIPING INFO</p> <p> UTILITIES (SIZE WHERE NOTED)</p> <p> UNDERGROUND</p> <p>G NATURAL GAS LINE</p> <p>HPG HIGH PRESSURE GAS LINE</p> <p>LPG LIQUID PETROLEUM GAS LINE</p> <p>W WATER</p> <p>PW POTABLE WATER</p> <p>FIRE FIRE SUPPLY WATER LINE</p> <p>REW RECLAIMED WATER</p> <p>UW UTILITY / NON-POTABLE WATER</p> <p>IRR IRRIGATION LINE</p> <p>SDR STORM DRAIN</p> <p>SS SANITARY SEWER</p> <p>STM STEAM LINE</p>			<p>TEL TELEPHONE</p> <p>COMM COMMUNICATIONS LINE</p> <p>FOC FIBER OPTIC CABLE</p> <p>CATV CABLE TV</p> <p>ELEC POWER</p> <p>UNID UNIDENTIFIED</p> <p>ABND ABANDONED UTILITY</p> <p> BUMPED HEAD</p> <p> POWER POLE</p> <p>BURIED ACCESS MANOLE (IN PLAN) LOCATE ON SIDE SHOWN</p> <p>BURIED ACCESS MANHOLE (IN PROFILE)</p> <p>AV/AR VALVE (IN PLAN)</p> <p>AV/AR VALVE (IN PROFILE)</p> <p>A/R VALVE (IN PLAN) LOCATE ON SIDE SHOWN</p> <p>A/R VALVE (IN PROFILE)</p> <p>BLOWOFF (IN PLAN) LOCATE ON SIDE SHOWN</p> <p>BLOWOFF (IN PROFILE)</p> <p>FH FIRE HYDRANT (IN PLAN)</p> <p>FH FIRE HYDRANT (IN PROFILE)</p> <p>MH MANHOLE (IN PLAN)</p> <p>MH MANHOLE (IN PROFILE)</p> <p>COTG CLEANOUT TO GRADE OR PRESSURE</p> <p>PCOTG CLEANOUT TO GRADE (IN PLAN)</p> <p>COTG CLEANOUT TO GRADE OR PRESSURE</p> <p>PCOTG CLEANOUT TO GRADE (IN PROFILE)</p> <p>BURIED VALVES IN VALVE BOX</p> <p>GATE VALVE</p> <p>BUTTERFLY VALVE</p> <p>ECCENTRIC PLUG VALVE</p> <p>LUBRICATED PLUG VALVE</p>			<p>ASPHALT CEMENT PAVING</p> <p>CONCRETE PAVING</p> <p>GRAVEL PAVING</p> <p>PERMEABLE PAVERS</p> <p>CONCRETE CURB</p> <p>CONCRETE CURB AND GUTTER</p> <p>DROP INLET CATCH BASIN</p> <p>CURBSIDE DROP INLET CATCH BASIN WITH LOCAL DEPRESSION</p> <p>SIDE INLET CATCH BASIN WITH LOCAL DEPRESSION</p> <p>CONCRETE WALK</p> <p>DRIVEWAY/ACCESS RAMP</p> <p>CONTROL SYMBOLS</p> <p> BM-XX BENCH MARK</p> <p> SITE COORDINATES</p> <p> PIPING COORDINATES</p> <p> SITE COORDINATES</p> <p> MONUMENT</p> <p> HORIZONTAL CONTROL POINT</p> <p> VERTICAL CONTROL POINT</p> <p> HORZ AND VERT CONTROL POINT</p> <p> FINISHED ELEVATION</p> <p> DELTA</p> <p>STRUCTURES</p> <p> SCREEN OR RETAINING WALL</p> <p> FENCE (CHAINLINK)</p> <p> FENCE (WOOD)</p> <p> STRUCTURE</p> <p> STRUCTURE (BELOW GRADE)</p> <p> CATCH BASIN</p>			

PLOT DATE: September 16, 2008 - 1:52PM USER: jdoe
 FILE: C:\Documents and Settings\jdoe\My Documents\134569.dwg TITLE: BLOCK-2007.dwg



LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: A ODELL
 DRAWN: A ODELL
 CHECKED: S WILLIAMS
 CHECKED: A PETERS
 APPROVED: J GROUNDS

REVISIONS				
REV.	DESCRIPTION	BY	DATE	APP.

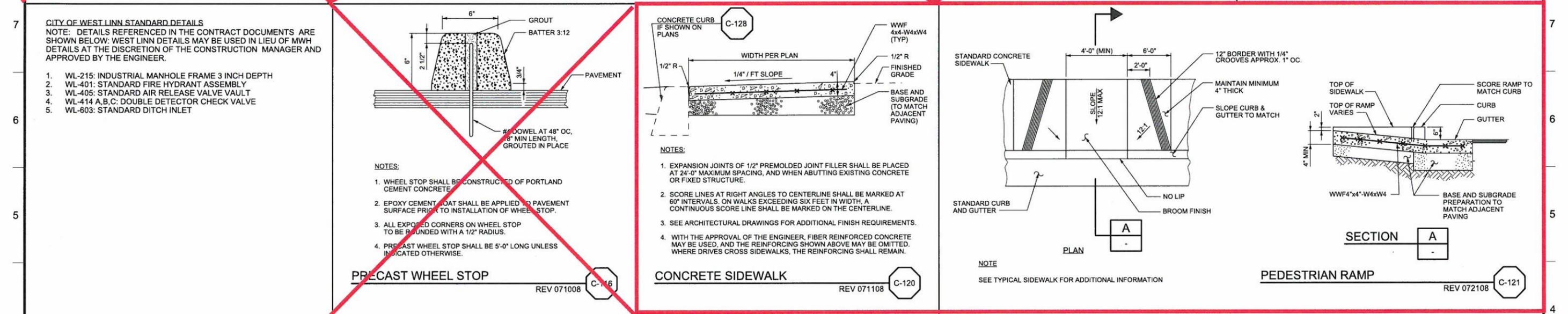
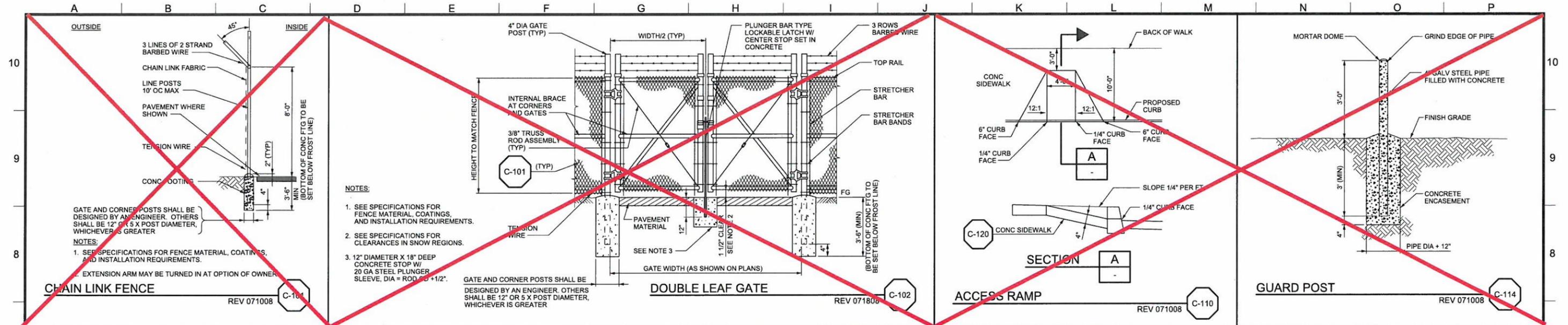
**PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW**



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

GENERAL CIVIL
SYMBOLS AND NOTES

PROJECT NUMBER	WORK ORDER 206
SCALE	NO SCALE
DRAWING/FIGURE NUMBER	GC-1
### OF	



CITY OF WEST LINN STANDARD DETAILS
 NOTE: DETAILS REFERENCED IN THE CONTRACT DOCUMENTS ARE SHOWN BELOW. WEST LINN DETAILS MAY BE USED IN LIEU OF MWH DETAILS AT THE DISCRETION OF THE CONSTRUCTION MANAGER AND APPROVED BY THE ENGINEER.

- WL-215: INDUSTRIAL MANHOLE FRAME 3 INCH DEPTH
- WL-401: STANDARD FIRE HYDRANT ASSEMBLY
- WL-405: STANDARD AIR RELEASE VALVE VAULT
- WL-414 A,B,C: DOUBLE DETECTOR CHECK VALVE
- WL-603: STANDARD DITCH INLET

PLOT DATE: September 10, 2008 - 4:58PM USER: pdell
 FILE: C:\Documents and Settings\pdell\Desktop\138564.dwg TITLE BLOCK:2007.dwg

MWH

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" SCALE ACCORDINGLY)

DESIGNED: S WILLIAMS
 DRAWN: A ODELL
 CHECKED: N MANN
 APPROVED: J GROUND

DATE: 3/27/13

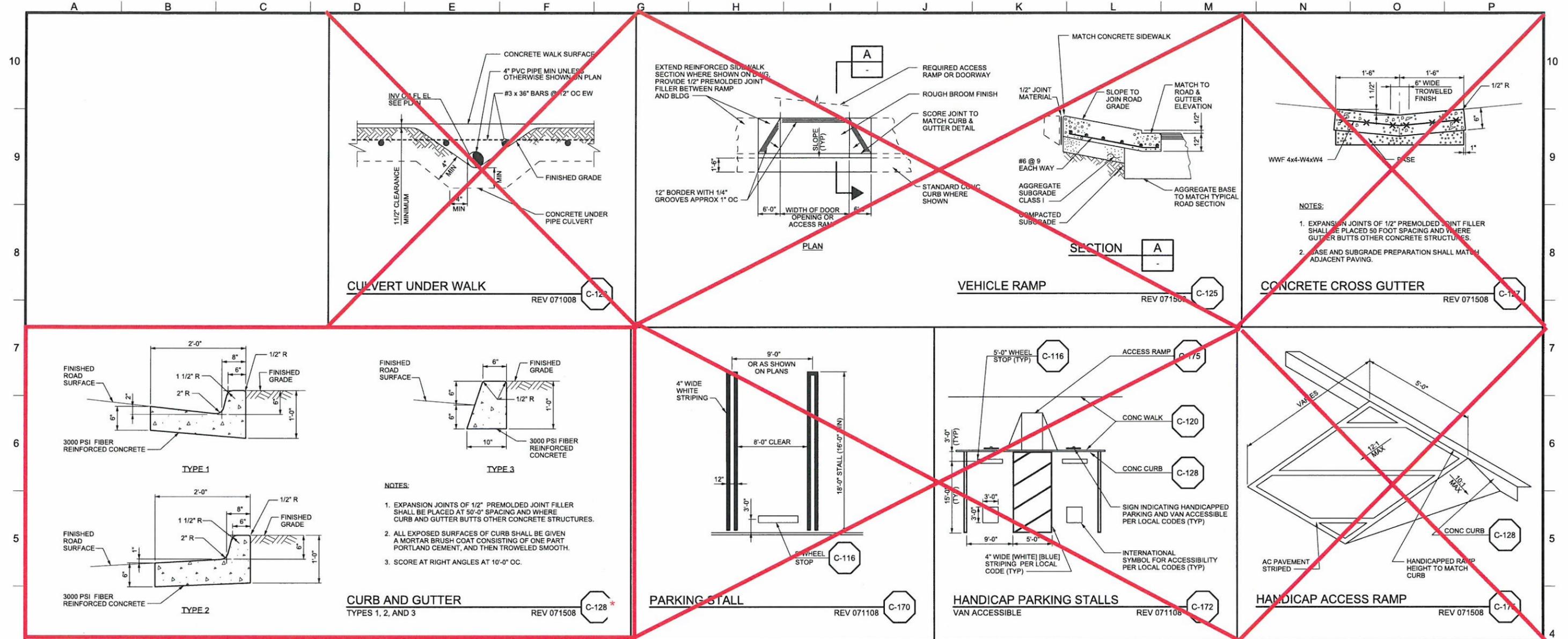
REVISIONS				
REV.	DESCRIPTION	BY	APP.	

**PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW**



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 GENERAL CIVIL
 STANDARD DETAILS - 1

PROJECT NUMBER WORK ORDER 206
SCALE NO SCALE
DRAWING/FIGURE NUMBER GC-2
OF

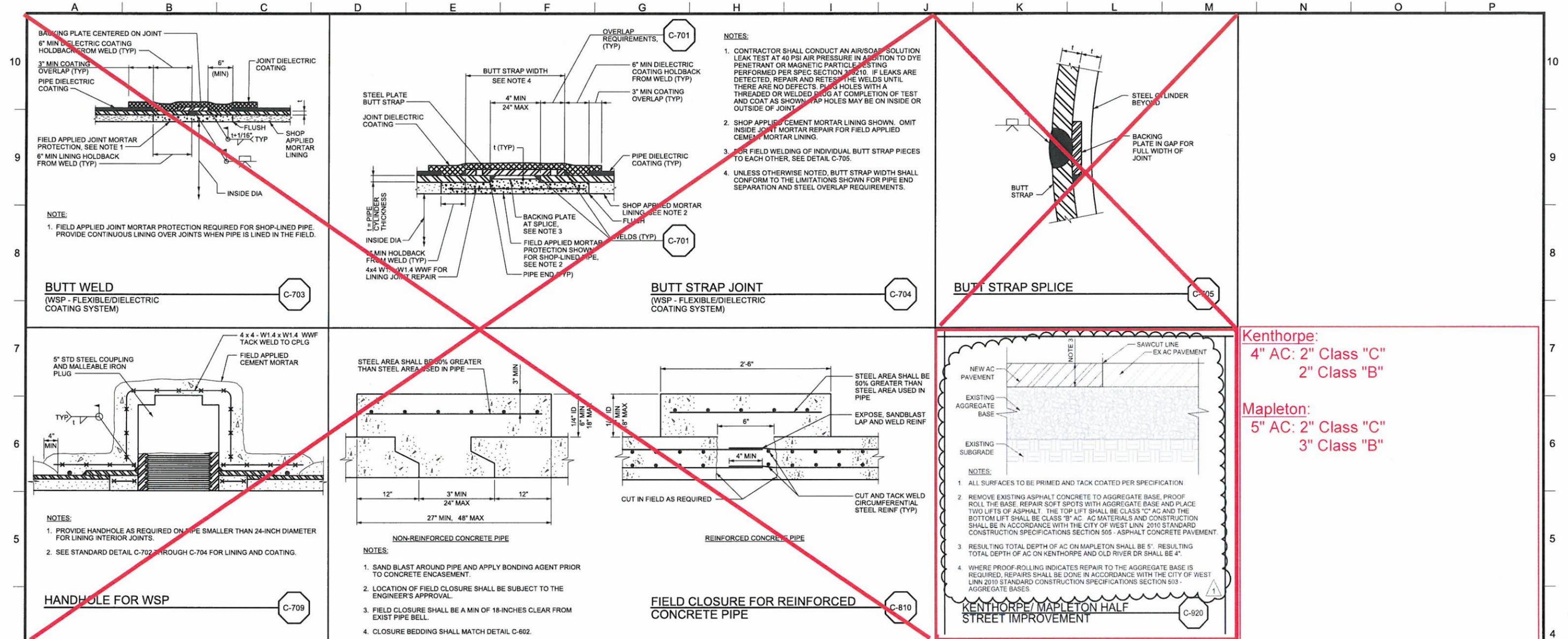


*See WL-501 Detail for construction of new curbs and gutters

PLOT DATE: September 10, 2008 - 1:58PM USER: rmlrcz
 FILE: C:\Documents and Settings\mlrcz\My Documents\Projects\2008\09\10\0910131554 - TITLE BLOCK.dwg

	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY) DESIGNED: S WILLIAMS DRAWN: A ODELL CHECKED: N MANN CHECKED: A PETERS APPROVED: P KREFT	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">REVISIONS</th> </tr> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>APP.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISIONS				REV.	DESCRIPTION	BY	APP.																	<p style="color: red; font-weight: bold;">PUBLIC IMPROVEMENTS/ PUBLIC WORKS PERMIT REVIEW</p>			LAKE OSWEGO - TIGARD WATER TREATMENT PLANT GENERAL CIVIL STANDARD DETAILS - 2	PROJECT NUMBER WORK ORDER 206 SCALE NO SCALE DRAWING/FIGURE NUMBER GC-3 ### OF
REVISIONS																															
REV.	DESCRIPTION	BY	APP.																												

APPROVED: *Jude Daniel Grounds* DATE: 3/27/13



Kenthorpe:
 4" AC: 2" Class "C"
 2" Class "B"

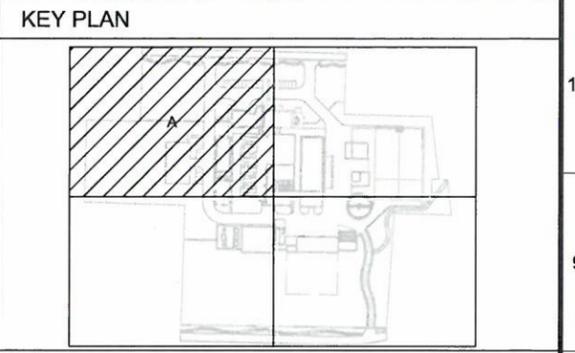
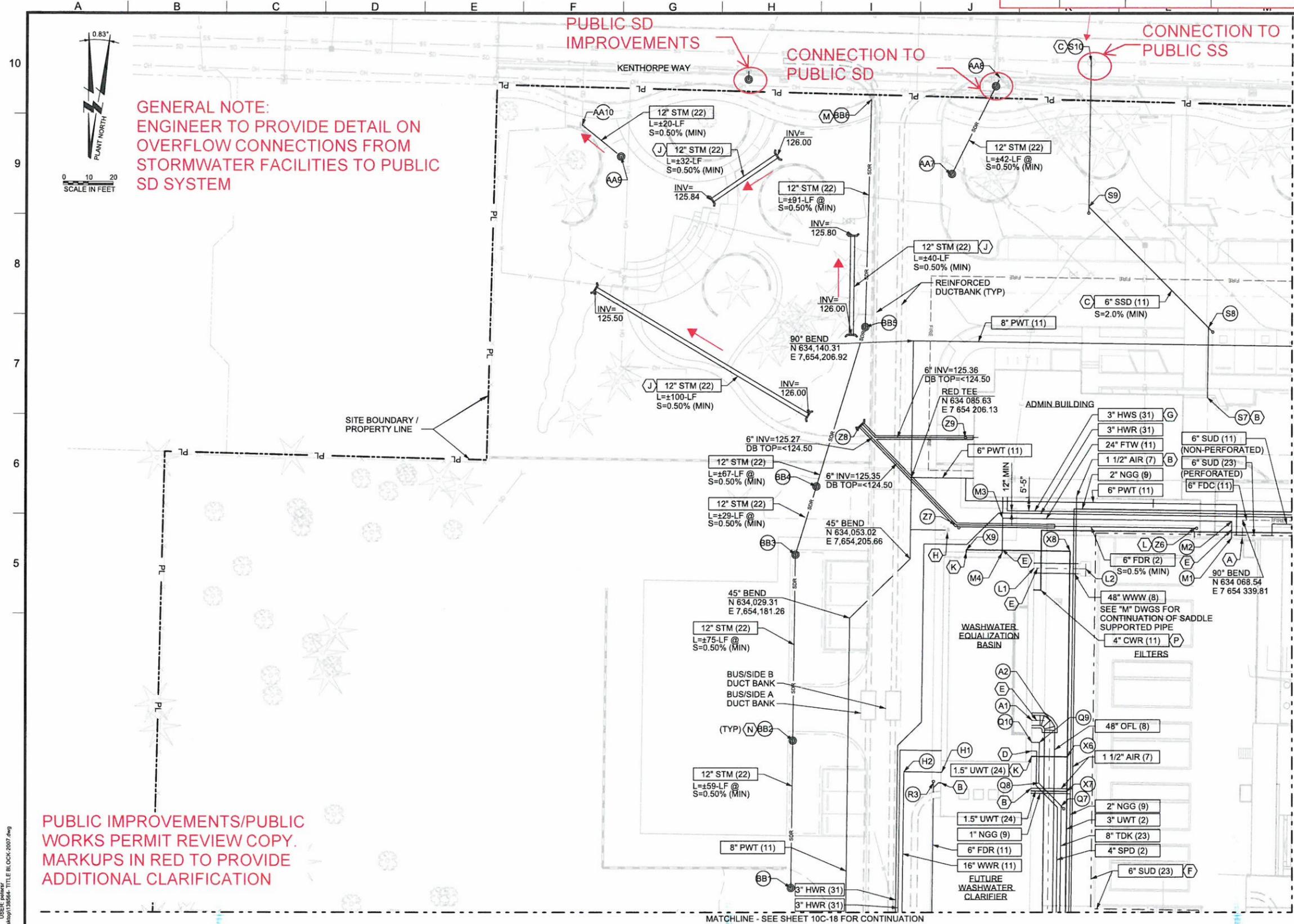
Mapleton:
 5" AC: 2" Class "C"
 3" Class "B"

PUBLIC IMPROVEMENTS/PUBLIC WORKS PERMIT REVIEW COPY. MARKUPS IN RED TO PROVIDE ADDITIONAL CLARIFICATION

PLOT DATE: September 10, 2008 - 1:52PM USER: jduffy
 FILE: C:\Documents and Settings\jduffy\My Documents\GC-10.dwg TITLE: BLOCK-2007.dwg

	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY) DESIGNED: S WILLIAMS DRAWN: A ODELL CHECKED: N MANN CHECKED: A PETERS APPROVED: P KREFT	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">REVISIONS</th> </tr> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>APP.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISIONS				REV.	DESCRIPTION	BY	APP.													<p style="color: red; font-weight: bold;">PUBLIC IMPROVEMENTS/ PUBLIC WORKS PERMIT REVIEW</p>			LAKE OSWEGO - TIGARD WATER TREATMENT PLANT GENERAL CIVIL CIVIL STANDARD DETAILS - 9	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>PROJECT NUMBER</td><td>WORK ORDER 206</td></tr> <tr><td>SCALE</td><td>NO SCALE</td></tr> <tr><td>DRAWING/FIGURE NUMBER</td><td>GC-10</td></tr> <tr><td>### OF</td><td> </td></tr> </table>	PROJECT NUMBER	WORK ORDER 206	SCALE	NO SCALE	DRAWING/FIGURE NUMBER	GC-10	### OF	
REVISIONS																																			
REV.	DESCRIPTION	BY	APP.																																
PROJECT NUMBER	WORK ORDER 206																																		
SCALE	NO SCALE																																		
DRAWING/FIGURE NUMBER	GC-10																																		
### OF																																			

S10	2+54	634,251±	7,654,278±	FIELD LOCATE & TIE-IN TO EXIST MH, TMH=(127±), INV IN (S)=118.15, INV IN (E)=(117.95±), INV OUT (W)=(117.95±)
-----	------	----------	------------	---



GENERAL SHEET NOTES

- SEE SHEET 10C-22 AND 10C-23 FOR COORDINATES (##)
- EXIST TIE-IN ELEVATIONS INDICATED ARE BASED ON AVAILABLE RECORD AND MAY REFLECT DIFFERENCE IN VERTICAL DATUM. FIELD VERIFY LOCATIONS AND ELEVATIONS OF ALL TIE-INS AND CROSSINGS AT EXIST UTILITIES PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER FOR ANY DISCREPANCIES.
- MAINTAIN 3' MIN COVER FOR ALL PIPING. CONCRETE ENCASE PIPING WITH LESS THAN 3' COVER PER STD DETAIL S-171. MAINTAIN 12" MIN CLEARANCE BETWEEN PIPING TO ALLOW FOR COMPACTION OR BACKFILL WITH CLSM.
- PROVIDE TEMPORARY PIPING AND APPURTENANCES AS REQ'D FOR BYPASS. TERMINATE PERMANENT PIPING WITH RESTRAINED END CAP OR BULKHEAD AS REQ'D TO AVOID CONFLICTS AND TO ALLOW EXTENSION IN SUBSEQUENT PHASE.

SHEET KEYNOTES

- SEE SERIES "F" DRAWINGS FOR CONTINUATION. PROVIDE REDUCER AS REQUIRED TO MATCH LINE SIZE ON "F" DRAWING.
- SEE SERIES "P" DRAWINGS FOR CONTINUATION. PROVIDE REDUCER AND COTG TO MATCH LINE SIZE ON "P" DRAWING.
- CORE DRILL EXIST MH WALL & PROVIDE ASTM C923 FLEXIBLE CONNECTOR FOR TIE-IN TO EXIST MH. MAINTAIN A MIN OF 5' COVER AND 2.0% SLOPE. RAISE INVERTS AS REQ'D TO AVOID EXIST CONFLICTS AND PROVIDE DROP CONNECTION PER CITY'S STD DETAIL WL-302 AT MH IF PROFILE IS RAISED MORE THAN 2' ABOVE EXIST MH INVERT.
- TIE-IN SPD TO WVEQ BASIN. INSTALL SPD WITH 3' MIN COVER AND IN PARALLEL WITH COORDINATES FROM "Q6-Q10" AND "R1, R5, R6" TO PROCESS DRAIN PUMP STATION.
- PROVIDE CORROSION TEST STATIONS (TYPE FT-R) PER STD DETAIL C-982 ON METALLIC PIPES WITHIN 12" OF WALL PENETRATION. SET CONCRETE COLLAR 3" ABOVE FINISHED GRADE. MAINTAIN ELECTRICAL CONTINUITY ACROSS ALL SLEEVE COUPLINGS AND GASKETED JOINTS AND FITTINGS ALONG PIPELINE WITH BOND WIRES.
- SEE STR DETAIL S-209 FOR FOOTING DRAIN DETAIL. PIPE IS TO BE PERFORATED AROUND FOOTING & NON-PERFORATED (SOLID LINE) WHEN ROUTED TO DISCHARGE LOCATION. PROVIDE 3 EA (MIN) MECH SLEEVE CPLGS @ 5' CC W/ FIRST CPLG SET WITHIN FOUNDATION AT EACH STRUCTURE APPROACH (TYPICAL FOR SHEET 10C-18 THRU 10C-20.)
- MAINTAIN 12" (MIN) CLEARANCE BETWEEN GEOTHERMAL HWR AND HWS LINES. COORDINATE W/ HVAC DWGS FOR GEOTHERMAL LOOP REQUIREMENTS.
- FIRE HYDRANT - SEE CITY STD DETAIL WL-401.
- PROVIDE CULVERT W/ 12" MIN COVER TO LINK BASINS. CONCRETE HEADWALL AT EACH END PER CITY STD DETAIL WL-613.
- UTILITY STATION - SEE DETAIL P-931 SYM. NO COMPRESSED AIR IS REQUIRED. 1 1/2-INCH HOSE BIB AND HOSE.
- SEE DETAIL P-332 FOR RAINWATER LEADER TO STORM SEWER CONNECTION
- REMOVE AND REPLACE CATCH INLET IN KIND.
- STORMWATER OVERFLOW CONNECTION - SEE LANDSCAPE
- PROVIDE FABRICATED PIPE THIMBLE PER M-122. TIE IN WVEQ BASIN WALL AT IE EL 125.50.

PUBLIC IMPROVEMENTS/PUBLIC WORKS PERMIT REVIEW COPY. MARKUPS IN RED TO PROVIDE ADDITIONAL CLARIFICATION

PLOT DATE: September 10, 2008, 1:55PM USER: rcalder FILE: C:\Documents and Settings\pca\Desktop\138564 - TITLE BLOCK.dwg

MWH

DESIGNED: A ODELL
 DRAWN: A ODELL
 CHECKED: S WILLIAMS
 CHECKED: J GROUNDS
 APPROVED: P KREFT

APPROVED: *Jude Daniel* DATE: 3/27/13
 APPROVED: JUDE DANIEL GROUNDS

REVISIONS				
REV.	DESCRIPTION	BY	APP.	

PUBLIC IMPROVEMENTS/PUBLIC WORKS PERMIT REVIEW



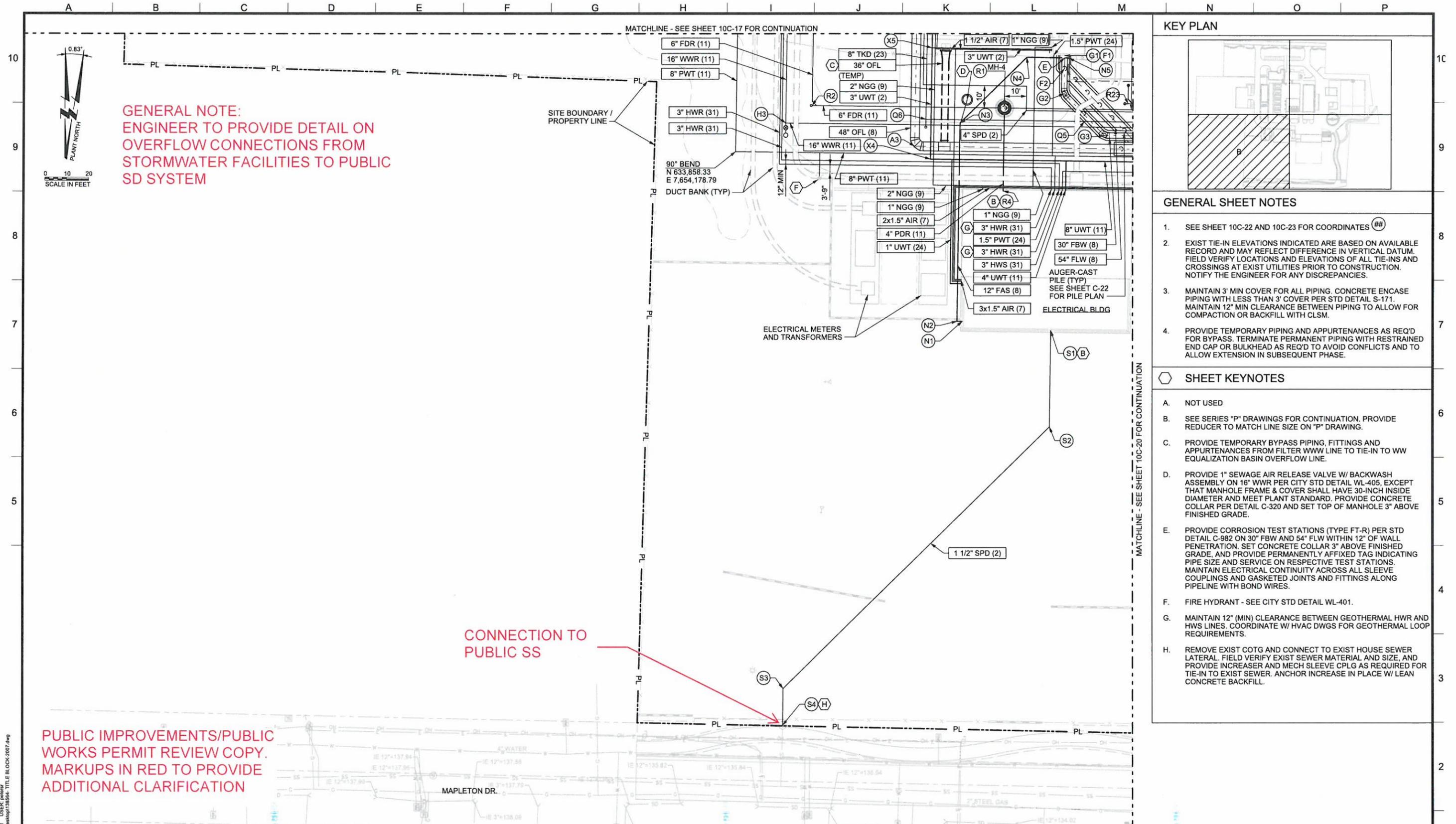
LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

CIVIL

YARD PIPING PLAN

AREA A

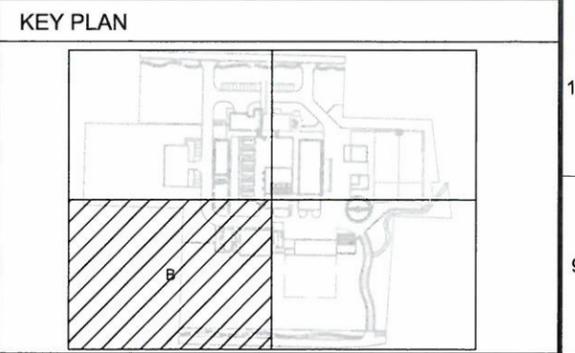
PROJECT NUMBER	WORK ORDER 206
SCALE	1" = 20'
DRAWING/FIGURE NUMBER	10C-17
### OF	



GENERAL NOTE:
ENGINEER TO PROVIDE DETAIL ON
OVERFLOW CONNECTIONS FROM
STORMWATER FACILITIES TO PUBLIC
SD SYSTEM

**PUBLIC IMPROVEMENTS/PUBLIC
WORKS PERMIT REVIEW COPY.**
MARKUPS IN RED TO PROVIDE
ADDITIONAL CLARIFICATION

**CONNECTION TO
PUBLIC SS**



- GENERAL SHEET NOTES**
- SEE SHEET 10C-22 AND 10C-23 FOR COORDINATES (##)
 - EXIST TIE-IN ELEVATIONS INDICATED ARE BASED ON AVAILABLE RECORD AND MAY REFLECT DIFFERENCE IN VERTICAL DATUM. FIELD VERIFY LOCATIONS AND ELEVATIONS OF ALL TIE-INS AND CROSSINGS AT EXIST UTILITIES PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER FOR ANY DISCREPANCIES.
 - MAINTAIN 3' MIN COVER FOR ALL PIPING. CONCRETE ENCASE PIPING WITH LESS THAN 3' COVER PER STD DETAIL S-171. MAINTAIN 12" MIN CLEARANCE BETWEEN PIPING TO ALLOW FOR COMPACTION OR BACKFILL WITH CLSM.
 - PROVIDE TEMPORARY PIPING AND APPURTENANCES AS REQ'D FOR BYPASS. TERMINATE PERMANENT PIPING WITH RESTRAINED END CAP OR BULKHEAD AS REQ'D TO AVOID CONFLICTS AND TO ALLOW EXTENSION IN SUBSEQUENT PHASE.

- SHEET KEYNOTES**
- NOT USED
 - SEE SERIES "P" DRAWINGS FOR CONTINUATION. PROVIDE REDUCER TO MATCH LINE SIZE ON "P" DRAWING.
 - PROVIDE TEMPORARY BYPASS PIPING, FITTINGS AND APPURTENANCES FROM FILTER WWW LINE TO TIE-IN TO WWW EQUALIZATION BASIN OVERFLOW LINE.
 - PROVIDE 1" SEWAGE AIR RELEASE VALVE W/ BACKWASH ASSEMBLY ON 16" WWR PER CITY STD DETAIL WL-405, EXCEPT THAT MANHOLE FRAME & COVER SHALL HAVE 30-INCH INSIDE DIAMETER AND MEET PLANT STANDARD. PROVIDE CONCRETE COLLAR PER DETAIL C-320 AND SET TOP OF MANHOLE 3" ABOVE FINISHED GRADE.
 - PROVIDE CORROSION TEST STATIONS (TYPE FT-R) PER STD DETAIL C-982 ON 30" FBW AND 54" FLW WITHIN 12" OF WALL PENETRATION. SET CONCRETE COLLAR 3" ABOVE FINISHED GRADE, AND PROVIDE PERMANENTLY AFFIXED TAG INDICATING PIPE SIZE AND SERVICE ON RESPECTIVE TEST STATIONS. MAINTAIN ELECTRICAL CONTINUITY ACROSS ALL SLEEVE COUPLINGS AND GASKETED JOINTS AND FITTINGS ALONG PIPELINE WITH BOND WIRES.
 - FIRE HYDRANT - SEE CITY STD DETAIL WL-401.
 - MAINTAIN 12" (MIN) CLEARANCE BETWEEN GEOTHERMAL HWR AND HWS LINES. COORDINATE W/ HVAC DWGS FOR GEOTHERMAL LOOP REQUIREMENTS.
 - REMOVE EXIST COTG AND CONNECT TO EXIST HOUSE SEWER LATERAL. FIELD VERIFY EXIST SEWER MATERIAL AND SIZE, AND PROVIDE INCREASER AND MECH SLEEVE CPLG AS REQUIRED FOR TIE-IN TO EXIST SEWER. ANCHOR INCREASE IN PLACE W/ LEAN CONCRETE BACKFILL.

PLOT DATE: September 10, 2008 - 1:55PM USER: pdeluz FILE: C:\Documents and Settings\pdeluz\Desktop\10C18.dwg



LINE IS 2 INCHES
AT FULL SIZE
(IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: A ODELL
DRAWN: A ODELL
CHECKED: S WILLIAMS
CHECKED: J GROUNDS
APPROVED: P KREFT

REVISIONS				
REV.	DESCRIPTION	BY	APP.	

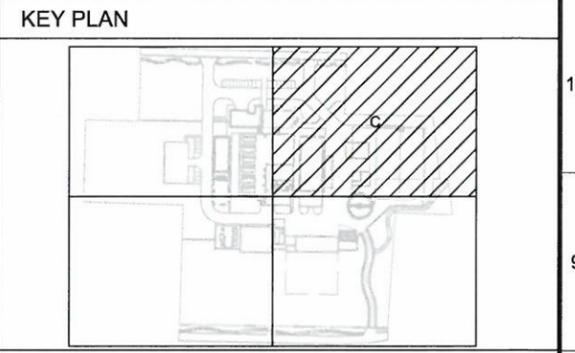
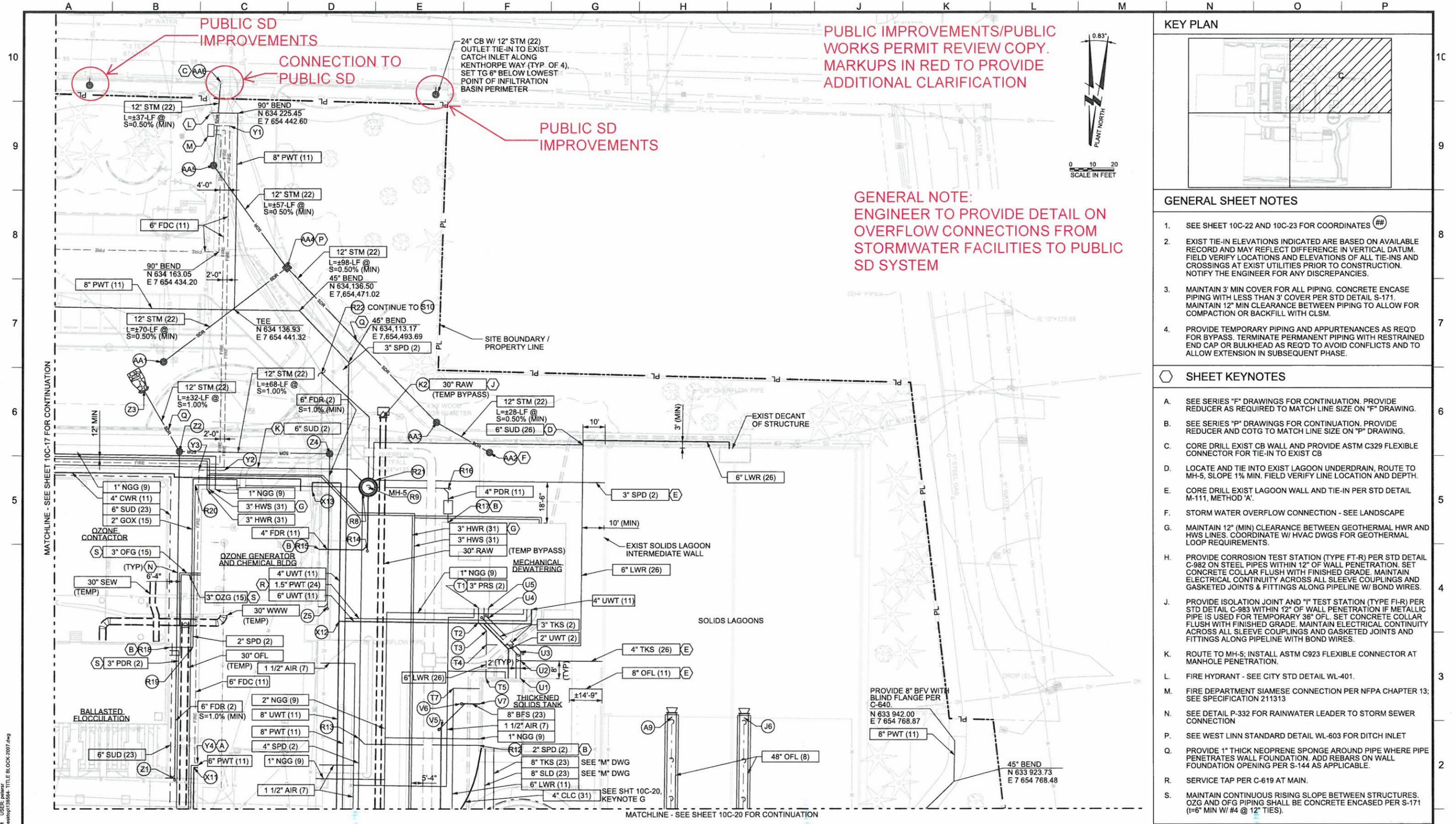
**PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW**



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

CIVIL
**YARD PIPING PLAN
AREA B**

PROJECT NUMBER WORK ORDER 206
SCALE 1" = 20'
DRAWING FIGURE NUMBER 10C-18
OF



- GENERAL SHEET NOTES**
- SEE SHEET 10C-22 AND 10C-23 FOR COORDINATES (##)
 - EXIST TIE-IN ELEVATIONS INDICATED ARE BASED ON AVAILABLE RECORD AND MAY REFLECT DIFFERENCE IN VERTICAL DATUM. FIELD VERIFY LOCATIONS AND ELEVATIONS OF ALL TIE-INS AND CROSSINGS AT EXIST UTILITIES PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER FOR ANY DISCREPANCIES.
 - MAINTAIN 3' MIN COVER FOR ALL PIPING. CONCRETE ENCASE PIPING WITH LESS THAN 3' COVER PER STD DETAIL S-171. MAINTAIN 12' MIN CLEARANCE BETWEEN PIPING TO ALLOW FOR COMPACTION OR BACKFILL WITH CLSM.
 - PROVIDE TEMPORARY PIPING AND APPURTENANCES AS REQ'D FOR BYPASS. TERMINATE PERMANENT PIPING WITH RESTRAINED END CAP OR BULKHEAD AS REQ'D TO AVOID CONFLICTS AND TO ALLOW EXTENSION IN SUBSEQUENT PHASE.

- SHEET KEYNOTES**
- A. SEE SERIES "F" DRAWINGS FOR CONTINUATION. PROVIDE REDUCER AS REQUIRED TO MATCH LINE SIZE ON "F" DRAWING.
 - B. SEE SERIES "P" DRAWINGS FOR CONTINUATION. PROVIDE REDUCER AND COTG TO MATCH LINE SIZE ON "P" DRAWING.
 - C. CORE DRILL EXIST CB WALL AND PROVIDE ASTM C329 FLEXIBLE CONNECTOR FOR TIE-IN TO EXIST CB
 - D. LOCATE AND TIE INTO EXIST LAGOON UNDERDRAIN, ROUTE TO MH-5, SLOPE 1% MIN. FIELD VERIFY LINE LOCATION AND DEPTH.
 - E. CORE DRILL EXIST LAGOON WALL AND TIE-IN PER STD DETAIL M-111, METHOD 'A'.
 - F. STORM WATER OVERFLOW CONNECTION - SEE LANDSCAPE
 - G. MAINTAIN 12" (MIN) CLEARANCE BETWEEN GEOTHERMAL HWR AND HWS LINES. COORDINATE W/ HVAC DWGS FOR GEOTHERMAL LOOP REQUIREMENTS.
 - H. PROVIDE CORROSION TEST STATION (TYPE FT-R) PER STD DETAIL C-982 ON STEEL PIPES WITHIN 12" OF WALL PENETRATION. SET CONCRETE COLLAR FLUSH WITH FINISHED GRADE. MAINTAIN ELECTRICAL CONTINUITY ACROSS ALL SLEEVE COUPLINGS AND GASKETED JOINTS & FITTINGS ALONG PIPELINE W/ BOND WIRES.
 - J. PROVIDE ISOLATION JOINT AND "I" TEST STATION (TYPE FI-R) PER STD DETAIL C-983 WITHIN 12" OF WALL PENETRATION IF METALLIC PIPE IS USED FOR TEMPORARY 36" OFL. SET CONCRETE COLLAR FLUSH WITH FINISHED GRADE. MAINTAIN ELECTRICAL CONTINUITY ACROSS ALL SLEEVE COUPLINGS AND GASKETED JOINTS AND FITTINGS ALONG PIPELINE WITH BOND WIRES.
 - K. ROUTE TO MH-5; INSTALL ASTM C923 FLEXIBLE CONNECTOR AT MANHOLE PENETRATION.
 - L. FIRE HYDRANT - SEE CITY STD DETAIL WL-401.
 - M. FIRE DEPARTMENT SIAMESE CONNECTION PER NFPA CHAPTER 13; SEE SPECIFICATION 211313
 - N. SEE DETAIL P-332 FOR RAINWATER LEADER TO STORM SEWER CONNECTION
 - P. SEE WEST LINN STANDARD DETAIL WL-603 FOR DITCH INLET
 - Q. PROVIDE 1" THICK NEOPRENE SPONGE AROUND PIPE WHERE PIPE PENETRATES WALL FOUNDATION. ADD REBARS ON WALL FOUNDATION OPENING PER S-144 AS APPLICABLE.
 - R. SERVICE TAP PER C-619 AT MAIN.
 - S. MAINTAIN CONTINUOUS RISING SLOPE BETWEEN STRUCTURES. OZG AND OFG PIPING SHALL BE CONCRETE ENCASED PER S-171 (1=6" MIN W/ #4 @ 12" TIES).

PLOT DATE: September 10, 2008 - 1:58PM USER: adellr
 FILE: C:\Documents and Settings\adellr\136594 TITLE BLOCK.dwg

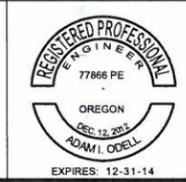
MWH

DESIGNED: A ODELL
 DRAWN: A ODELL
 CHECKED: S WILLIAMS
 CHECKED: J GROUNDS
 APPROVED: P KREFT

APPROVED: *Jude Daniel Grounds* DATE: 3/27/13

REVISIONS				
REV.	DESCRIPTION	BY	APP.	

**PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW**

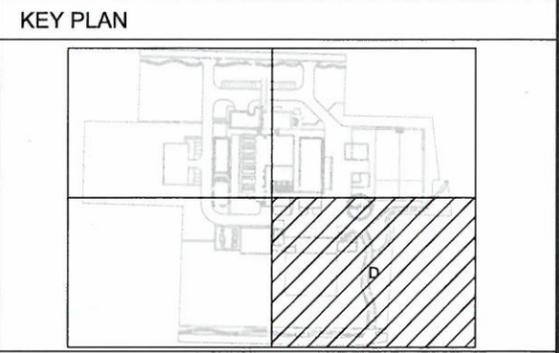
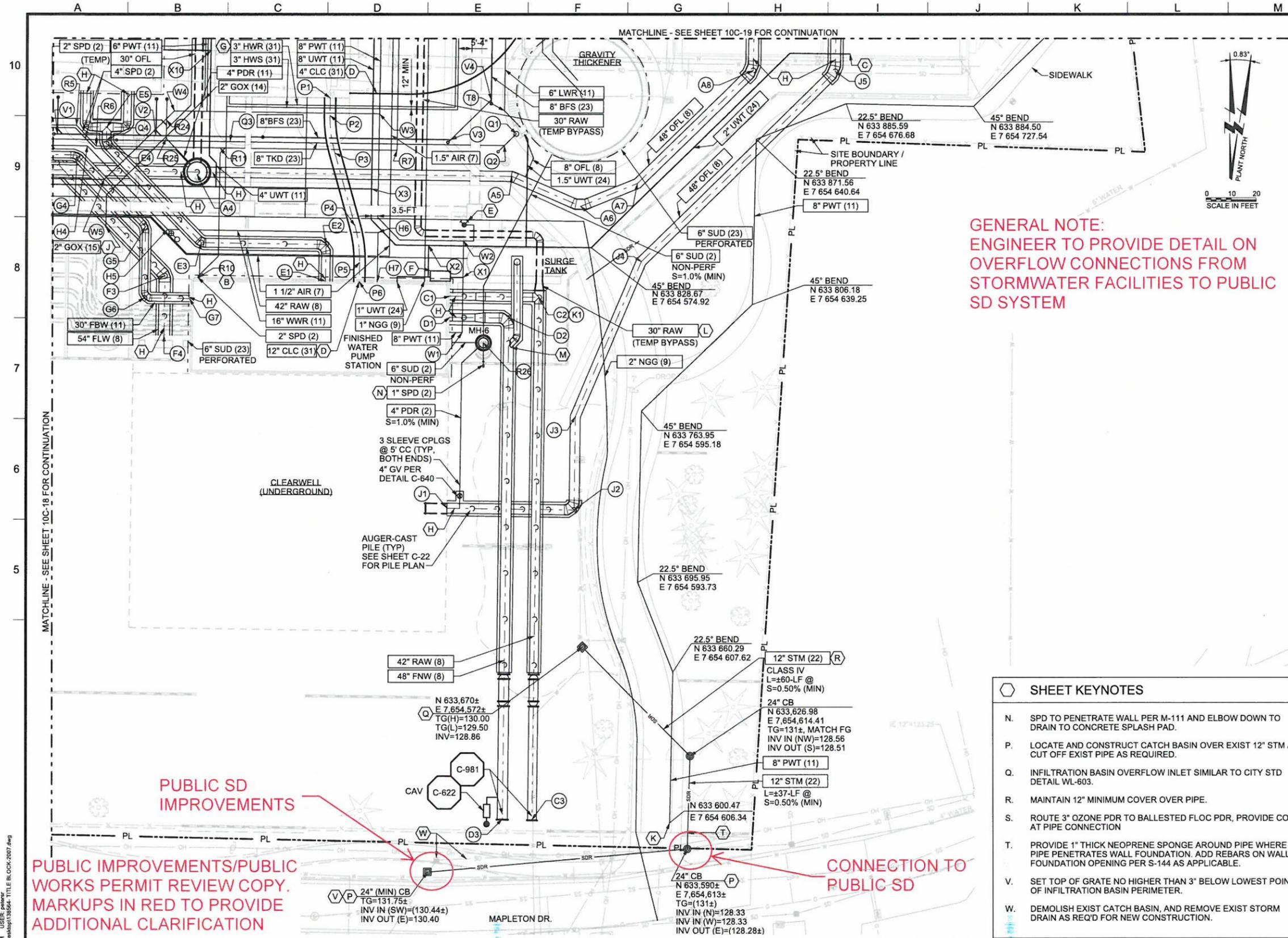


LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

CIVIL

**YARD PIPING PLAN
AREA C**

PROJECT NUMBER	WORK ORDER 206
SCALE	1" = 20'
DRAWING/FIGURE NUMBER	10C-19
### OF	



GENERAL NOTE:
ENGINEER TO PROVIDE DETAIL ON
OVERFLOW CONNECTIONS FROM
STORMWATER FACILITIES TO PUBLIC
SD SYSTEM

- GENERAL SHEET NOTES**
- SEE SHEET 10C-22 AND 10C-23 FOR COORDINATES (##)
 - EXIST TIE-IN ELEVATIONS INDICATED ARE BASED ON AVAILABLE RECORD AND MAY REFLECT DIFFERENCE IN VERTICAL DATUM. FIELD VERIFY LOCATIONS AND ELEVATIONS OF ALL TIE-INS AND CROSSINGS AT EXIST UTILITIES PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER FOR ANY DISCREPANCIES.
 - MAINTAIN 3' MIN COVER FOR ALL PIPING. CONCRETE ENCASE PIPING WITH LESS THAN 2' COVER PER STD DETAIL S-171. MAINTAIN 12" MIN CLEARANCE BETWEEN PIPING TO ALLOW FOR COMPACTION OR BACKFILL WITH CLSM.
 - PROVIDE TEMPORARY PIPING AND APPURTENANCES AS REQ'D FOR BYPASS. TERMINATE PERMANENT PIPING WITH RESTRAINED END CAP OR BULKHEAD AS REQ'D TO AVOID CONFLICTS AND TO ALLOW EXTENSION IN SUBSEQUENT PHASE.

- SHEET KEYNOTES**
- A. SEE SERIES "F" DRAWINGS FOR CONTINUATION. PROVIDE REDUCER AS REQUIRED TO MATCH LINE SIZE ON "F" DRAWING.
 - B. SEE SERIES "P" DRAWINGS FOR CONTINUATION. PROVIDE REDUCER AND COTG TO MATCH LINE SIZE ON "P" DRAWING.
 - C. FIELD LOCATE EXIST WATER LINE AND PROVIDE FITTINGS AND RESTRAINED SLEEVE COUPLING FOR TIE-IN.
 - D. SEE SERIES "M" DWGS FOR CHEMICAL LINES WITHIN CONTAINMENT PIPE. PIPE WALL THICKNESS AND CONCRETE ENCASEMENT SIMILAR TO PROFILE "P". MAINTAIN 0.5% MIN SLOPE TO DRAIN TOWARDS CHEMICAL SUMP IN CHEMICAL BLDG. COLD BENDING OF HDPE CONTAINMENT PIPE SHALL NOT EXCEED PIPE MFR'S RECOMMENDATION. SECURE PIPE DURING INSTALLATION AND PROVIDE INTERMEDIATE PRECAST BASIN AS REQUIRED FOR PULLING CARRIER PIPE. ANY PRECAST BASIN INSTALLED SHALL BE WATERTIGHT AND INTERIOR LINED WITH PROTECTIVE COATING SYSTEM 111 PER SPEC 099600.
 - E. FIRE HYDRANT - SEE CITY STD DETAIL WL-401.
 - F. BACKFLOW PREVENTOR - SEE WL-414 A,B & C.
 - G. MAINTAIN 12" (MIN) CLEARANCE BETWEEN GEOTHERMAL HWR AND HWS LINES. COORDINATE W/ HVAC DWGS FOR GEOTHERMAL LOOP REQUIREMENTS.
 - H. PROVIDE CORROSION TEST STATIONS (TYPE FT-R) PER STD DETAIL C-982 ON STEEL PIPES WITHIN 12" OF WALL PENETRATION. SET CONCRETE COLLAR 3" ABOVE FINISHED GRADE IN NON-PAVED AREA AND FLUSH IN PAVED AREA. MAINTAIN ELECTRICAL CONTINUITY ACROSS ALL SLEEVE COUPLINGS AND GASKETED JOINTS & FITTINGS ALONG PIPELINE W/ BOND WIRES.
 - J. COORDINATE FINAL GOX PIPING LOCATION WITH LOX SYSTEM SUPPLIER (APPROX 270-LF); MAINTAIN CONTINUOUS RISING SLOPE TO OZONE GENERATOR. GOX PIPING SHALL BE CONCRETE ENCASED PER S-171 (1=6" MIN W/ #4 @ 12" TIES).
 - K. PROVIDE 8" BFV WITH BLIND FLANGE PER C-640.
 - L. PROVIDE ISOLATION JOINT AND "I" TEST STATION (TYPE FI-R) PER STD DETAIL C-983 IF METALLIC PIPE IS USED FOR TEMPORARY 30" RAW. SET CONCRETE COLLAR FLUSH WITH FINISHED GRADE. MAINTAIN ELEC CONTINUITY ACROSS ALL SLEEVE COUPLINGS AND GASKETED JOINTS AND FITTINGS ALONG PIPELINE WITH BOND WIRES.
 - M. SUBMIT 30" SURGE TANK LATERAL OPENING REINFORCEMENT DESIGN BY MANUFACTURER.

- SHEET KEYNOTES**
- N. SPD TO PENETRATE WALL PER M-111 AND ELBOW DOWN TO DRAIN TO CONCRETE SPLASH PAD.
 - P. LOCATE AND CONSTRUCT CATCH BASIN OVER EXIST 12" STM AND CUT OFF EXIST PIPE AS REQUIRED.
 - Q. INFILTRATION BASIN OVERFLOW INLET SIMILAR TO CITY STD DETAIL WL-603.
 - R. MAINTAIN 12" MINIMUM COVER OVER PIPE.
 - S. ROUTE 3" OZONE PDR TO BALLESTED FLOC PDR, PROVIDE COTG AT PIPE CONNECTION
 - T. PROVIDE 1" THICK NEOPRENE SPONGE AROUND PIPE WHERE PIPE PENETRATES WALL FOUNDATION. ADD REBARS ON WALL FOUNDATION OPENING PER S-144 AS APPLICABLE.
 - V. SET TOP OF GRATE NO HIGHER THAN 3" BELOW LOWEST POINT OF INFILTRATION BASIN PERIMETER.
 - W. DEMOLISH EXIST CATCH BASIN, AND REMOVE EXIST STORM DRAIN AS REQ'D FOR NEW CONSTRUCTION.

PUBLIC SD IMPROVEMENTS

PUBLIC IMPROVEMENTS/PUBLIC WORKS PERMIT REVIEW COPY. MARKUPS IN RED TO PROVIDE ADDITIONAL CLARIFICATION

CONNECTION TO PUBLIC-SD

PLOT DATE: September 10, 2008 - 1:55PM USER: jkeller FILE: C:\Documents and Settings\jkeller\Desktop\136594 TITLE BLOCK.dwg



LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: A ODELL
DRAWN: A ODELL
CHECKED: S WILLIAMS
CHECKED: J GROUNDS
APPROVED: P KREFT

REVISIONS			
REV.	DESCRIPTION	BY	APP.

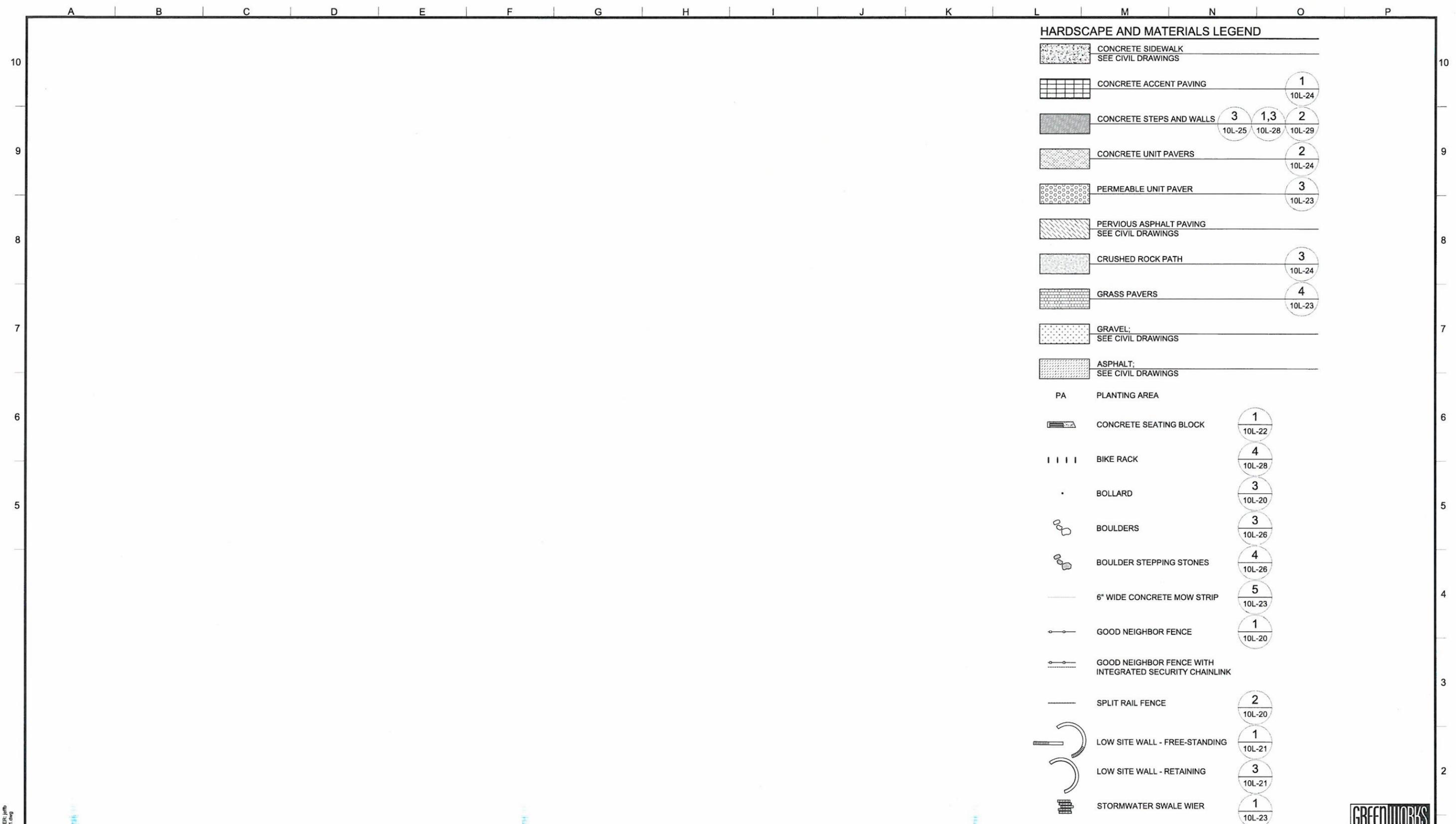
PUBLIC IMPROVEMENTS/PUBLIC WORKS PERMIT REVIEW



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

CIVIL
YARD PIPING PLAN
AREA D

PROJECT NUMBER	WORK ORDER 206
SCALE	1" = 20'
DRAWING/FIGURE NUMBER	10C-20
### OF	1



HARDSCAPE AND MATERIALS LEGEND

	CONCRETE SIDEWALK SEE CIVIL DRAWINGS	
	CONCRETE ACCENT PAVING	1 10L-24
	CONCRETE STEPS AND WALLS	3 10L-25
	CONCRETE UNIT PAVERS	1,3 10L-28
	CONCRETE UNIT PAVERS	2 10L-29
	PERMEABLE UNIT PAVER	2 10L-24
	PERMEABLE UNIT PAVER	3 10L-23
	PERVIOUS ASPHALT PAVING SEE CIVIL DRAWINGS	
	CRUSHED ROCK PATH	3 10L-24
	GRASS PAVERS	4 10L-23
	GRAVEL; SEE CIVIL DRAWINGS	
	ASPHALT; SEE CIVIL DRAWINGS	
PA	PLANTING AREA	
	CONCRETE SEATING BLOCK	1 10L-22
	BIKE RACK	4 10L-28
	BOLLARD	3 10L-20
	BOULDERS	3 10L-26
	BOULDER STEPPING STONES	4 10L-26
	6" WIDE CONCRETE MOW STRIP	5 10L-23
	GOOD NEIGHBOR FENCE	1 10L-20
	GOOD NEIGHBOR FENCE WITH INTEGRATED SECURITY CHAINLINK	
	SPLIT RAIL FENCE	2 10L-20
	LOW SITE WALL - FREE-STANDING	1 10L-21
	LOW SITE WALL - RETAINING	3 10L-21
	STORMWATER SWALE WIER	1 10L-23

PLOT DATE: March 29, 2013 - 3:18PM USER: jdfab
 FILE: C:\pwworking\mwh\551616\DWG\10L-01.dwg



LINE IS 2 INCHES
AT FULL SIZE
(IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: J BOGGESS
 DRAWN: D DAVISON
 CHECKED: M FAHA
 CHECKED: J GROUNDS
 APPROVED: P KREFT

REVISIONS				
REV.	DESCRIPTION	BY	DATE	APP.

**PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW**



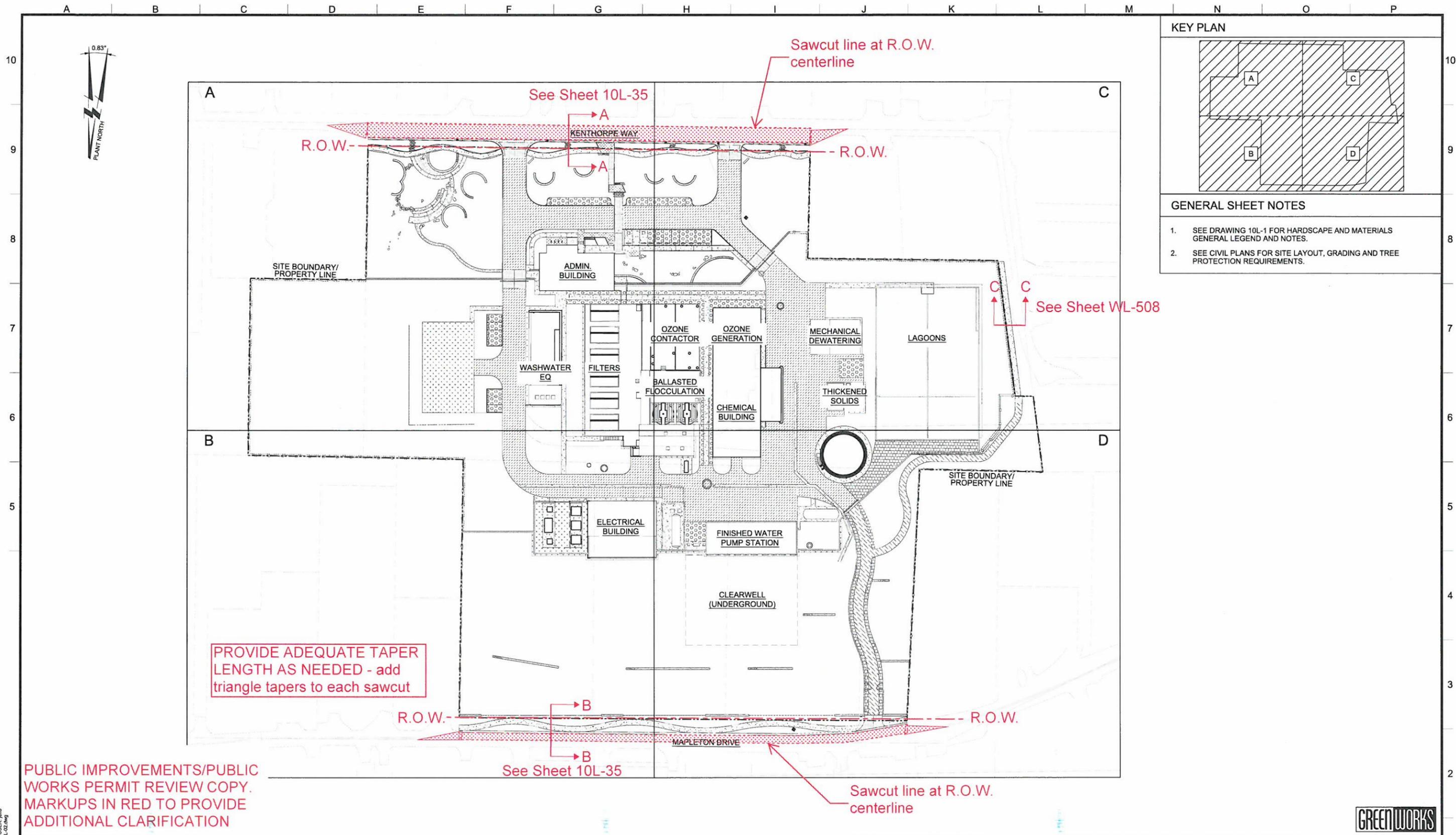
LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

GENERAL LANDSCAPE
LEGENDS AND NOTES
 HARDSCAPE AND MATERIALS



PROJECT NUMBER WORK ORDER 206	1
SCALE NO SCALE	
DRAWING/FIGURE NUMBER 10L-1	

OF



PLOT DATE: March 25, 2013 - 3:22PM USER: jdh
 FILE: C:\pwworking\m531816\DWG\10L-02.dwg



LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)
 DESIGNED: J BOGGESS
 DRAWN: D DAVISON
 CHECKED: M FAHA
 CHECKED: J GROUNDS
 APPROVED: P KREFT

REVISIONS				
REV.	DESCRIPTION	BY	APP.	

**PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW**



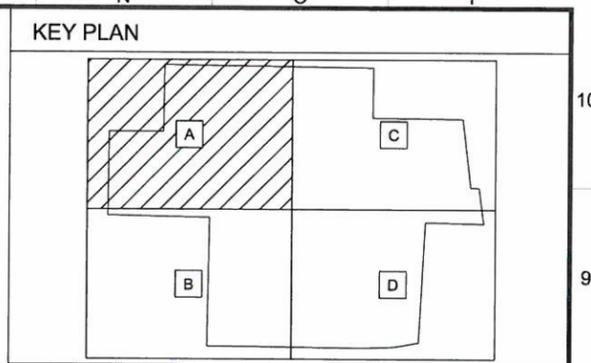
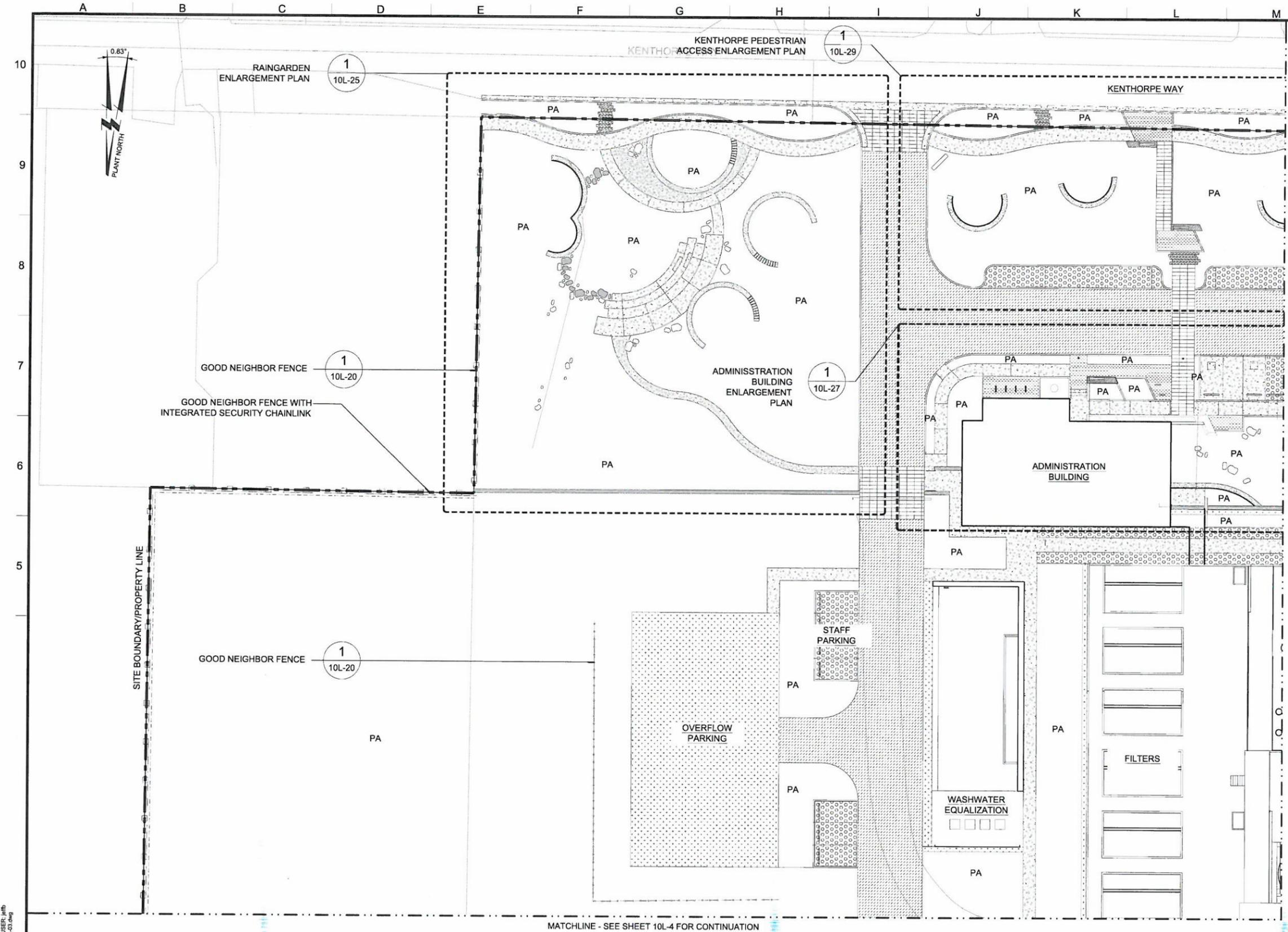
LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

LANDSCAPE
**HARDSCAPE AND MATERIALS
 OVERALL PLAN**



PROJECT NUMBER
 WORK ORDER 206
 SCALE
 1" = 50'
 DRAWING/FIGURE NUMBER
10L-2

OF



- GENERAL SHEET NOTES**
- SEE DRAWING 10L-1 FOR HARDSCAPE AND MATERIALS GENERAL LEGEND AND NOTES.
 - SEE CIVIL PLANS FOR SITE LAYOUT, GRADING AND TREE PROTECTION REQUIREMENTS.

MATCHLINE - SEE SHEET 10L-5 FOR CONTINUATION

MATCHLINE - SEE SHEET 10L-4 FOR CONTINUATION

PLOT DATE: March 26, 2013 3:58PM USER: jdh
FILE: C:\pwworking\mwh\10L\CONTR-10L-3.dwg



LINE IS 2 INCHES
AT FULL SIZE
(IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: J BOGESS
DRAWN: D DAVISON
CHECKED: M FAHA
CHECKED: J GROUNDS
APPROVED: P KREFT

REVISIONS			
REV.	DESCRIPTION	BY	APP.

**PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW**

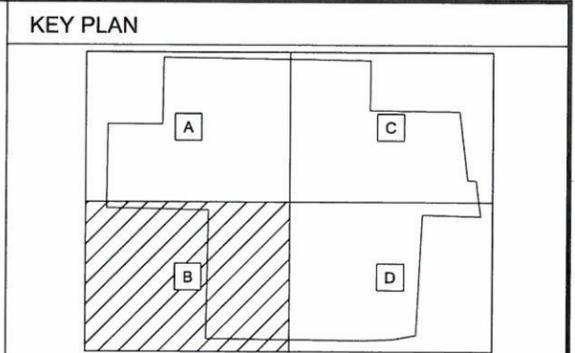
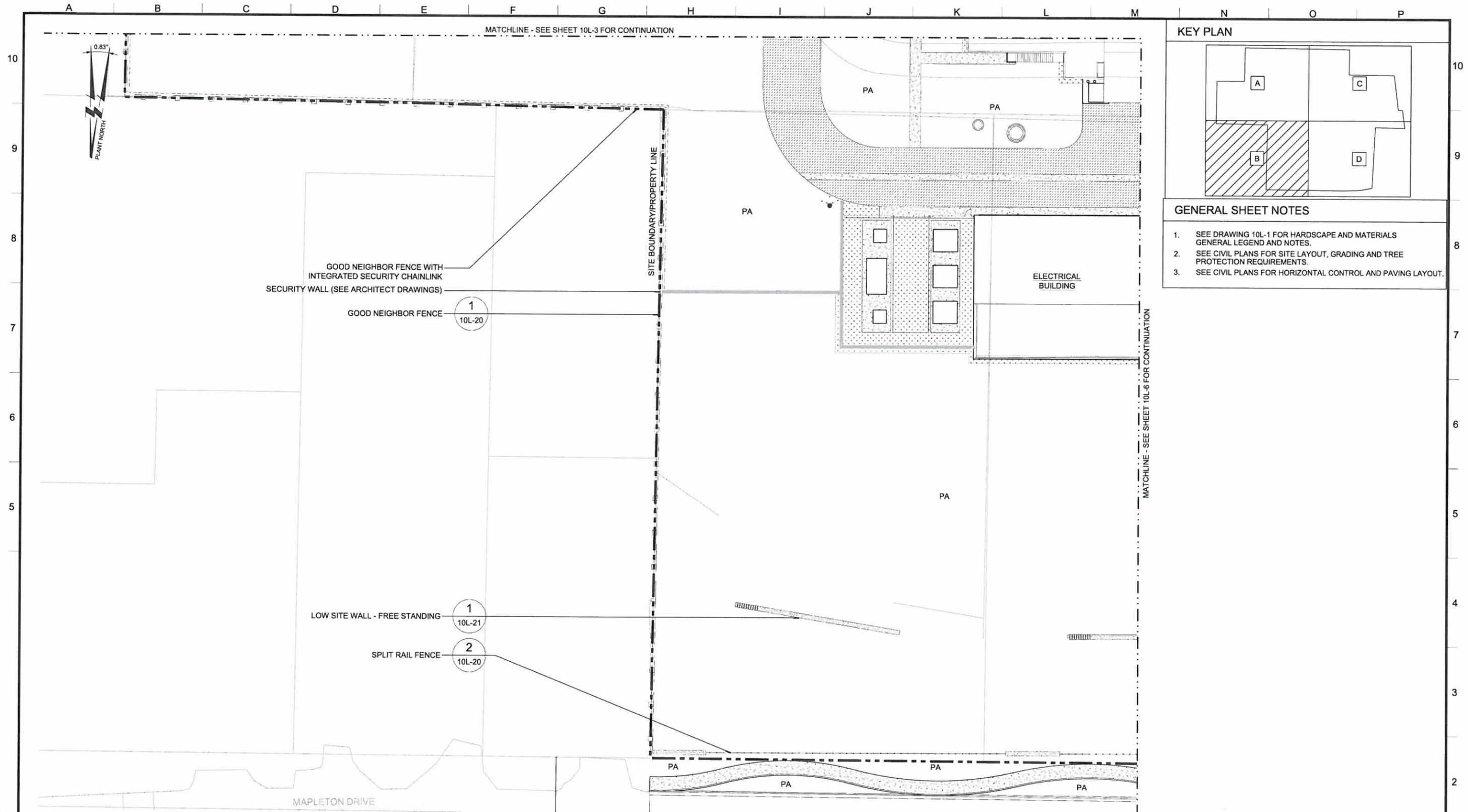


LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
LANDSCAPE
**HARDSCAPE AND MATERIALS PLAN
AREA A**



PROJECT NUMBER
WORK ORDER 206
SCALE
1" = 20'
DRAWING FIGURE NUMBER
10L-3
OF

APPROVED: *Jude Daniel* DATE: 3/27/13
JUDE DANIEL GROUNDS



- GENERAL SHEET NOTES**
- SEE DRAWING 10L-1 FOR HARDSCAPE AND MATERIALS GENERAL LEGEND AND NOTES.
 - SEE CIVIL PLANS FOR SITE LAYOUT, GRADING AND TREE PROTECTION REQUIREMENTS.
 - SEE CIVIL PLANS FOR HORIZONTAL CONTROL AND PAVING LAYOUT.

PLOT DATE: March 26, 2013 3:29PM USER: jdh
 FILE: C:\pwworking\mwh\10L-4.dwg



LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" SCALE ACCORDINGLY)
 DESIGNED: J BOGGESS
 DRAWN: D DAVISON
 CHECKED: M FAHA
 CHECKED: J GROUNDS
 APPROVED: P KREFT

REVISIONS				
REV.	DESCRIPTION	BY	APP.	

**PUBLIC
 IMPROVEMENTS/
 PUBLIC WORKS
 PERMIT REVIEW**

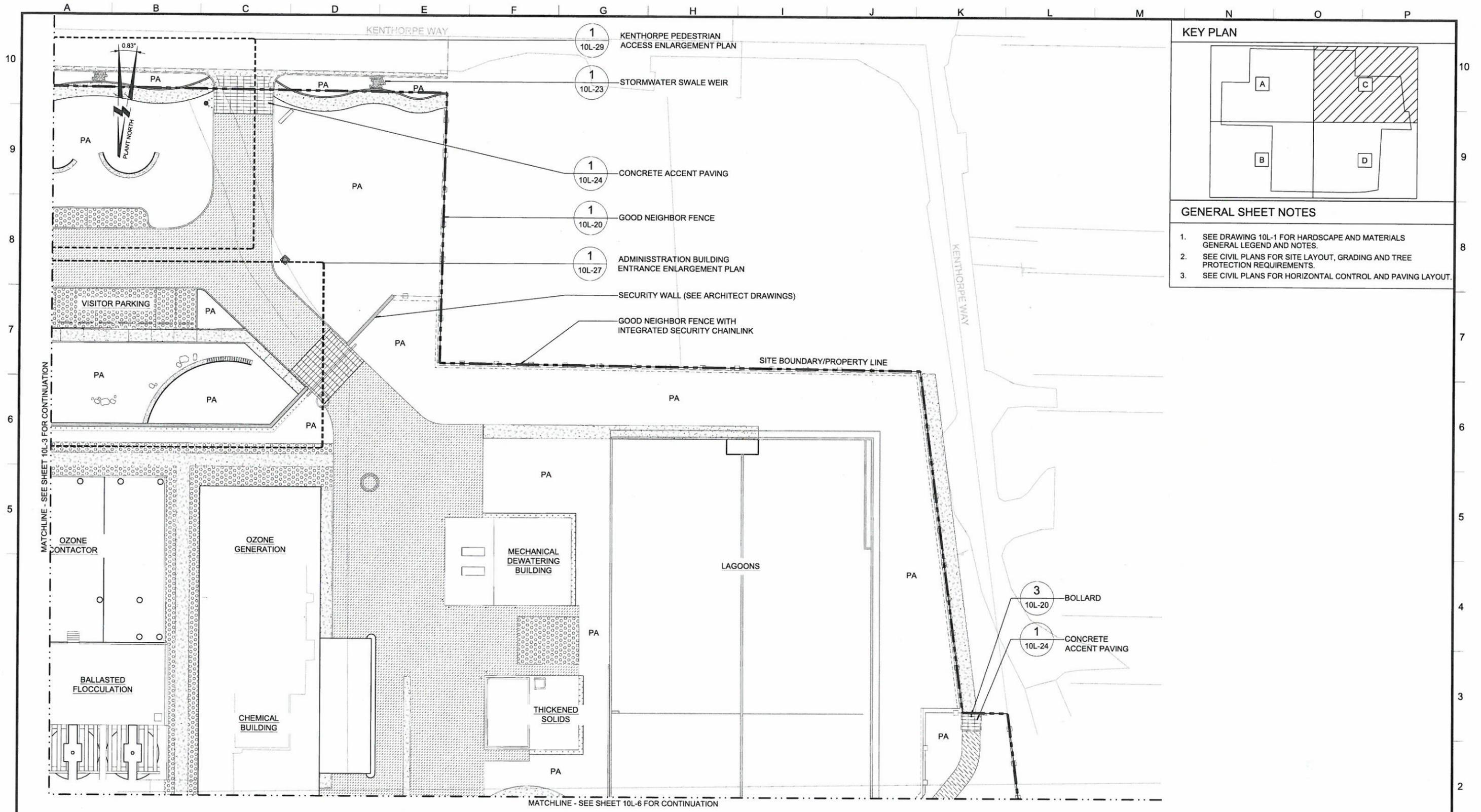


LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 LANDSCAPE
HARDSCAPE AND MATERIALS PLAN
AREA B



PROJECT NUMBER
 WORK ORDER 206
 SCALE
 1" = 20'
 DRAWING/FIGURE NUMBER
10L-4
 OF

APPROVED: *Jude Daniel* DATE: 3/27/13
 JUDE DANIEL GROUNDS



KEY PLAN

GENERAL SHEET NOTES

- SEE DRAWING 10L-1 FOR HARDSCAPE AND MATERIALS GENERAL LEGEND AND NOTES.
- SEE CIVIL PLANS FOR SITE LAYOUT, GRADING AND TREE PROTECTION REQUIREMENTS.
- SEE CIVIL PLANS FOR HORIZONTAL CONTROL AND PAVING LAYOUT.

PLOT DATE: March 29, 2013, 3:04PM USER: jdh
 FILE: C:\pwworkspace\mwh\10L-5.dwg

APPROVED: *Jude Daniel*
 JUDE DANIEL GROUNDS DATE: 3/27/13

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: J BOGESS
 DRAWN: D DAVISON
 CHECKED: M FAHA
 CHECKED: J GROUNDS
 APPROVED: P KREFT

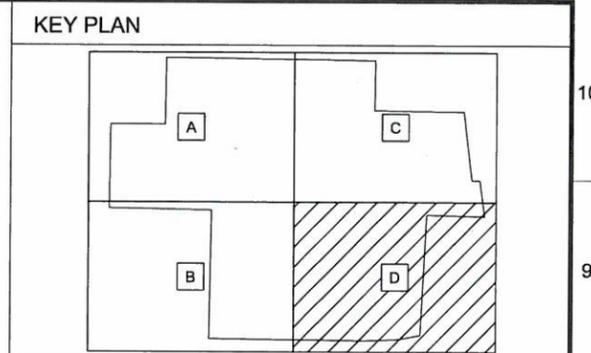
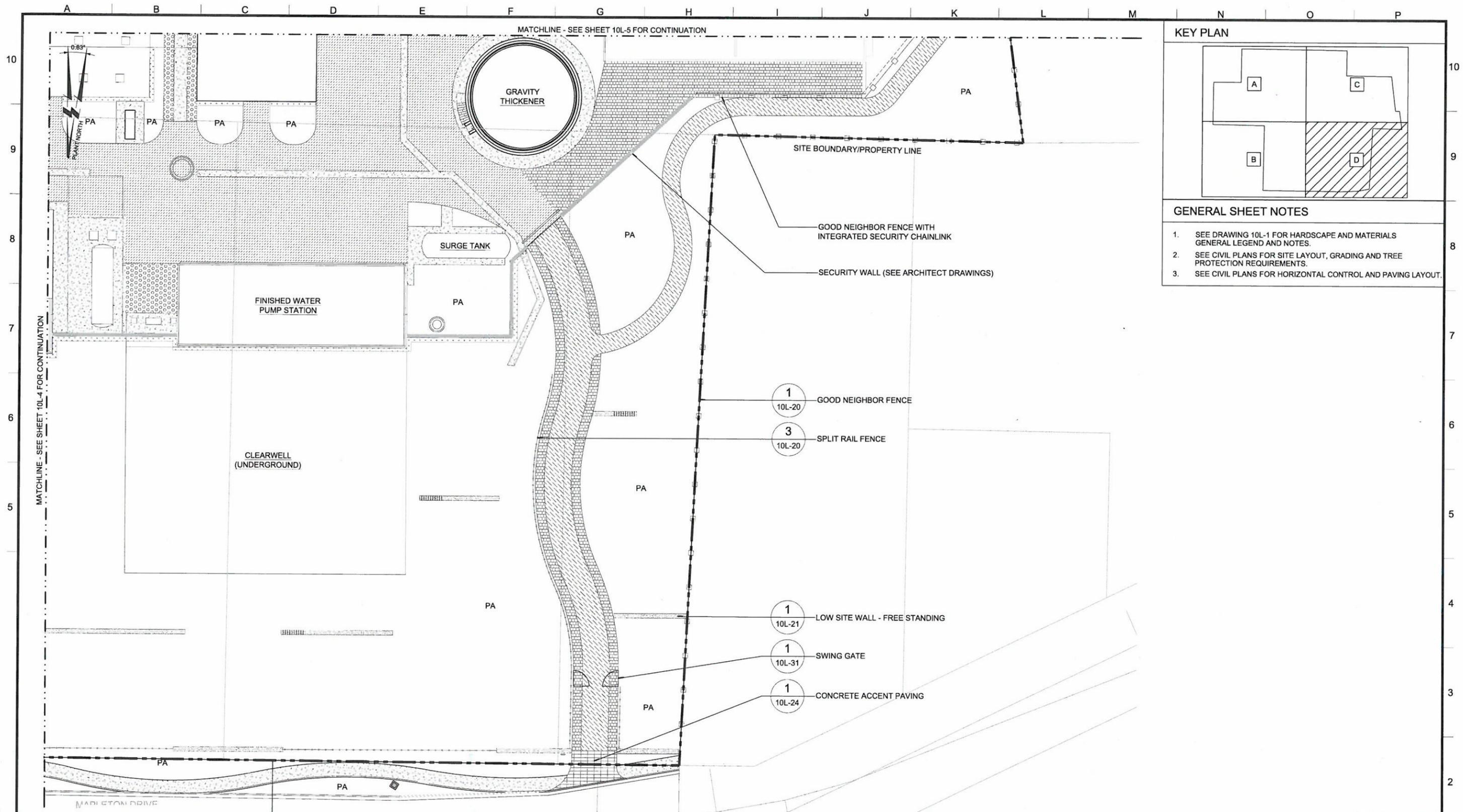
REVISIONS				
REV.	DESCRIPTION	BY	APP.	

**PUBLIC IMPROVEMENTS/
 PUBLIC WORKS
 PERMIT REVIEW**



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 LANDSCAPE
HARDSCAPE AND MATERIALS PLAN
 AREA C

PROJECT NUMBER
 WORK ORDER 206
 SCALE
 1" = 20'
 DRAWING/Figure NUMBER
10L-5
 OF



- GENERAL SHEET NOTES**
1. SEE DRAWING 10L-1 FOR HARDSCAPE AND MATERIALS GENERAL LEGEND AND NOTES.
 2. SEE CIVIL PLANS FOR SITE LAYOUT, GRADING AND TREE PROTECTION REQUIREMENTS.
 3. SEE CIVIL PLANS FOR HORIZONTAL CONTROL AND PAVING LAYOUT.

PLOT DATE: March 25, 2013 3:38PM USER: jdh
 FILE: C:\pwworking\mwh\10L-6.dwg



LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)
 DESIGNED: J BOGGESS
 DRAWN: D DAVISON
 CHECKED: M FAHA
 CHECKED: J GROUNDS
 APPROVED: P KREFT

REVISIONS			
REV.	DESCRIPTION	BY	APP.

**PUBLIC IMPROVEMENTS/
 PUBLIC WORKS
 PERMIT REVIEW**



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 LANDSCAPE
HARDSCAPE AND MATERIALS PLAN
 AREA D



PROJECT NUMBER
 WORK ORDER 206
 SCALE
 1" = 20'
 DRAWING/FIGURE NUMBER
10L-6
 OF

APPROVED: *Jude Daniel* DATE: 3/27/13
 JUDE DANIEL GROUNDS

PLANT LEGEND



TREES

1,2
10L-34

- ACER CIRCINATUM - VINE MAPLE
5'-7' HT, MULTI-TRUNK, B&B
- ACER MACROPHYLLUM
BIG LEAF MAPLE
- ALNUS RUBRA - RED ALDER
2" CAL, B&B, BRANCHED @ 6'
- AMELANCHIER ALNIFOLIA 'AUTUMN BRILLIANCE' -
AUTUMN BRILLIANCE SERVICE BERRY; 1 1/2" CAL, B&B
- CERCIS CANADENSIS - EASTERN REDBUD
2" CAL, B&B, BRANCHED @ 6'
- CORNUS NUTTALLII X FLORIDA - 'EDDIE'S WHITE
WONDER'; 2" CAL, B&B, BRANCHED @ 6'
- PSEUDOTSUGA MENZIESII - DOUGLAS FIR
8'-10' HT, B&B, BRANCHED TO GROUND
- QUERCUS GARRYANA - OREGON WHITE OAK
2" CAL, B&B, BRANCHED @ 6'
- RHAMNUS PURSHIANA - CASCARA
1 1/2" CAL, B&B
- THUJA PLICATA - WESTERN RED CEDAR
12'-14' HT, B&B, BRANCHED TO GROUND
- THUJA PLICATA - WESTERN RED CEDAR
6'-8' HT, B&B, BRANCHED TO GROUND
- THUJA PLICATA 'FASTIGIATA' - HOGAN CEDAR
6'-8' HT, B&B, BRANCHED TO GROUND

SHRUBS AND GROUNDCOVER

3-5 1,2
10L-34 10L-36

- ARCTOSTAPHYLOS UVA-URSI 'EMERALD CARPET'
EMERALD CARPET MANZANITA; 1 GAL CONT, 3' O.C.
- CORNUS SERICEA 'KELSEY' - KELSEY'S DWARF
RED-OSIER DOGWOOD; 3 GAL CONT, 2' O.C.
- CORNUS STOLONIFERA 'FARROW' - ARCTIC FIRE RED
TWIG DOGWOOD; 3 GAL CONT, SPACE AS SHOWN
- MYRICA CALIFORNICA - PACIFIC WAX MYRTLE
5 GAL CONT, SPACE AS SHOWN
- MAHONIA AQUIFOLIUM 'COMPACTA' COMPACT
OREGON GRAPE; 3 GAL CONT, SPACE AS SHOWN
- POLYSTICHUM MUNITUM - WESTERN SWORD FERN
3 GAL CONT, SPACE AS SHOWN
- RIBES SANGUINEUM - RED-FLOWERING CURRANT
5 GAL CONT, SPACE AS SHOWN
- SALIX PURPUREA 'NANA' - DWARF PURPLE
OSIER WILLOW; 5 GAL CONT, SPACE AS SHOWN
- SPIRAEA DOUGLASII - DOUGLAS SPIRAEA
2 GAL CONT, SPACE AS SHOWN
- SYMPHORICARPOS ALBUS - COMMON SNOWBERRY
3 GAL CONT, SPACE AS SHOWN
- VACCINIUM OVATUM - EVERGREEN HUCKLEBERRY
3 GAL CONT, SPACE AS SHOWN

SEED MIXES

- GREEN ROOF PLANTING MIX
MEADOW MIX WITH SEDUM VARIETIES
- GRASS PAVERS SEED MIX
DOT MULTIPURPOSE, SUNMARK SEEDS

AREA%
30% LOLIUM PERENNE VAR. QUEBEC - QUEBEC PERENNIAL RYE
30% LOLIUM PERENNE VAR EXPRESS II - EXPRESS II PER. RYE
20% FESTUCA RUBRA SPP. FALLAX - WINDWARD CHEWINGS FESCUE
20% FESTUCA RUBRA VAR. GARNET - GARNET CREEPING RED FESCUE

- ECO-LAWN SEED MIX
ECOLOGY MIX, SUNMARK SEEDS

APPLICATION RATE: APPLY SEED MIX AT 8.0 PLS LBS PER 1000 SF
MIX % IS BY WT.

- MEADOW SEED MIX

APPLICATION RATE: APPLY SEED MIX AT 2.0 PLS LBS PER 1000 SF
MIX % IS BY WT.

MULCH

- BARK MULCH
AS SPECIFIED

PLANTING PLAN NOTES

1. ALL NEW PLANTING AREAS SHALL BE IRRIGATED UTILIZING A FULLY AUTOMATIC IRRIGATION SYSTEM. SEE IRRIGATION PLANS FOR AREAS DESIGNATED FOR TEMPORARY IRRIGATION SYSTEM. IRRIGATION SYSTEM SHALL INCORPORATE A SMART CONTROLLER, IN COMBINATION WITH LOW PRECIPITATION SPRAY HEADS. IRRIGATION INTENT IS TO PROVIDE SUFFICIENT WATER TO ESTABLISH NEW PLANTINGS WITHIN THE FIRST TWO YEARS, AND THEN SLOWLY DECREASE WATERING, LIMITED TO DRY MONTHS, OR PERIODS OF DROUGHT THE FOLLOWING (3) YEARS.
2. CONTRACTOR SHALL PROVIDE TOPSOIL, SOIL AMENDMENTS AND MULCH AS SPECIFIED.
3. ALL PLANTS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS AND SPECIFICATIONS PROVIDED AS PART OF THE CONSTRUCTION DOCUMENT PACKAGE.
4. QUANTITIES ARE LISTED FOR THE CONTRACTOR'S CONVENIENCE ONLY. ALL COUNTS MUST BE VERIFIED BY THE CONTRACTOR. IN THE CASE OF A DISCREPANCY BETWEEN THE LEGEND AND THE PLAN, PLANTS INDICATED ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN THE LEGEND.

PLOT DATE: March 20, 2013. RUPM USER: jdb
FILE: C:\pwworking\m53181\COMP\10L-13.dwg



LINE IS 2 INCHES
AT FULL SIZE
(IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: J BOGGESS
DRAWN: D DAVISON
CHECKED: M FAHA
CHECKED: J GROUNDS
APPROVED: P KREFT

REVISIONS				
REV.	DESCRIPTION	BY	DATE	APP.

PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

GENERAL LANDSCAPE
LEGENDS AND NOTES
PLANTING - 1

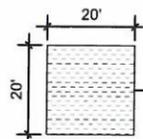


PROJECT NUMBER
WORK ORDER 206
SCALE
NO SCALE
DRAWING NUMBER
10L-13

OF

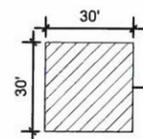
PLANT LEGEND (CONTINUED)

TEMPLATE PLANTING



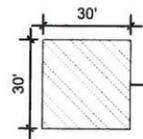
LOW SHRUB/GROUNDCOVER PLANTING
PLANT THE FOLLOWING SHRUBS AT 3' O.C. - (TYPICAL PLOT 400 SF) TOTAL AREA: 5,693 SF

SHRUBS	SIZE	GROUPINGS	QTY PER PLOT
GAULTHERIA SHALLON - SALAL	2 GAL, CONT	3, 5 OR 7	20
MAHONIA NERVOSA - LONG LEAF MAHONIA	2 GAL, CONT	3, 5 OR 7	20
POLYSTICHUM MUNITUM - SWORD FERN	3 GAL, CONT	1, 3 OR 5	11



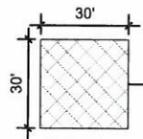
LOW SHRUB/GROUNDCOVER PLANTING
PLANT THE FOLLOWING SHRUBS AND GROUNDCOVER AT 3' O.C. IN RANDOM GROUPINGS AS INDICATED BELOW AND ACCORDING TO DETAIL 5 ON SHEET 10L-34 - (TYPICAL PLOT 900 SF) TOTAL AREA: 41,220 SF

SHRUBS	SIZE	GROUPINGS	QTY PER PLOT
BLECHNUM SPICANT - DEER FERN	1 GAL, CONT	1, 3 OR 5	6
DESCHAMPSIA CAESPITOSA - TUFTED HAIR GRASS	1 GAL, CONT	3, 5 OR 7	12
DICENTRA FORMOSA - PACIFIC BLEEDING HEART	1 GAL, CONT	1, 3 OR 5	6
FRAGARIA CHILOENSIS - BEACH STRAWBERRY	1 GAL, CONT	3 OR 6	6
GAULTHERIA SHALLON - SALAL	2 GAL, CONT	1, 3 OR 5	23
MAHONIA NERVOSA - LONGLEAF MAHONIA	2 GAL, CONT	3, 5 OR 7	23
OXALIS OREGANA - OREGON OXALIS	1 GAL, CONT	3 OR 6	6
POLYSTICHUM MUNITUM - SWORD FERN	3 GAL, CONT	1, 3 OR 5	23
SPIREA BETULIFOLIA - BIRCH-LEAF SPIREA	2 GAL, CONT	3, 5 OR 7	12



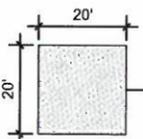
WOODLAND SCREEN PLANTINGS
PLANT THE FOLLOWING SHRUBS AND GROUNDCOVER AT 3' O.C. IN RANDOM GROUPINGS AS INDICATED BELOW AND ACCORDING TO DETAIL 5 ON SHEET 10L-34 - (TYPICAL PLOT 900 SF) TOTAL AREA: 24,973 SF

SHRUBS - 3 GAL. CONT.	GROUPINGS	QTY PER PLOT
CORNUS STOLONIFERA - RED-OSIER DOGWOOD	1, 2 OR 4	4
MYRICA CALIFORNICA - PACIFIC WAX MYRTLE	1, 3 OR 5	5
OEMLERIA CERASIFORMIS - INDIAN PLUM	1 OR 2	2
PHYSOCARPUS CAPITATUS - PACIFIC NINEBARK	1 OR 3	5
RIBES SANGUINEUM - RED-FLOWERING CURRANT	1, 3 OR 5	6
SAMBUCUS RACEMOSA - RED ELDERBERRY	1 OR 3	4
VACCINIUM OVATUM - EVERGREEN HUCKLEBERRY	3 OR 5	5



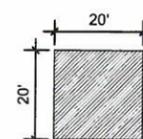
WOODLAND UNDERSTORY INFILL PLANTINGS
PLANT THE FOLLOWING SHRUBS AND GROUNDCOVER AT 4' O.C. IN RANDOM GROUPINGS AS INDICATED BELOW AND ACCORDING TO DETAIL 5 ON SHEET 10L-34 - (TYPICAL PLOT 900 SF) TOTAL AREA: 28,240 SF

SHRUBS - 1 GAL. CONT.	GROUPINGS	QTY PER PLOT
GAULTHERIA SHALLON - SALAL	1, 3 OR 5	13
MAHONIA NERVOSA - LONG LEAF MAHONIA	1, 3 OR 5	10
OEMLERIA CERASIFORMIS - INDIAN PLUM	1	4
PHILADELPHUS LEWISII - MOCK ORANGE	1 OR 3	7
POLYSTICHUM MUNITUM - SWORD FERN	1, 3 OR 5	13
RUBUS PARVIFLORUS - THIMBLEBERRY	1 OR 3	7
SAMBUCUS RACEMOSA - RED ELDERBERRY	1 OR 3	6
SYMPHORICARPOS ALBUS - COMMON SNOWBERRY	1 OR 3	6



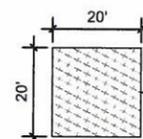
STORMWATER PLANTING - FACILITY BOTTOM (ZONE 'A')
PLANT THE FOLLOWING SHRUBS AT 1' O.C. IN GROUPINGS AS INDICATED BELOW - (TYPICAL PLOT 400 SF) TOTAL AREA: 17,054 SF

SHRUBS - 1 GAL. CONT.	GROUPINGS	QTY PER PLOT
CAREX OBNUPTA - SLOUGH SEDGE	DRIFTS OF 40-70 PLANTS	115
JUNCUS EFFUSUS - COMMON RUSH	DRIFTS OF 40-70 PLANTS	115
JUNCUS PATENS - SPREADING RUSH	DRIFTS OF 20-50 PLANTS	69
SCIRPUS MICROCARPUS - SMALL FRUITED BULL RUSH	DRIFTS OF 10-20 PLANTS	46
DESCHAMPSIA CAESPITOSA - TUFTED HAIRGRASS	DRIFTS OF 20-50 PLANTS	69
CAMASSIA QUAMASH - COMMON CAMAS	5, 7, OR 9	46



STORMWATER PLANTING - FACILITY SIDE SLOPE (ZONE 'B')
PLANT THE FOLLOWING SHRUBS AT 3' O.C. IN GROUPINGS AS INDICATED BELOW - (TYPICAL PLOT 900 SF) TOTAL AREA: 14,707 SF

SHRUBS - 1 GAL. CONT.	GROUPINGS	QTY PER PLOT
DESCHAMPSIA CAESPITOSA - TUFTED HAIRGRASS	3, 5 OR 7	12
GAULTHERIA SHALLON - SALAL	1, 3, 5 OR 7	17
MAHONIA AQUIFOLIUM 'COMPACTA'		
- COMPACT OREGON GRAPE	3, 5 OR 7	12
MAHONIA REPENS - CREEPING MAHONIA	1, 3, 5 OR 7	11
POLYSTICHUM MUNITUM - SWORD FERN	3, 5 OR 7	23
SPIRAEA DOUGLASII - DOUGLAS SPIRAEA	3, 5 OR 7	29
SYMPHORICARPOS MOLLIS - CREEPING SNOWBERRY	1, 3 OR 5	11



OAK UNDERSTORY PLANTING
PLANT THE FOLLOWING SHRUBS AND GRASSES AT 18" O.C. - (TYPICAL PLOT 400 SF) TOTAL AREA: 670 SF

SHRUBS	SIZE	GROUPINGS	QTY PER PLOT
BALSAMORHIZA DELTOIDEA - BALSAMROOT	1 GAL, CONT	3, 5 OR 7	10
BROMUS CARINATUS - CALIFORNIA BROME	1 GAL, CONT	9 TO 15	44
CAMASSIA QUAMASH - COMMON CAMAS	1 GAL, CONT	3, 5 OR 7	10
FESTUCA ROEMERI - ROEMER'S FESUE	1 GAL, CONT	3, 5 OR 7	48
FESTUCA RUBRA - RED FESCUE	1 GAL, CONT	9, 12 OR 15	44
FRAGARIA CHILOENSIS - BEACH STRAWBERRY	1 GAL, CONT	3, 5 OR 7	10
RANUNCULUS OCCIDENTALLIS - WESTERN BUTTERCUP	1 GAL, CONT	3, 5 OR 7	10
SYMPHORICARPOS MOLLIS - CREEPING SNOWBERRY	2 GAL, CONT	3, 5 OR 7	31

PLOT DATE: March 20, 2013, 8:09AM USER: jdm
FILE: C:\pwworking\mwh\10L-14.dwg



LINE IS 2 INCHES
AT FULL SIZE
(IF NOT 2" SCALE ACCORDINGLY)

DESIGNED: J BOGGESS
DRAWN: D DAVISON
CHECKED: M FAHA
CHECKED: J GROUNDS
APPROVED: P KREFT

REVISIONS				
REV.	DESCRIPTION	BY	DATE	APP.

PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

GENERAL LANDSCAPE
LEGENDS AND NOTES
PLANTING - 2

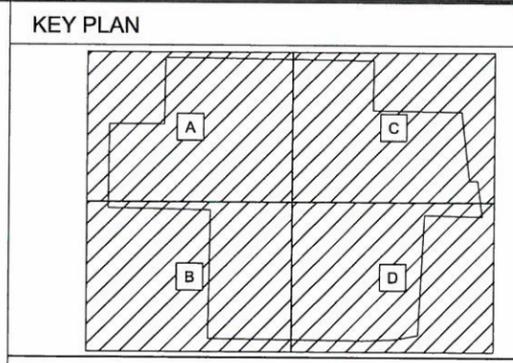
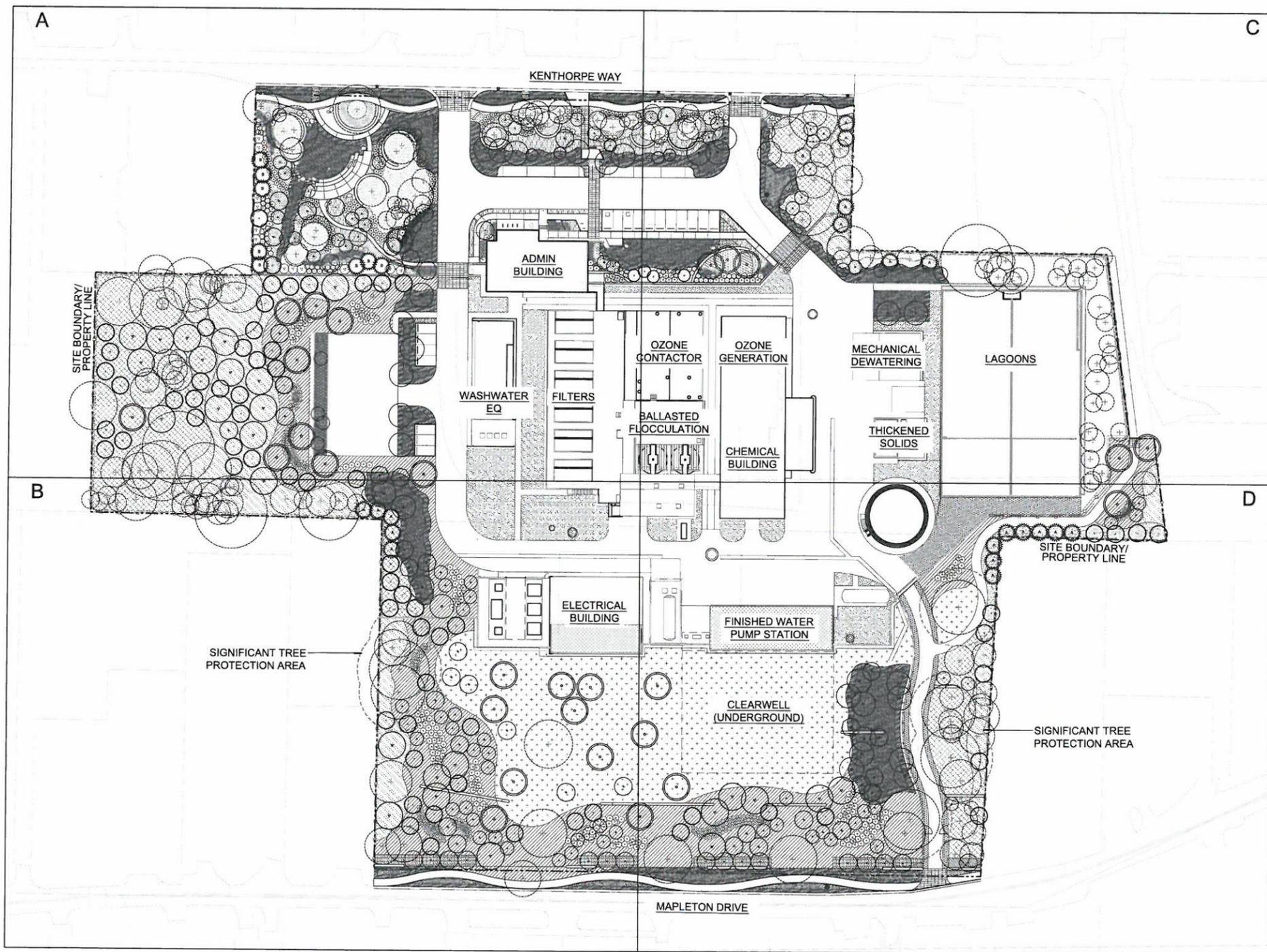


PROJECT NUMBER
WORK ORDER 206
SCALE
NO SCALE
DRAWING FIGURE NUMBER
10L-14

OF

A B C D E F G H I J K L M N O P

10
9
8
7
6
5



- GENERAL SHEET NOTES**
1. SEE DRAWING 10L-13,14 FOR PLANTING LEGEND AND NOTES.
 2. SEE CIVIL PLANS FOR SITE LAYOUT, GRADING AND TREE PROTECTION REQUIREMENTS.

10
9
8
7
6
5
4
3
2

PLOT DATE: March 20, 2013, 4:10PM, USER: jdh
FILE: C:\pwworkdir\mms53161\DWTP-10L-15.dwg



LINE IS 2 INCHES
AT FULL SIZE
(IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: J BOGGESS
DRAWN: D DAVISON
CHECKED: M FAHA
CHECKED: J GROUNDS
APPROVED: P KREFT

REVISIONS			
REV.	DESCRIPTION	BY	APP.

**PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW**



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

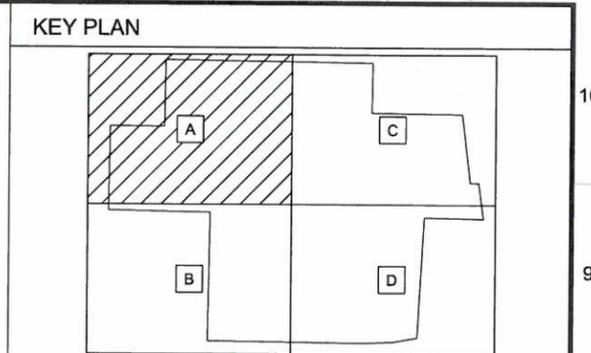
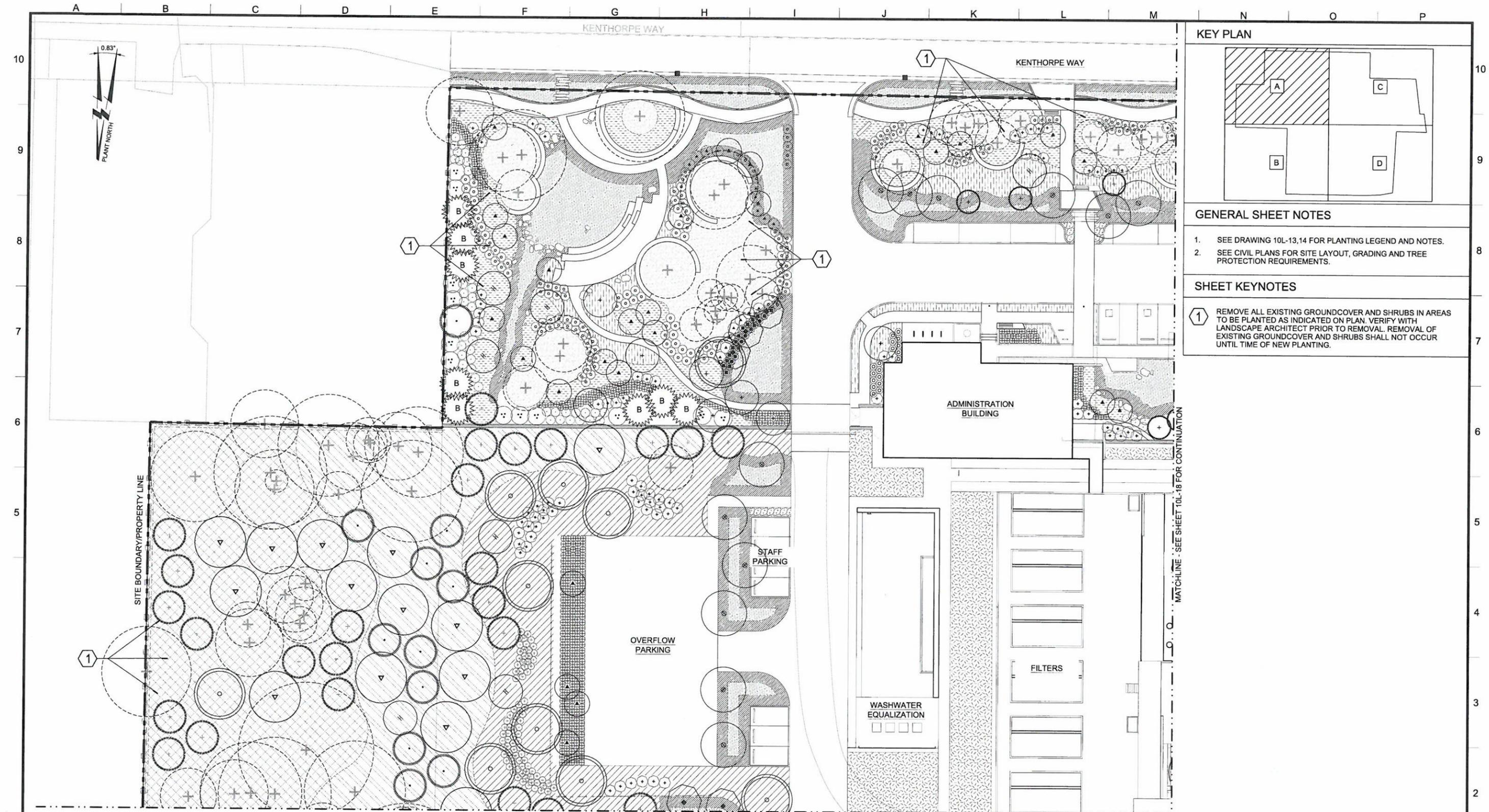
LANDSCAPE
PLANTING
OVERALL PLAN



PROJECT NUMBER
WORK ORDER 206
SCALE
1" = 50'
DRAWING/FIGURE NUMBER
10L-15
OF

APPROVED: *Jude Daniel* DATE: 3/27/13
JUDE DANIEL GROUNDS

A B C D E F G H I J K L M N O P



- GENERAL SHEET NOTES**
- SEE DRAWING 10L-13,14 FOR PLANTING LEGEND AND NOTES.
 - SEE CIVIL PLANS FOR SITE LAYOUT, GRADING AND TREE PROTECTION REQUIREMENTS.

- SHEET KEYNOTES**
- 1** REMOVE ALL EXISTING GROUNDCOVER AND SHRUBS IN AREAS TO BE PLANTED AS INDICATED ON PLAN. VERIFY WITH LANDSCAPE ARCHITECT PRIOR TO REMOVAL. REMOVAL OF EXISTING GROUNDCOVER AND SHRUBS SHALL NOT OCCUR UNTIL TIME OF NEW PLANTING.

PLOT DATE: March 20, 2013 - 9:12AM - USER: jdb
 FILE: C:\pwworking\m55181\CONT\10L-16.dwg



LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" SCALE ACCORDINGLY)
 DESIGNED: J BOGGESS
 DRAWN: D DAVISON
 CHECKED: M FAHA
 CHECKED: J GROUNDS
 APPROVED: P KREFT

REVISIONS			
REV.	DESCRIPTION	BY	APP.

**PUBLIC IMPROVEMENTS/
 PUBLIC WORKS
 PERMIT REVIEW**



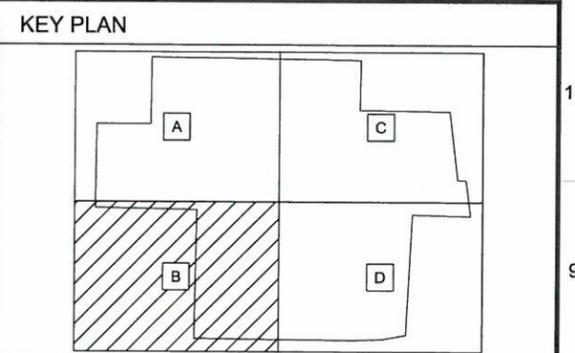
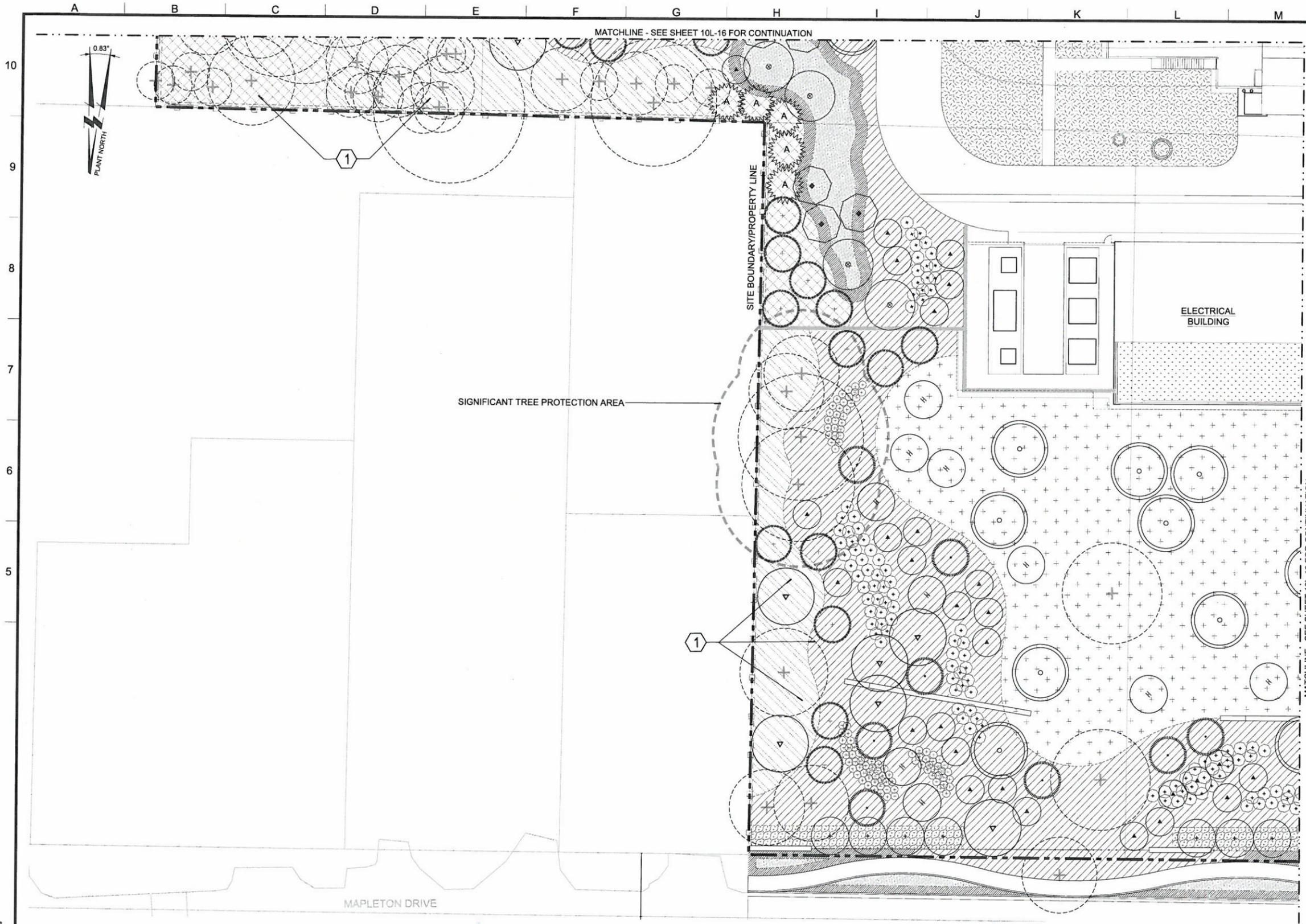
LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

LANDSCAPE
**PLANTING PLAN
 AREA A**



PROJECT NUMBER
 WORK ORDER 206
 SCALE
 1" = 20'
 DRAWING/FIGURE NUMBER
10L-16

APPROVED: *Jude Daniel*
 JUDE DANIEL GROUNDS DATE: 3/27/13



- GENERAL SHEET NOTES
- SEE DRAWING 10L-13,14 FOR PLANTING LEGEND AND NOTES.
 - SEE CIVIL PLANS FOR SITE LAYOUT, GRADING AND TREE PROTECTION REQUIREMENTS.

- SHEET KEYNOTES
- 1 REMOVE ALL EXISTING GROUNDCOVER AND SHRUBS IN AREAS TO BE PLANTED AS INDICATED ON PLAN. VERIFY WITH LANDSCAPE ARCHITECT PRIOR TO REMOVAL. REMOVAL OF EXISTING GROUNDCOVER AND SHRUBS SHALL NOT OCCUR UNTIL TIME OF NEW PLANTING.

PLOT DATE: March 20, 2013, 9:27AM USER: jdh
FILE: C:\pwworkspace\10L-17.dwg



LINE IS 2 INCHES
AT FULL SIZE
(IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: J BOGGESS
DRAWN: D DAVISON
CHECKED: M FAHA
CHECKED: J GROUNDS
APPROVED: P KREFT

REVISIONS				
REV.	DESCRIPTION	BY	APP.	

PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW

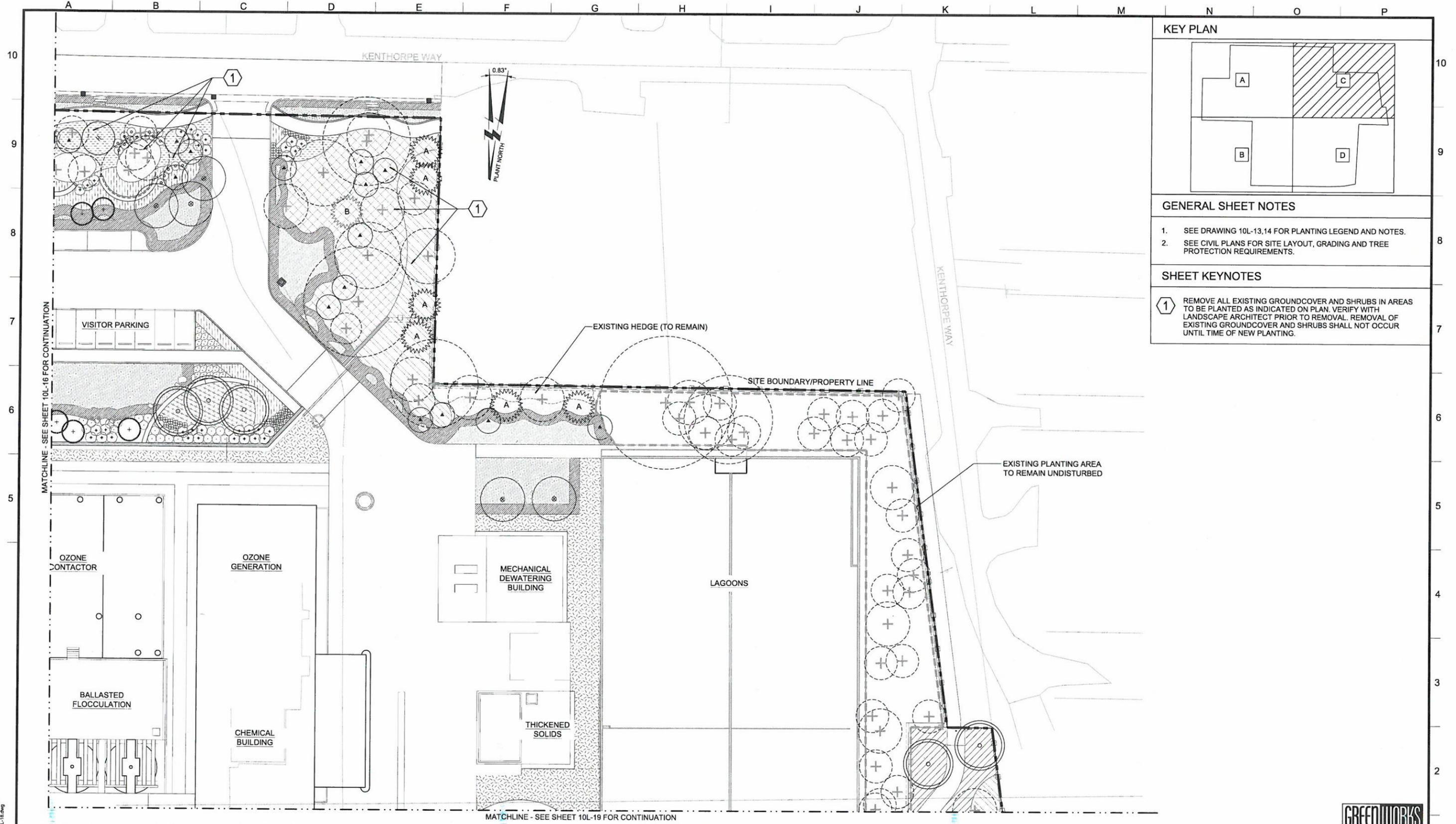


LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
LANDSCAPE
PLANTING PLAN
AREA B



PROJECT NUMBER
WORK ORDER 206
SCALE
1" = 20'
DRAWING/FIGURE NUMBER
10L-17
OF

APPROVED: *Jude Daniel* DATE: 3/27/13
JUDE DANIEL GROUNDS



KEY PLAN

GENERAL SHEET NOTES

- SEE DRAWING 10L-13,14 FOR PLANTING LEGEND AND NOTES.
- SEE CIVIL PLANS FOR SITE LAYOUT, GRADING AND TREE PROTECTION REQUIREMENTS.

SHEET KEYNOTES

① REMOVE ALL EXISTING GROUNDCOVER AND SHRUBS IN AREAS TO BE PLANTED AS INDICATED ON PLAN. VERIFY WITH LANDSCAPE ARCHITECT PRIOR TO REMOVAL. REMOVAL OF EXISTING GROUNDCOVER AND SHRUBS SHALL NOT OCCUR UNTIL TIME OF NEW PLANTING.

PLOT DATE: March 20, 2013 - 8:26PM USER: jdb
 FILE: C:\pwworkspace\10L-18\10L-18.dwg

MWH

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: J BOGGESS
 DRAWN: D DAVISON
 CHECKED: M FAHA
 CHECKED: J GROUNDS
 APPROVED: P KREFT

APPROVED: *Jude Daniel* DATE: 3/27/13
 JUDE DANIEL GROUNDS

REVISIONS			
REV.	DESCRIPTION	BY	APP.

**PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW**



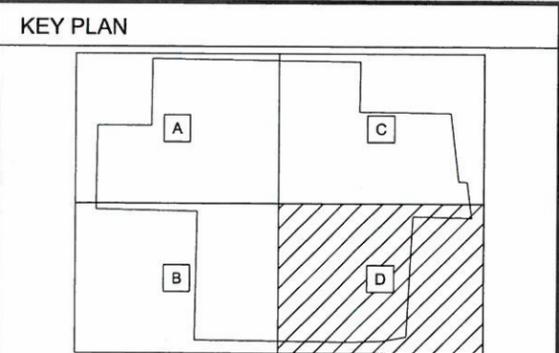
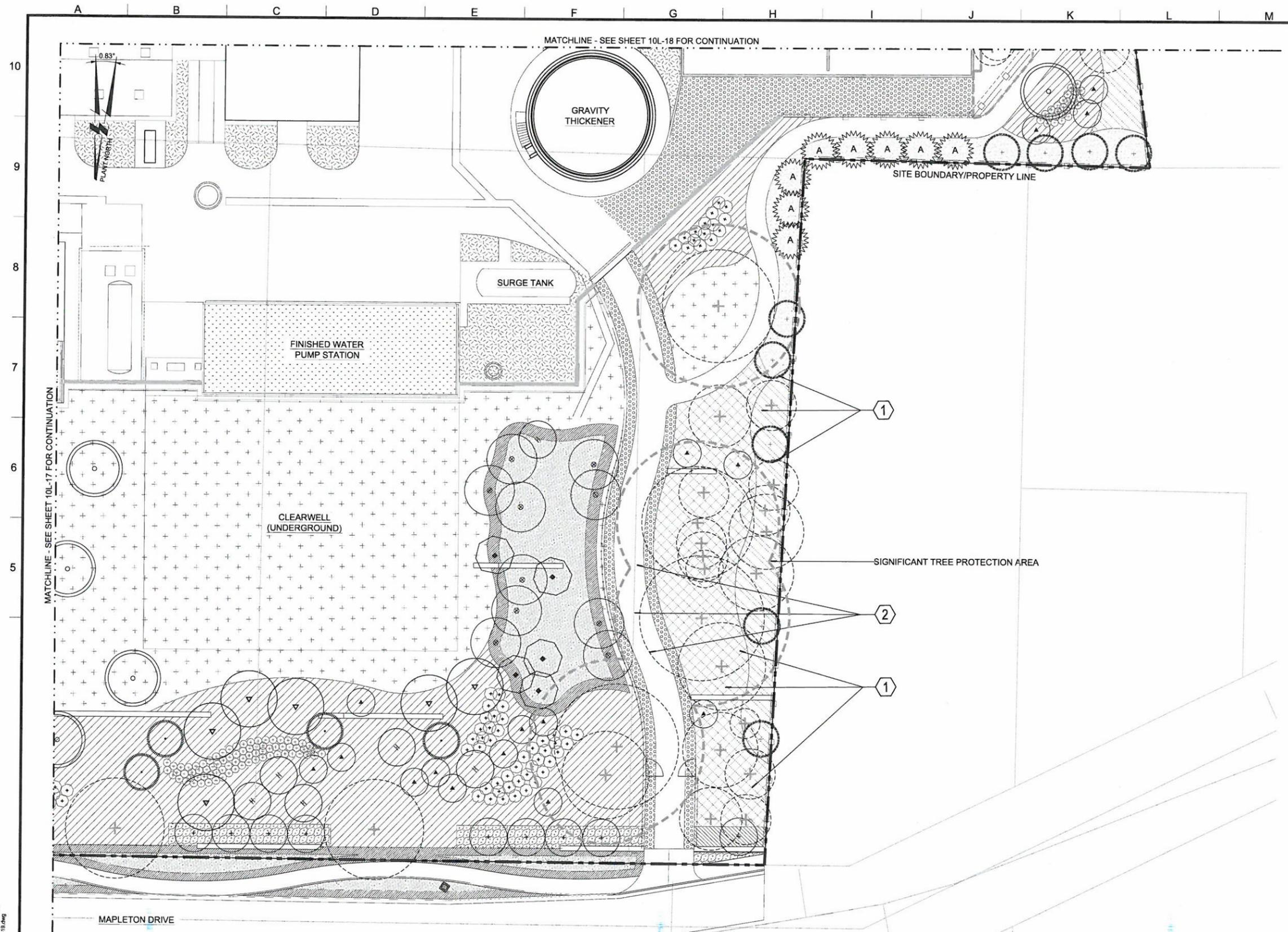
LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

LANDSCAPE
PLANTING PLAN
AREA C



PROJECT NUMBER
WORK ORDER 206
SCALE
1" = 20'
DRAWING/FIGURE NUMBER
10L-18

OF



GENERAL SHEET NOTES

1. SEE DRAWING 10L-13,14 FOR PLANTING LEGEND AND NOTES.
2. SEE CIVIL PLANS FOR SITE LAYOUT, GRADING AND TREE PROTECTION REQUIREMENTS.

SHEET KEYNOTES

- ① REMOVE ALL EXISTING GROUNDCOVER AND SHRUBS IN AREAS TO BE PLANTED AS INDICATED ON PLAN. VERIFY WITH LANDSCAPE ARCHITECT PRIOR TO REMOVAL. REMOVAL OF EXISTING GROUNDCOVER AND SHRUBS SHALL NOT OCCUR UNTIL TIME OF NEW PLANTING.
- ② BRANCHES OF EXISTING TREES ADJACENT TO THE EMERGENCY ACCESS ROAD ENTERING FROM MAPLETON DRIVE TO BE TRIMMED AS NEEDED TO ESTABLISH A CLEAR ZONE OF 20' WIDE AND 13.5' HIGH IN ORDER TO ALLOW FOR UNOBSTRUCTED EMERGENCY VEHICLE TRAVEL.

PLOT DATE: March 20, 2013 - 8:26PM USER: jmb
 FILE: C:\pwworking\mwhs\10L-19\10L-19.dwg



LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)
 DESIGNED: J BOGGESS
 DRAWN: D DAVISON
 CHECKED: M FAHA
 CHECKED: J GROUNDS
 APPROVED: P KREFT

REVISIONS			
REV.	DESCRIPTION	BY	APP.

**PUBLIC IMPROVEMENTS/
 PUBLIC WORKS
 PERMIT REVIEW**



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

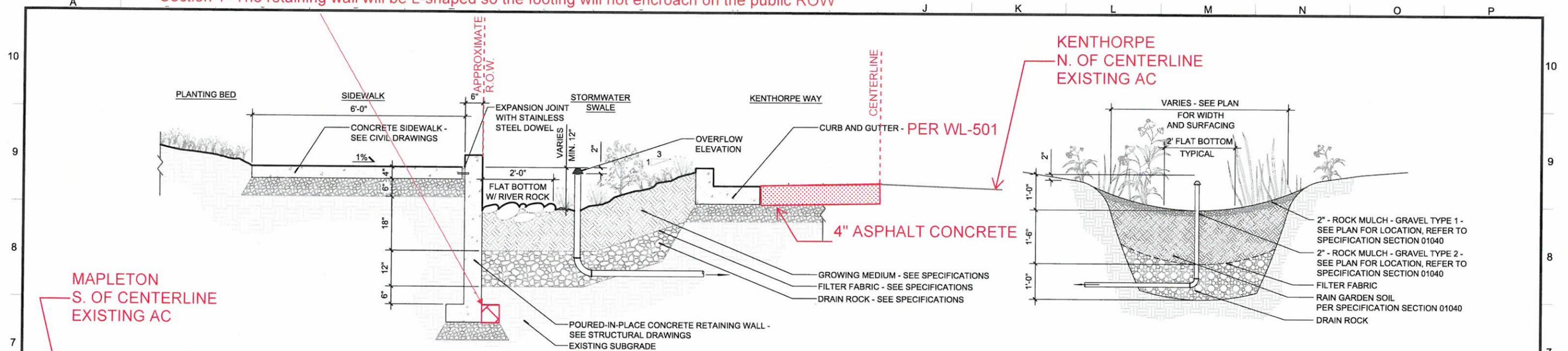
LANDSCAPE
PLANTING PLAN
 AREA D



PROJECT NUMBER
 WORK ORDER 206
 SCALE
 1" = 20'
 DRAWING/FIGURE NUMBER
10L-19
 OF

APPROVED: *Jude Daniel* DATE: 3/27/13
 JUDE DANIEL GROUNDS

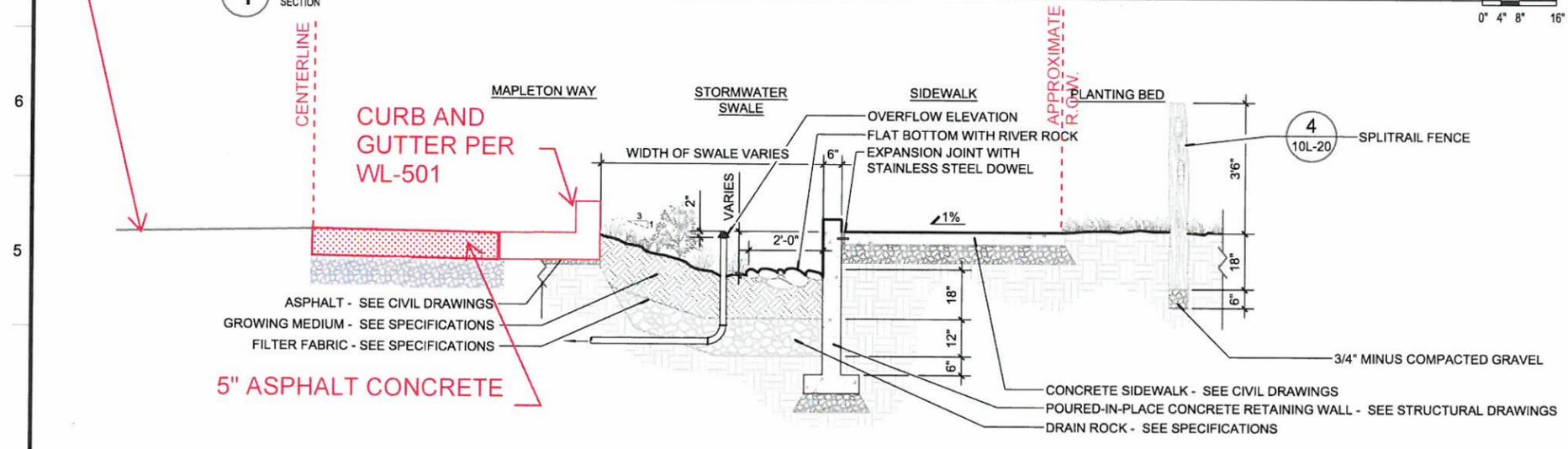
Section 1- The retaining wall will be L-shaped so the footing will not encroach on the public ROW



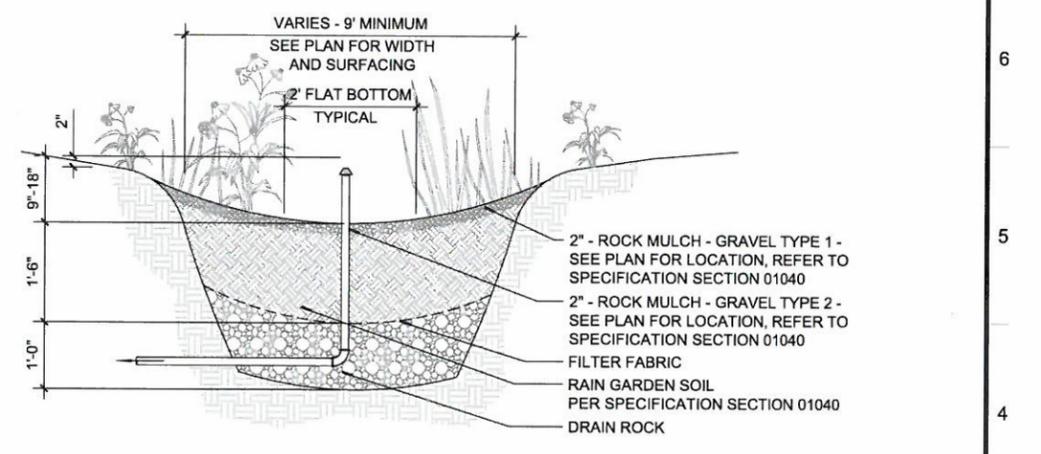
1 SECTION
STORMWATER SWALE - KENTHORPE



2 SECTION
STORMWATER SWALE - PLANT PROPERTY



3 SECTION
STORMWATER SWALE - MAPLETON



4 SECTION
STORMWATER BASIN - PLANT PROPERTY

GENERAL NOTES:

- To construct the half street improvements on Mapleton Drive remove existing asphalt concrete to aggregate base, proof roll the base, repair soft spots with overexcavation and structural aggregate base and place two lifts of asphalt concrete for total depth of 5"
- To construct the half street improvements on Kenthorpe Way remove existing asphalt concrete to aggregate base, proof roll the base, repair soft spots with overexcavation and structural aggregate base and place two lifts of asphalt concrete for total depth of 4". This assumes a uniformity in existing aggregate base depth throughout Kenthorpe Way.
- See WL-508 on next page for Kenthorpe Sidewalk Improvements on eastern property boundary.

PUBLIC IMPROVEMENTS/PUBLIC WORKS PERMIT REVIEW COPY. MARKUPS IN RED TO PROVIDE ADDITIONAL CLARIFICATION

PLOT DATE: Mapletn 2013 03/27/13 USER: jdh
 FILE: C:\pwworking\mwh\2013\10L-35.dwg



REV.	DESCRIPTION	BY	APP.

PUBLIC IMPROVEMENTS/
PUBLIC WORKS
PERMIT REVIEW



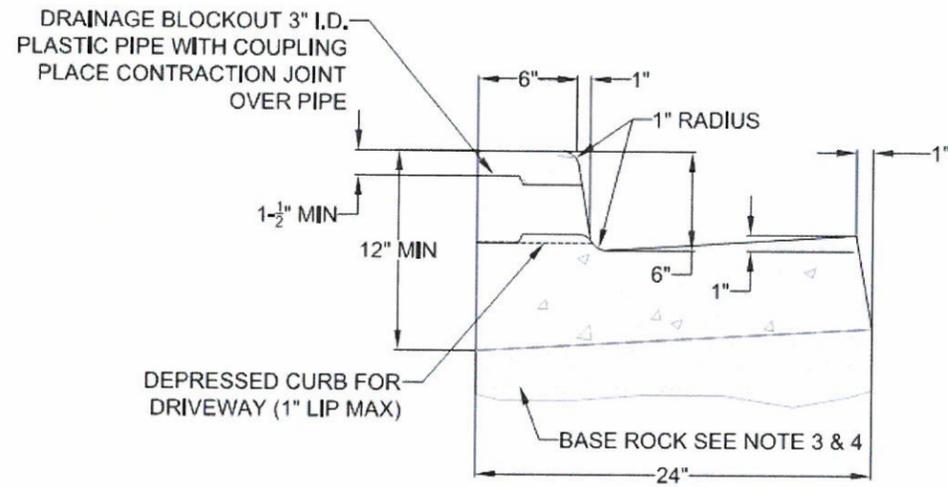
LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

LANDSCAPE
PLANTING DETAILS - 2



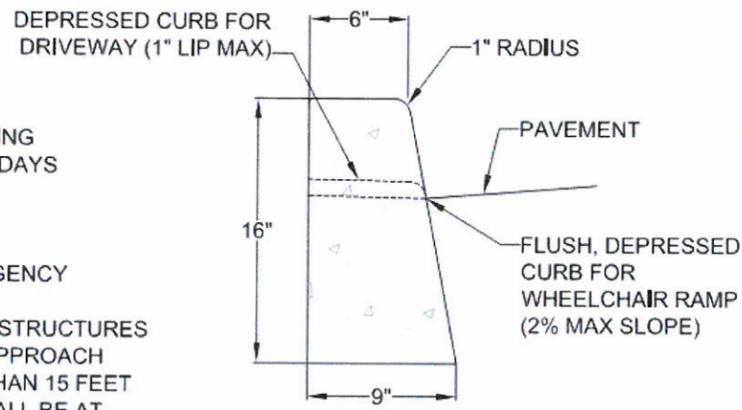
PROJECT NUMBER WORK ORDER 206
SCALE AS SHOWN
DRAWING NUMBER 10L-35

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



FLUSH, DEPRESSED CURB FOR WHEELCHAIR RAMP 2% MAX SLOPE

TYPICAL CURB AND GUTTER



TYPICAL STRAIGHT CURB

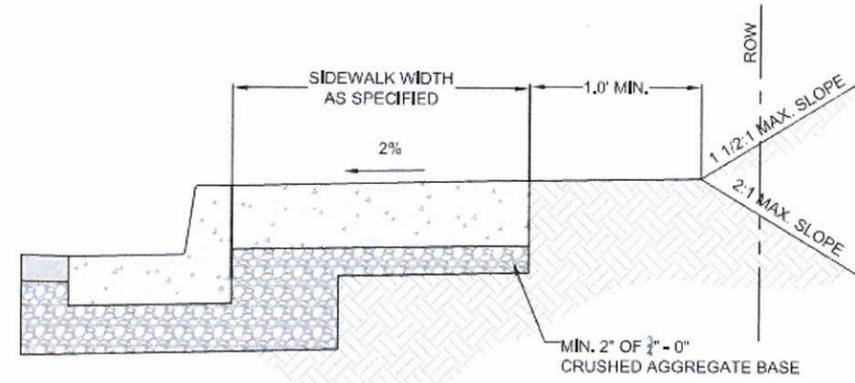
- NOTE:**
- CONCRETE SHALL HAVE A BREAKING STRENGTH OF 3300 PSI AFTER 28 DAYS
 - CONTRACTION JOINTS:
 - TO BE PROVIDED:
 - AT EACH POINT OF TANGENCY
 - AT EACH COLD JOINT
 - AT EACH SIDE OF INLET STRUCTURES
 - AT BOTH SIDES OF AN APPROACH
 - SPACING TO BE NOT MORE THAN 15 FEET
 - THE DEPTH OF THE JOINT SHALL BE AT LEAST 1/3 OF THE THICKNESS OF CONCRETE
 - EXPANSION JOINTS SHALL NOT BE USED
 - BASE ROCK - 1-1/2"-0", 95% COMPACTION PER AASHTO T-180
ROCK SHALL BE TO SUBGRADE OF THE STREET SECTION OR 4" IN DEPTH, WHICHEVER IS GREATER
 - FULL DEPTH PREPARED ROCK SECTION SHALL EXTEND 1' HORIZONTALLY BEYOND BOTH SIDES OF CURB AND GUTTER
 - DRAINAGE BLOCK - 3" DIA. PLASTIC PIPE
 - DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE DONE BY:
 - CORE DRILLING
 - VERTICAL SAWCUT OF CURB 24" EACH SIDE OF DRAIN AND RE-POURED TO FULL DEPTH OF CURB
 - STAMP TOP OF CURB WITH "W" AT WATER SERVICE CROSSING AND "S" AT SANITARY LATERAL CROSSING

TYPICAL CURBS

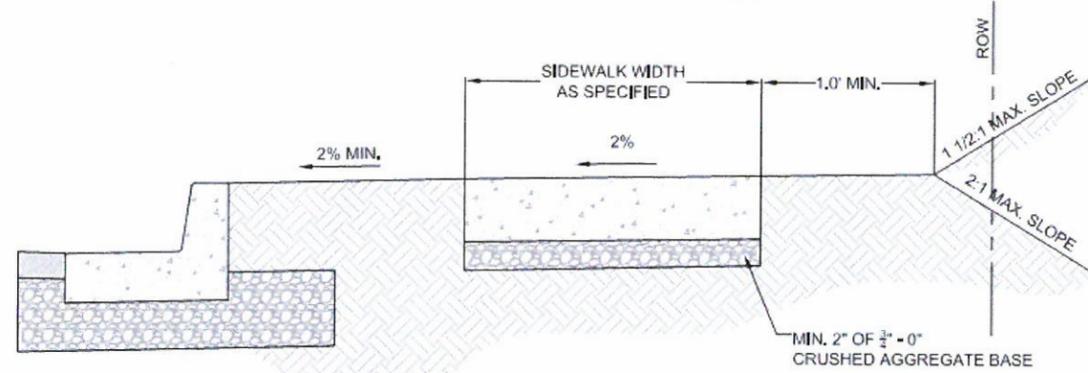


DATE:	2010
DRAWING NO.	WL-501
FILE NO.	

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



TYPICAL CURB TIGHT SIDEWALK



SIDEWALK AWAY FROM CURB

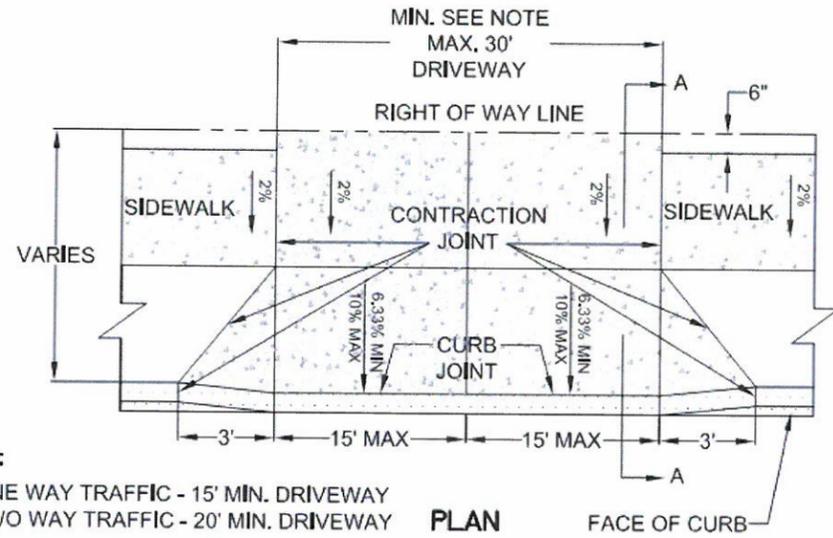
- NOTE:**
- CONCRETE SHALL BE 3300 PSI AT 28 DAYS.
 - PANEL LENGTHS SHALL BE EQUAL TO THE SIDEWALK WIDTH, BUT MAY BE ADJUSTED WITH THE CITY ENGINEER'S APPROVAL.
 - CONTRACTION JOINTS (1/3RD OF THE THICKNESS OF CONCRETE) SHALL BE PLACED EVERY THIRD PANEL, WITH A MAX. SPACING OF 15 FEET. JOINTS SHALL ALSO BE PLACED AT THE SIDES OF DRIVEWAY APPROACHES, UTILITY VAULTS, AND WHEELCHAIR RAMPS.
 - A CURING COMPOUND SHALL BE USED. WHITE REFLECTIVE SHEETING SHALL BE USED IN CASE OF RAIN.
 - 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 MIN. 1/2" RADIUS.
 - THE SIDEWALK SHALL HAVE A MIN. THICKNESS OF 6" IF THE SIDEWALK IS INTENDED AS A PORTION OF THE DRIVEWAY, OTHERWISE, THE SIDEWALK SHALL HAVE A MIN. THICKNESS OF 4".
 - DRAIN BLOCKOUTS IN THE CURB SHALL BE EXTENDED TO THE BACK OF THE SIDEWALK WITH A 3" DIAMETER PLASTIC PIPE AT A 2% SLOPE. A CONTRACTION JOINT SHALL BE PLACED OVER THE PIPE.

CONCRETE SIDEWALK CROSS SECTION



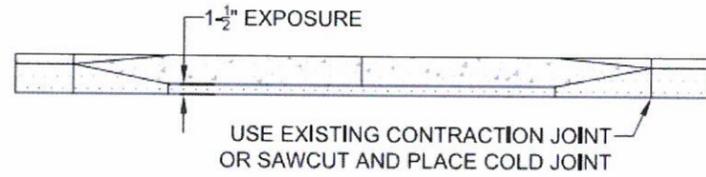
DATE:	2010
DRAWING NO.	WL-508
FILE NO.	

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.

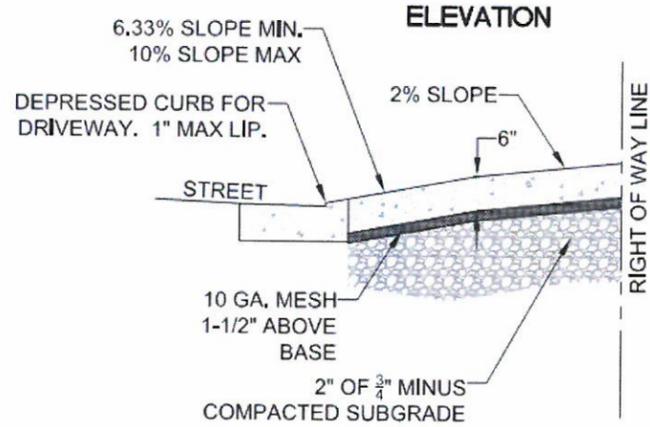


NOTES:
 ONE WAY TRAFFIC - 15' MIN. DRIVEWAY
 TWO WAY TRAFFIC - 20' MIN. DRIVEWAY

PLAN



USE EXISTING CONTRACTION JOINT
 OR SAWCUT AND PLACE COLD JOINT



SECTION A-A

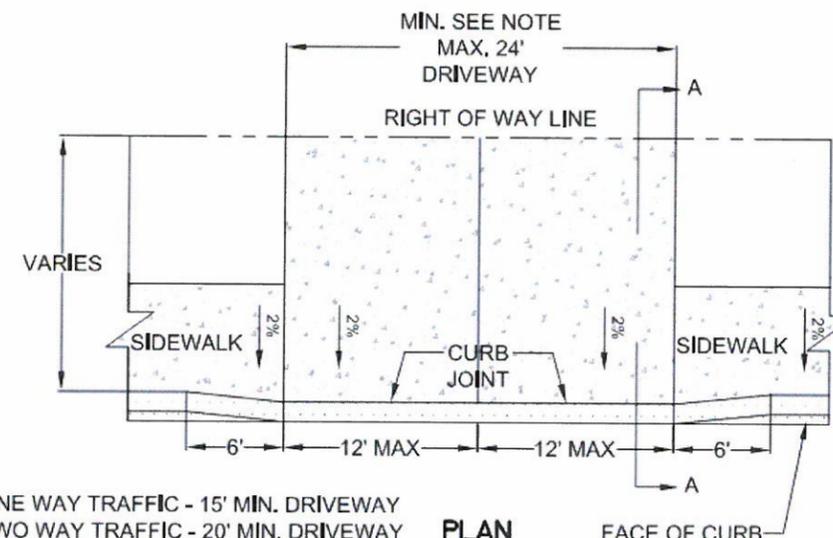
- NOTE:
1. CONCRETE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 4000 PSI AFTER 28 DAYS, 6 SACK MIX
 2. CURB JOINT SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS ALONG BACK OF CURB
 3. DRIVEWAY SHALL BE A MINIMUM 6" THICK
 4. DRIVEWAY CURB CUT SHALL COMPLY WITH THE CONDITIONS OF 5.0070, "WIDTH AND LOCATION OF CURB CUTS"

**COMMERCIAL DRIVEWAY
 WITH
 SIDEWALK AWAY FROM CURB**



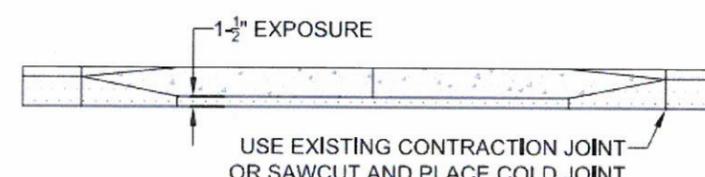
DATE: 2010
 DRAWING NO. WL-504A
 FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.

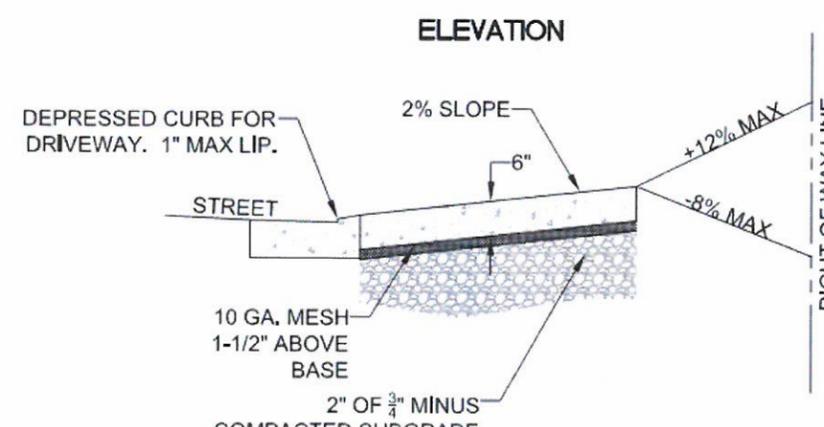


NOTE:
 ONE WAY TRAFFIC - 15' MIN. DRIVEWAY
 TWO WAY TRAFFIC - 20' MIN. DRIVEWAY

PLAN



USE EXISTING CONTRACTION JOINT
 OR SAWCUT AND PLACE COLD JOINT



SECTION A-A

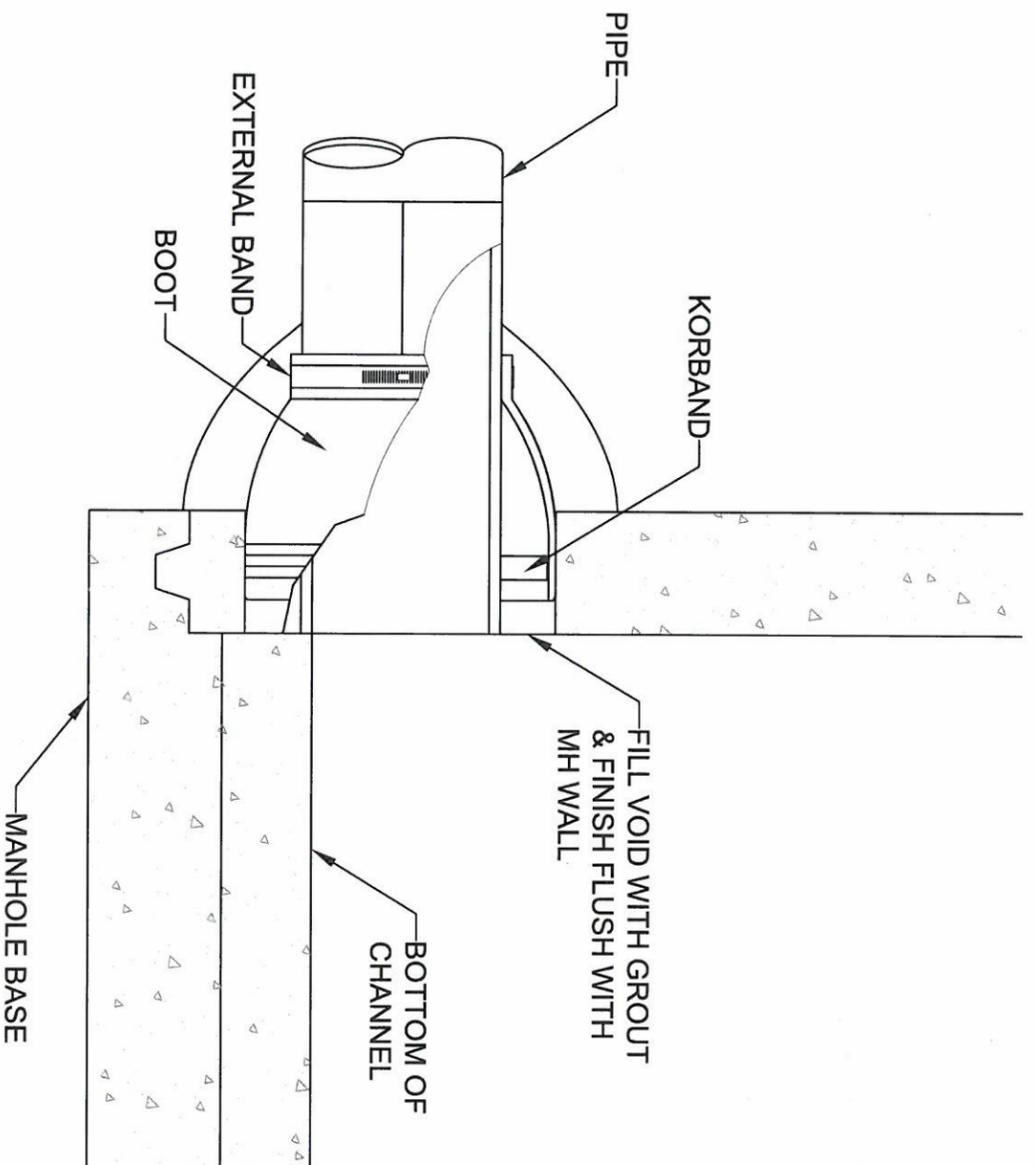
- NOTE:
1. CONCRETE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 4000 PSI AFTER 28 DAYS, 6 SACK MIX
 2. CURB JOINT SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS ALONG BACK OF CURB
 3. DRIVEWAY SHALL BE A MINIMUM 6" THICK
 4. DRIVEWAY CURB CUT SHALL COMPLY WITH THE CONDITIONS OF 5.0070, "WIDTH AND LOCATION OF CURB CUTS"

**COMMERCIAL DRIVEWAY
 WITH
 SIDEWALK ADJACENT TO CURB**



DATE: 2010
 DRAWING NO. WL-504B
 FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



FLEXIBLE MANHOLE CONNECTION
(KOR-N-SEAL OR APPROVED EQUAL)

FLEXIBLE MANHOLE CONNECTION

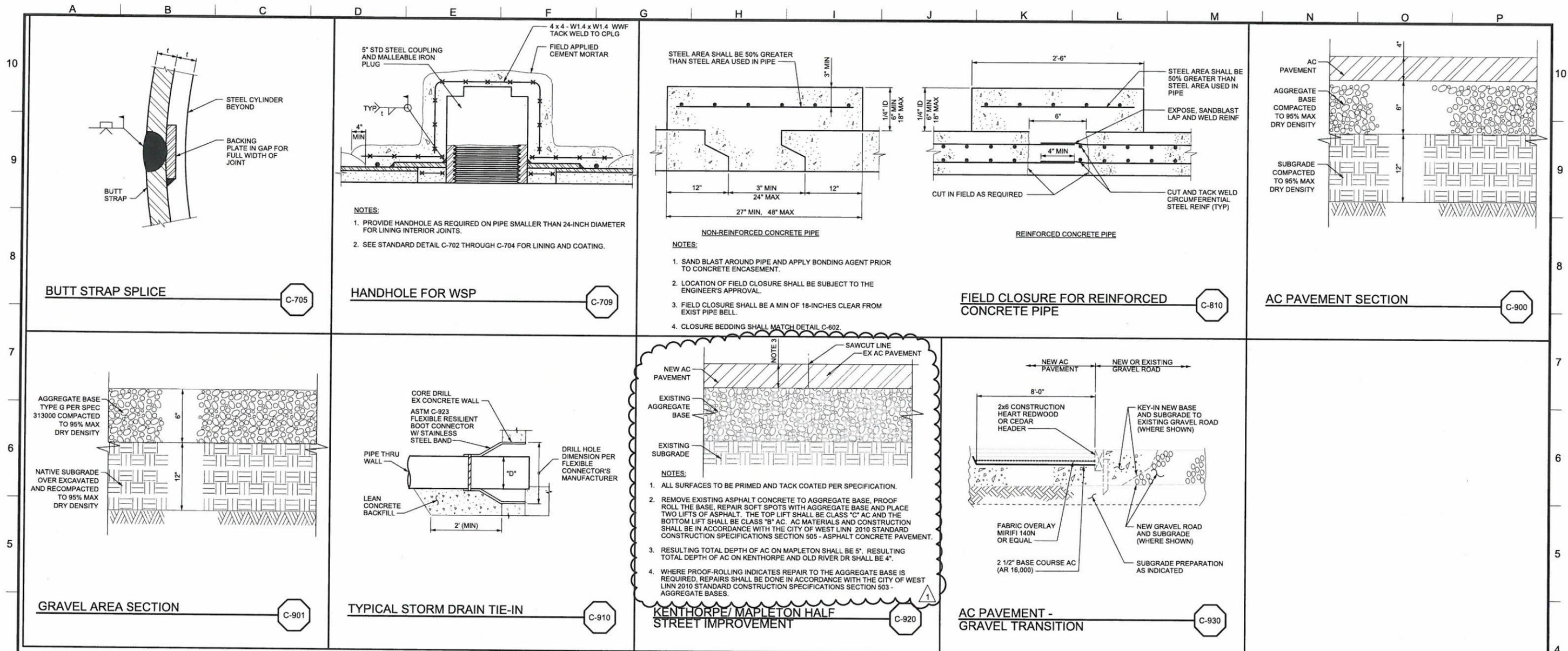


CITY OF
West Linn

DATE: 2010

DRAWING NO. WL-212

FILE NO.



PLOT DATE: September 10, 2008 - 1:55PM USER: pdelner
 FILE: C:\Documents and Settings\pdelner\Desktop\138564 - TITLE BLOCK.dwg



LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: S WILLIAMS
 DRAWN: A ODELL
 CHECKED: N MANN
 CHECKED: A PETERS
 APPROVED: P KREFT

REVISIONS				
REV.	DESCRIPTION	BY	DATE	APP.
1	ADDENDUM NO 3	AIO	5/24/2013	AIO

ISSUED FOR BID

ANY PRINTS NOT BEARING THIS STAMP MAY HAVE BEEN PRINTED PRIOR TO ADVERTISING AND CANNOT BE CONSIDERED AS BID DOCUMENTS



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
GENERAL CIVIL

STANDARD DETAILS - 8

PROJECT NUMBER	WORK ORDER 206
SCALE	NO SCALE
DRAWING/FIGURE NUMBER	GC-9
### OF	

APPROVED: *Jude Daniel* DATE: 5/1/13
JUDE DANIEL GROUNDS

GENERAL NOTES:

- CONTRACTOR SHALL PROVIDE ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES. PROVIDE A 12-FOOT WIDE ACCESS FOR EMERGENCY VEHICLES TO PASS THROUGH THE WORK ZONE.
- TOTAL APPROXIMATE AREA OF RESURFACING: MAPLETON-9312 YD2, KENTHORPE-6792 YD2. CONTRACTOR SHALL ASSUME THAT THE RESULTS OF PROOF-ROLLING WILL INDICATE THAT 15% OF THE TOTAL AREA WILL REQUIRE REPAIR TO THE EXISTING AGGREGATE BASE. REPAIR CONSISTS OF OVEREXCAVATING SOFT AREAS AND REPLACING WITH STRUCTURAL AGGREGATE BASE.
- CONTRACTOR SHALL NOTIFY ENGINEER A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION ON RESIDENTS DRIVEWAYS. THE CONTRACTOR SHALL MINIMIZE THE DURATION AND LIMIT THE DURATION OF ANY RESIDENTIAL DRIVEWAY CLOSURE TO NO MORE THAN ONE WORK SHIFT AT A TIME.
- CONTRACTOR SHALL PREVENT DAMAGE TO EXISTING AGGREGATE BASE DURING REMOVAL OF AC PAVEMENT.
- PROTECT ALL UTILITIES, TREES, SIGNS, ETC. IN PLACE. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES, TREES, SIGNS, ETC. RESULTING FROM THE STREET RESURFACING CONSTRUCTION.
- STREET RESURFACING WORK SHALL BE DURING PHASE C AND THE TIMING OF THE WORK SHALL BE COORDINATED WITH THE ENGINEER. PRIOR TO STARTING THE RESURFACING WORK THE CONTRACTOR SHALL SUBMIT A STREET RESURFACING PLAN AND A TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL. STREET RESURFACING ACTIVITIES ARE SUBJECT TO THE REQUIREMENTS STATED IN SECTION 013130 AND 015526.
- MATERIALS REMOVED UNDER THIS WORK WHICH ARE NOT RECYCLED AND USED ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AT THE POINT OF REMOVAL AND SHALL BE DISPOSED OF OFF SITE IN MANNER THAT MEETS ALL LAWS AND REGULATIONS.
- THE EXISTING SURFACING SHALL NOT BE REMOVED MORE THAN FIVE DAYS PRIOR TO CONSTRUCTION OF THE NEW SURFACING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- MANHOLES, INLETS, WATER VALVE BOXES AND OTHER SUCH STRUCTURES SHALL BE MADE CLEAN AND READY FOR ASPHALT PAVEMENT.
- PAINT VERTICAL SURFACES THAT WILL COME IN CONTACT WITH ASPHALT PAVEMENT WITH TACK COAT MATERIAL TO PROVIDE A GOOD BOND AND SEAL. COVER TOP SURFACES WITH PAPER OR OTHER MATERIAL TO PREVENT ADHERENCE OF ASPHALT PAVEMENT, TACK COAT OR PRIME COAT.
- CONTRACTOR SHALL BE AWARE THAT OVERHEAD POWER LINES EXIST THROUGHOUT THE AREA AND SHALL TAKE CAUTION DURING CONSTRUCTION TO PREVENT INJURY AND DAMAGE.
- CONTRACTOR SHALL REPLACE SPEED BUMPS AND DRAINAGE BERMS IN KIND.
- CONTRACTOR SHALL FURNISH AND APPLY WATER FOR ROADWAY SUBGRADES, ROADBEDS, BACKFILL, SUBBASES, BASES AND SURFACINGS, AND WATER USED FOR THE ALLEVIATION OR PREVENTION OF DUST WITHIN THE PROJECT LIMITS. WATER SHALL BE FREE OF SILTS AND OTHER DELETERIOUS MATTER. MAKE ALL NECESSARY ARRANGEMENTS AND PAY ALL COSTS FOR OBTAINING WATER. MAINTAIN AN ADEQUATE SUPPLY OF WATER AT ALL TIMES TO COMPLETE THE REQUIRED WORK. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS NECESSARY FOR THE PROCUREMENT OF WATER AND ITS APPLICATION. WATER SHALL BE OBTAINED ONLY FROM A METERED HYDRANT ON 8TH STREET FOR WATER TRUCK AFTER SETTING UP AN ACCOUNT WITH THE CITY OF WEST LINN FINANCE DEPARTMENT. USE OF A METER AND DOUBLE CHECK BACKFLOW DEVICE ON A HYDRANT ON THE PROJECT SITE SHALL ONLY BE ALLOWED WITH THE APPROVAL OF THE CITY ENGINEER. IF ALLOWED, THE CONTRACTOR SHALL OBTAIN A HYDRANT METER FROM THE CITY ENGINEER FOR THE PURPOSES OF MEASURING ALL WATER USED ON THE PROJECT. WATER BY MEANS OF TANK TRUCKS EQUIPPED WITH SPRAY BARS, BY HOSE AND NOZZLE, OR BY OTHER APPROVED EQUAL MEANS WHICH ENSURE UNIFORM AND CONTROLLED APPLICATION. THE USE OF SPLASH BOARDS WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL.
- REMOVE AND DISPOSE OF ALL EXCAVATED OR CONSTRUCTION MATERIALS, EQUIPMENT AND TRASH OF ALL KINDS RESULTING FROM THE WORK. CLEAN ALL DRAINAGE FACILITIES SUCH AS INLETS, CATCH BASINS, CULVERTS AND OPEN DITCHES OF ALL EXCESS MATERIAL OR DEBRIS WHICH IS THE RESULT OF THE WORK. CLEAN ALL PAVEMENT SURFACES, WHETHER NEW OR EXISTING WITHIN THE LIMITS OF THE PROJECT. ALL HAUL ROUTES WILL BE KEPT FREE OF DUST, DIRT, GRAVEL AND DEBRIS AT ALL TIMES. CLEAN EXISTING IMPROVEMENTS AND HAND BROOM OR FLUSH ALL SIDEWALKS. CLEAN ALL PROPERTIES WHICH WERE DISTURBED DURING CONSTRUCTION OF THE PROJECT. REPAIR OR REPLACE ALL CURBS, SIDEWALKS, DRIVEWAYS AND OTHER STRUCTURES DAMAGED DURING CONSTRUCTION OF THE WORK.
- SAW CUT THE EXISTING PAVEMENT WHERE SHOWN ON THE PLANS. THE SAW CUT SHALL BE A STRAIGHT LINE AND THE SAW CUT PAVEMENT EDGES SHALL BE FREE OF IRREGULARITIES. PROVIDE A SMOOTH, SOUND EDGE FOR JOINING THE NEW PAVEMENT.
- IMMEDIATELY AFTER THE NEW PAVING IS COMPLETED, APPLY A SEAL COAT OF LIQUID ASPHALT TO ALL JOINTS BETWEEN THE NEW AND ORIGINAL ASPHALT PAVEMENT. THE SEAL COAT SHALL BE A MINIMUM OF 12 INCHES IN WIDTH AND SHALL BE CENTERED ON THE JOINT. THE LIQUID ASPHALT SHALL BE APPLIED TO THE POINT THAT IT BEGINS TO RUN OFF. THE MINIMUM APPLICATION RATE SHALL BE 1.7 GALLONS PER 100 LINEAR FEET. IMMEDIATELY AFTER THE LIQUID ASPHALT HAS BEEN APPLIED AND BEFORE THE ASPHALT HAS SOLIDIFIED, COVER THE SEAL COAT ASPHALT WITH CLEAN DRY MASONRY SAND. THE SAND SHALL BE APPLIED IN A LAYER THICK ENOUGH TO PREVENT TRACKING OF SEAL COAT. BEFORE OPENING THE STREET TO TRAFFIC, THE CONTRACTOR SHALL CLEAN UP ALL LOOSE SAND.
- PROVIDE WHATEVER PROTECTIVE COVERINGS MAY BE NECESSARY TO PROTECT THE EXPOSED PORTIONS OF PRIVATE DRIVEWAYS, CULVERTS, CURBS, GUTTERS, POSTS, GUARD FENCES, ROAD SIGNS AND ANY OTHER STRUCTURES FROM SPLASHING OIL AND ASPHALT FROM THE PAVING OPERATIONS. REMOVE ANY OIL, ASPHALT, DIRT OR ANY OTHER UNDESIRABLE MATTER THAT MAY COME UPON THESE STRUCTURES BY REASON OF THE PAVING OPERATIONS.
- THE LENGTH OF THE CONSTRUCTION ZONE SHALL BE LIMITED TO 150 FEET.
- PROVIDE 24-HOUR PER DAY, 7-DAY PER WEEK VEHICULAR ACCESS TO ALL STREETS.
- PROVIDE A 5-FOOT WIDE PEDESTRIAN AND BICYCLE ACCESS WAY AROUND THE WORK ZONE.
- RE-OPEN AND MAINTAIN FULLY FUNCTIONAL STREETS OUTSIDE OF WORK HOURS.
- PROVIDE TEMPORARY PARKING WITHIN 200-FEET OF A RESIDENT'S HOME DURING THE TIME THAT ANY RESIDENTIAL DRIVEWAY IS NOT ACCESSIBLE.
- COMPLY WITH THE AMERICAN WITH DISABILITY ACT, TO THE EXTENT PRACTICAL, FOR ALL PEDESTRIAN ACCESS AROUND OR THROUGH THE CONSTRUCTION AREA TO HOMES AND BUSINESSES.

STREET RESURFACING WORK TO BE DONE:

- CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING PAVEMENT TO THE LIMITS SHOWN ON THE DRAWINGS. THE EXISTING AGGREGATE BASE SHALL BE PROOF-ROLLED AND REPAIRED AS NEEDED. NEW AC PAVEMENT SHALL BE CONSTRUCTED IN TWO LIFTS. FINISHED GRADE OF STREET SHALL MATCH EXISTING GRADE. CONTRACTOR SHALL ADD PAVEMENT MARKINGS TO MATCH EXISTING. TRAFFIC CONTROL SHALL BE PROVIDED FOR THE DURATION OF THE WORK

LEGEND

- PAVEMENT REPLACEMENT (SEE GENERAL NOTES)
- NATURAL GAS
- WATER MAIN
- SANITARY SEWER
- STORM DRAIN
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- WOOD FENCE
- CHAIN LINK FENCE
- RIGHT OF WAY / PROPERTY LINE
- MAJOR CONTOURS (5' INTERVAL)
- MINOR CONTOURS (1' INTERVAL)
- SANITARY MH (NUMBER)
- STORM MH (NUMBER)
- WATER VALVE
- SIGN
- MAILBOX
- UTILITY POLE
- PINE TREE (DIA.)
-

PLOT DATE: May 29, 2013 - 2:48PM USER: lbut FILE: P:\BC_PORTLAND\WTP_Fencing\Drawing00.dwg

 Brown and Caldwell PORTLAND, OREGON	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY) DESIGNED: KS DRAWN: RNH CHECKED: BDT CHECKED: APPROVED:	EXTERNAL REFERENCE FILES 138564-TITLE BLOCK-DESIGN.dwg WTP.dwg BDT-6462-16462-OR.dwg 45817-FWATR-DTM-DREF.dwg Drawing00-SHADE.dwg 45817-RWATR-2011.dwg	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>APP.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REV.	DESCRIPTION	BY	APP.																		 LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN GENERAL NOTES AND LEGEND	FILENAME: DRAWING00 BC PROJECT NUMBER: 143012 SCALE: AS SHOWN DRAWING/FIGURE NUMBER: 10C-100 133 OF 1111
REV.	DESCRIPTION	BY	APP.																							



PLOT DATE: May 29, 2013 - 9:17AM USER: bshul
 FILE: P:\BC_PORTLAND\WTP_Fencing\Drawing\10C.dwg

Brown and Caldwell

PORTLAND, OREGON

SUBMITTED: _____ DATE: _____
 PROJECT MANAGER
 APPROVED: _____ DATE: _____
 BROWN AND CALDWELL

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 CHECKED:
 APPROVED:

EXTERNAL REFERENCE FILES

- 138564-TITLE BLOCK-DESIGN.dwg
- WTP.dwg
- BDT-draws\Ycal-DR.dwg
- 45817-FWATRDTM-DREF.dwg
- Drawing\KCSHADE.dwg
- 45817-RWATR2011.dwg

REVISIONS

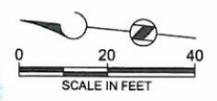
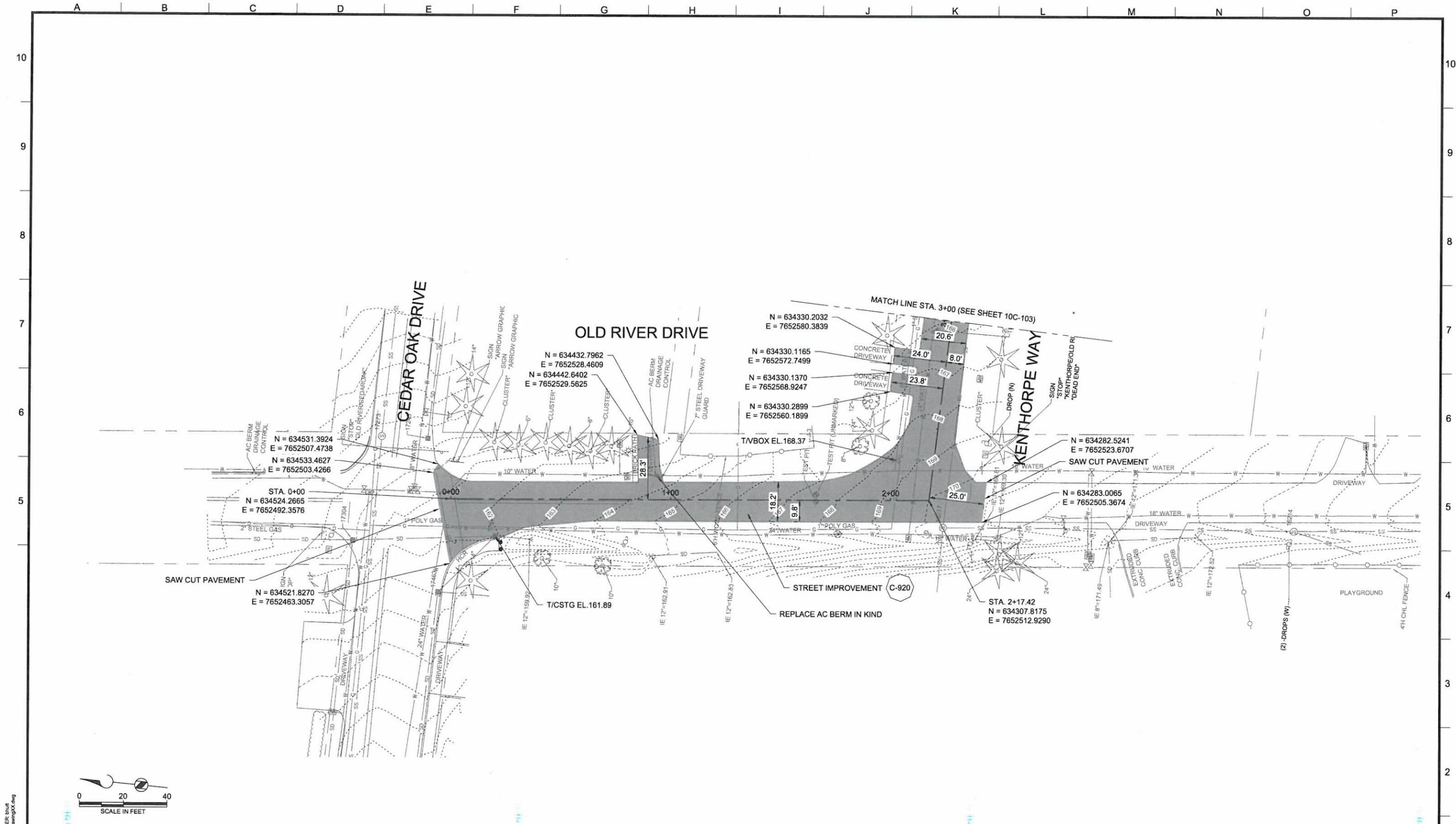
REV.	DESCRIPTION	BY	APP.



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

ADDENDUM 3
 STREET RESURFACING PLAN
 SHEET INDEX

FILENAME
 DRAWINGXX
 BC PROJECT NUMBER
 143012
 SCALE
 AS SHOWN
 DRAWING/FIGURE NUMBER
10C-101



PLOT DATE: May 28, 2013 - 9:41AM USER: bhuitt
 FILE: P:\BC_PORLAND\WTP_Fencing\Drawing\K.dwg

Brown and Caldwell
 PORTLAND, OREGON

SUBMITTED: _____ DATE: _____
 PROJECT MANAGER

APPROVED: _____ DATE: _____
 BROWN AND CALDWELL

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 CHECKED:
 APPROVED:

EXTERNAL REFERENCE FILES

138564-TITLE BLOCK.DESIGN.dwg
WTP.dwg
BDT-8net-1-Feet-OR.dwg
45817-FWA TR-21M_CREF.dwg
Drawing\K\SPADE.dwg
45817-RWATR-2011.dwg

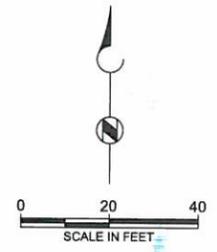
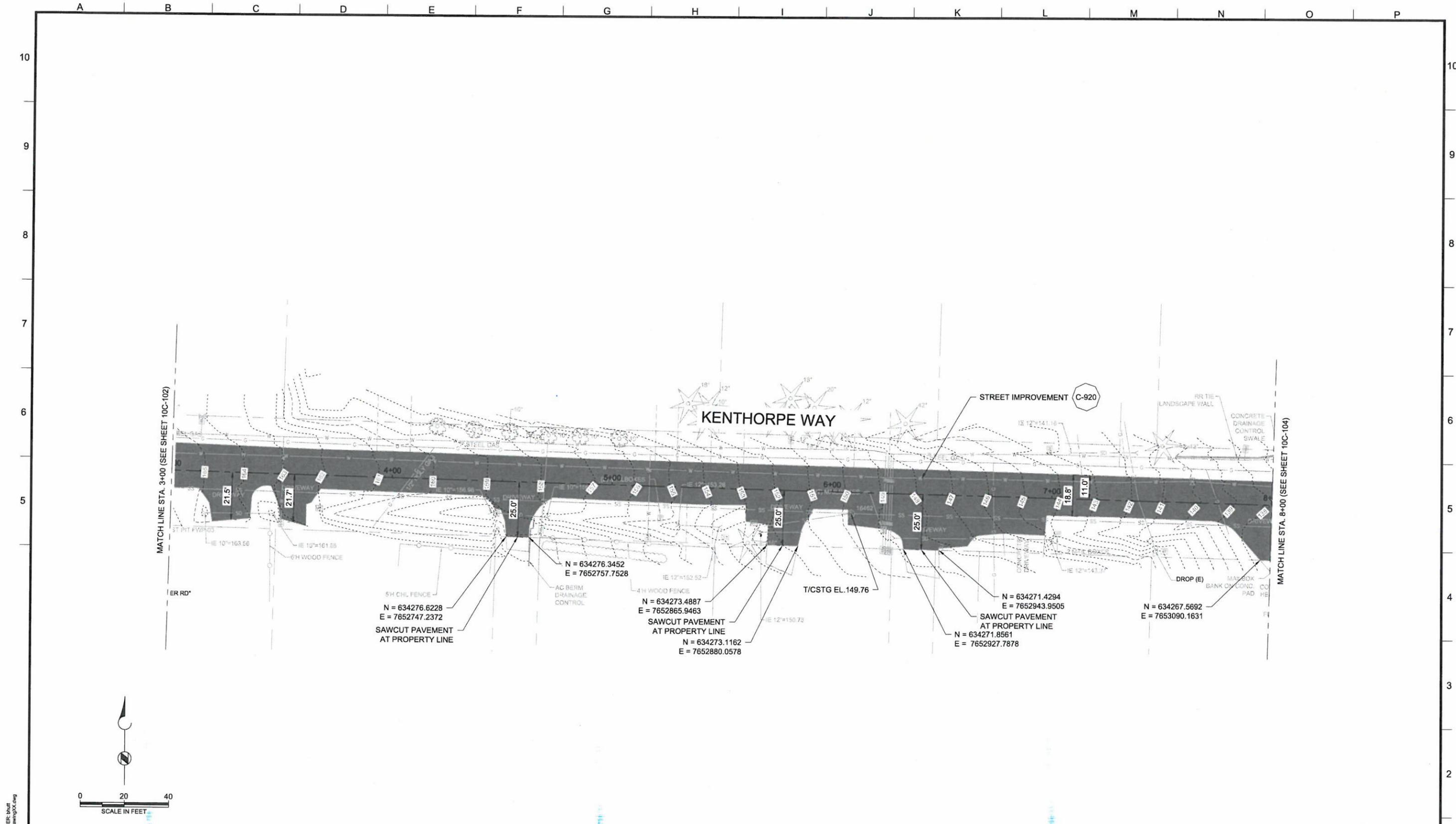
REVISIONS				
REV.	DESCRIPTION	BY		APP.

REGISTERED PROFESSIONAL ENGINEER
 15933 PE
 BRET DOUGLAS TEEL
 EXPIRES: 06-30-2014

Lake Oswego - Tigard Water Partnership
 sharing water · connecting communities

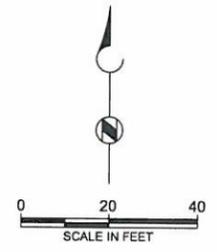
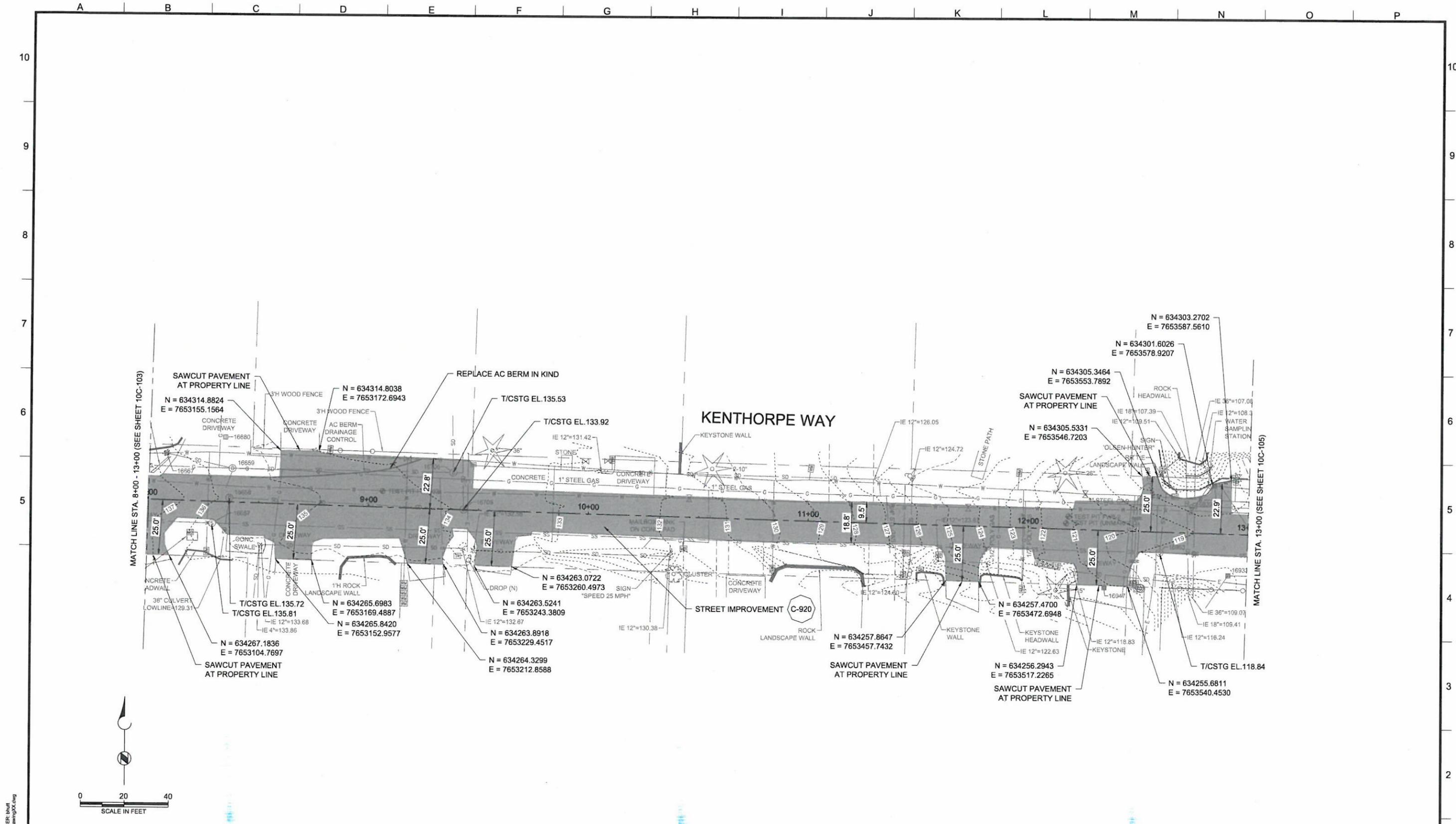
LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 ADDENDUM 3
 STREET RESURFACING PLAN
 STA. 0+00 - 3+00

FILENAME DRAWINGXX
BC PROJECT NUMBER 143012
SCALE AS SHOWN
DRAWING FIGURE NUMBER 10C-102
135 OF 1111



Brown and Caldwell		LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)		EXTERNAL REFERENCE FILES		REVISIONS						LAKE OSWEGO - TIGARD WATER TREATMENT PLANT		FILENAME: DRAWINGXX	
PORTLAND, OREGON				138564-TITLE BLOCK-DESIGN.dwg WTP.dwg BDT-Brett Teel-OR.dwg 45817-RWTR-DYR-DREF.dwg DrawingXCSHADE.dwg 45817-RWTR-2011.dwg		REV.	DESCRIPTION	BY	APP.					ADDENDUM 3	
SUBMITTED: _____ DATE: _____		DESIGNED: KS									STREET RESURFACING PLAN		SCALE: AS SHOWN		
APPROVED: _____ DATE: _____		DRAWN: RNH									STA. 3+00 - 8+00		DRAWING/FIGURE NUMBER: 10C-103		
		CHECKED: BDT											136 OF 1111		
		CHECKED: _____													
		APPROVED: _____													

PLOT DATE: May 29, 2013 - 9:44AM USER: bhatt
 FILE: P:\BC_PORLAND\WTP_Fencing\DrawingX.dwg



Brown and Caldwell
 PORTLAND, OREGON

DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 CHECKED:
 APPROVED:

PROJECT MANAGER
 DATE:
 DATE:

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

EXTERNAL REFERENCE FILES

138564-TITLE BLOCK-DESIGN.dwg
WTP.dwg
BDT-Shell-Tee-OR.dwg
45817-RWATR-OTM-DREF.dwg
DrawingXX-SHADE.dwg
45817-RWATR-2011.dwg

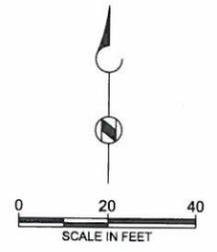
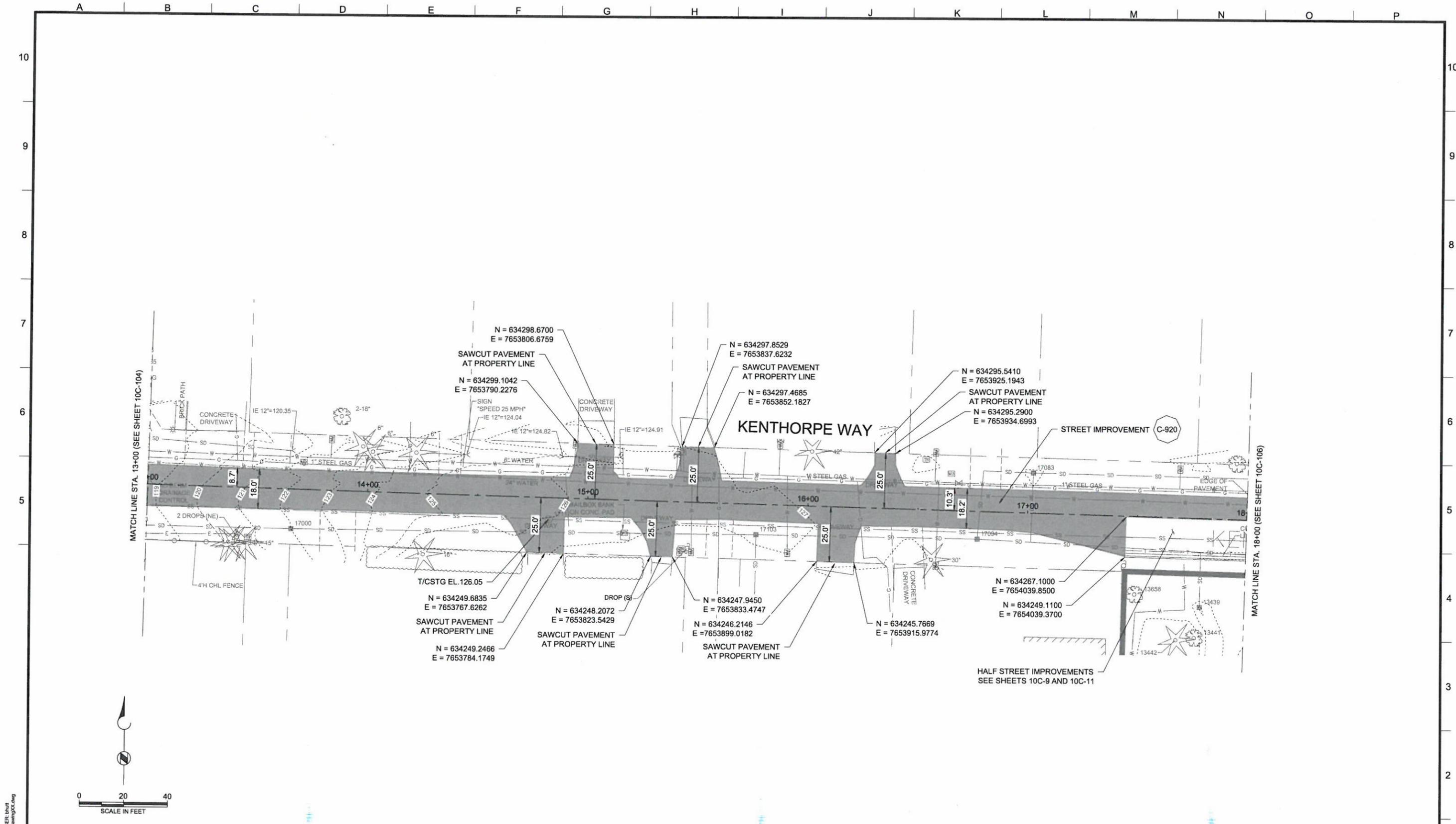
REVISIONS				
REV.	DESCRIPTION	BY	APP.	

REGISTERED PROFESSIONAL ENGINEER
 15933 PE
 OREGON
 BRETT DOUGLAS TEEL
 EXPIRES: 09-30-2014

Lake Oswego - Tigard Water Partnership
 sharing water - connecting communities

LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 ADDENDUM 3
 STREET RESURFACING PLAN
 STA. 8+00 - 13+00

FILENAME DRAWINGXX
BC PROJECT NUMBER 143012
SCALE AS SHOWN
DRAWING/FIGURE NUMBER 10C-104
137 OF 1111



PLOT DATE: May 29, 2013 - 8:47AM USER: bhuitt
 FILE: P:\BC_PORTLAND\WTP_Finang\Drawing\10C.dwg

Brown and Caldwell
 PORTLAND, OREGON

SUBMITTED: _____ DATE: _____
 PROJECT MANAGER

APPROVED: _____ DATE: _____
 BROWN AND CALDWELL

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 CHECKED:
 APPROVED:

EXTERNAL REFERENCE FILES

138564-TITLE BLOCK-DESIGN.dwg
WTP.dwg
BDT-8ret-Tee-OR.dwg
45817-RWATRODM_DREF.dwg
Drawing\X\SWADE.dwg
45817-RWATR-2011.dwg

REVISIONS

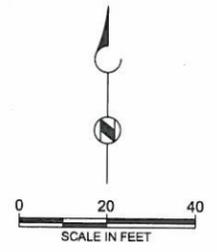
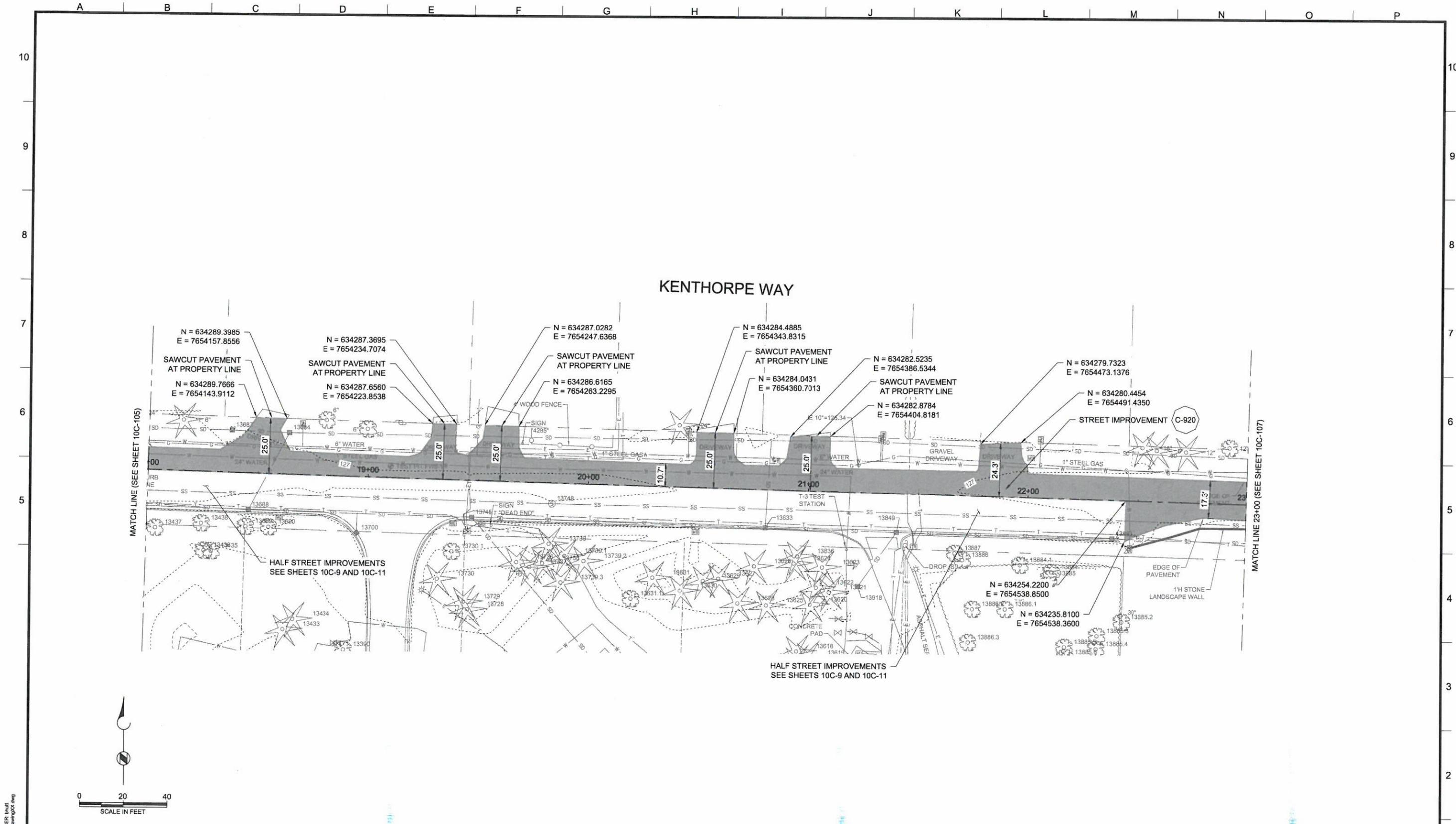
REV.	DESCRIPTION	BY	APP.

REGISTERED PROFESSIONAL ENGINEER
 15933 PE
 OREGON
 BRETT DOUGLAS TEEL
 EXPIRES: 06-30-2014

Lake Oswego - Tigard Water Partnership
 sharing water - connecting communities

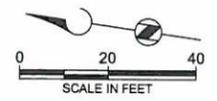
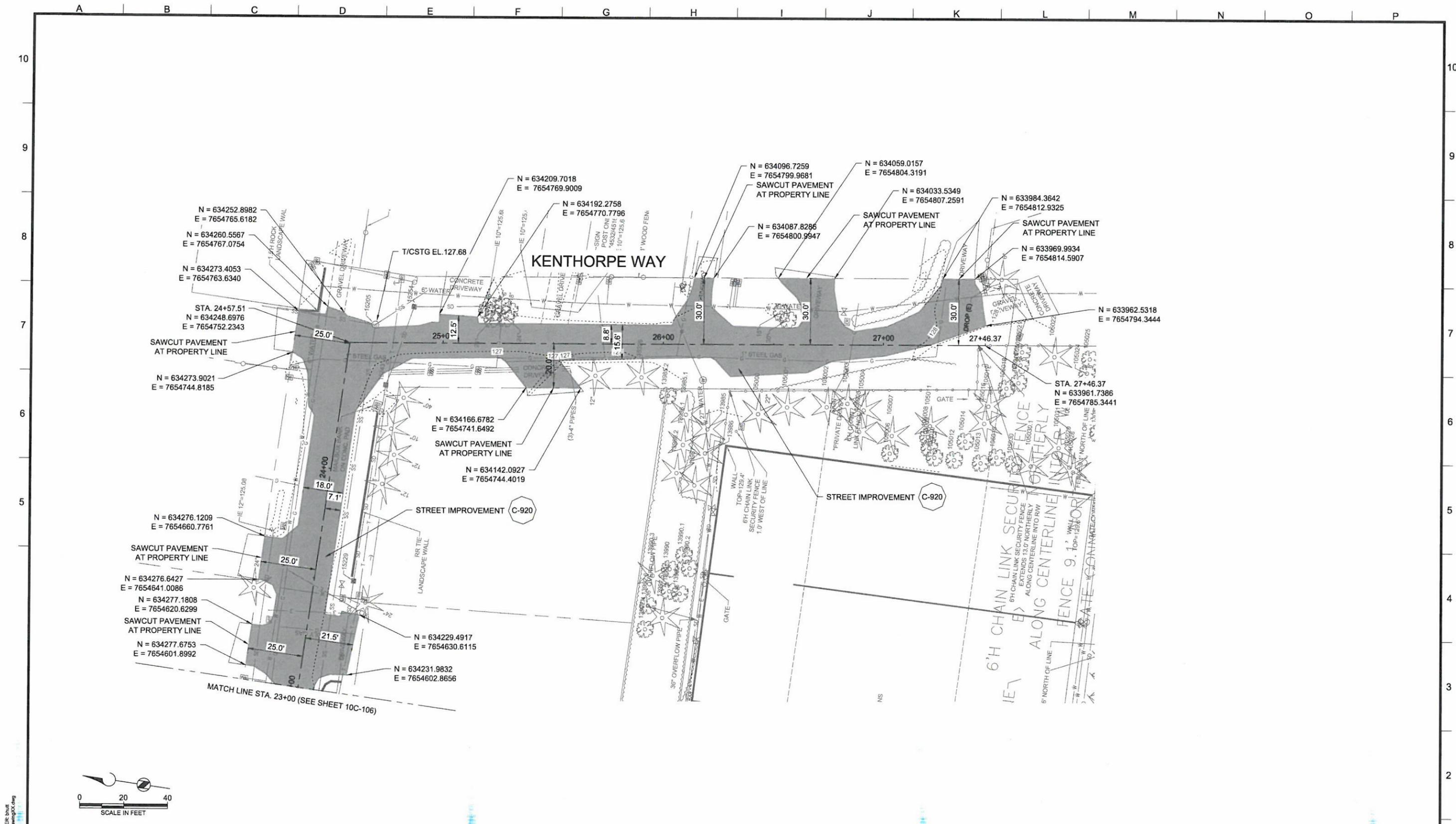
LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 ADDENDUM 3
 STREET RESURFACING PLAN
 STA. 13+00 - 18+00

FILENAME DRAWINGXX
BC PROJECT NUMBER 143012
SCALE AS SHOWN
DRAWING/FIGURE NUMBER 10C-105
138 OF 1111



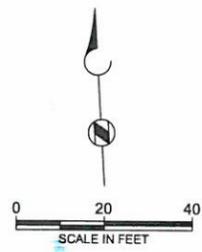
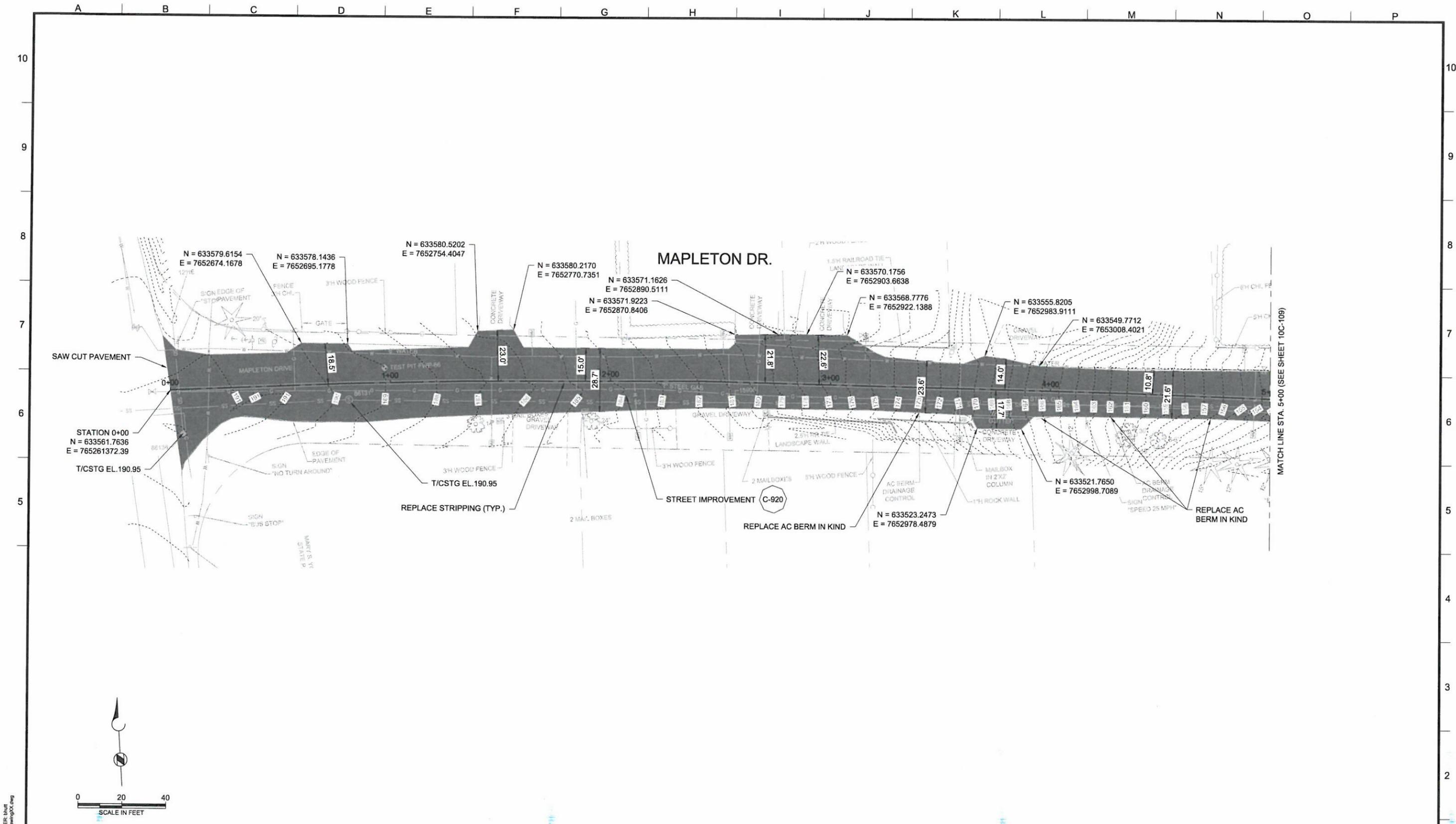
Brown and Caldwell PORTLAND, OREGON		LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY) DESIGNED: KS DRAWN: RNH CHECKED: BDT CHECKED: APPROVED:	EXTERNAL REFERENCE FILES 138564-TITLE BLOCK-DESIGN.dwg WTP.dwg BDT-8net-Test-OR.dwg 45817-RWATR-DIM-DREF.dwg DrawingXX-SHADE.dwg 45817-RWATR-2011.dwg	REVISIONS <table border="1"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>APP.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REV.	DESCRIPTION	BY	APP.																			LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 18+00 - 23+00	FILENAME: DRAWINGXX BC PROJECT NUMBER: 143012 SCALE: AS SHOWN DRAWING/FIGURE NUMBER: 10C-106 139 OF 1111
REV.	DESCRIPTION	BY	APP.																									

PLOT DATE: May 29, 2013 - 8:49AM USER: bhatt
 FILE: P:\BC_PORTLAND\WTP_Fencing\DrawingXX.dwg



PLOT DATE: May 29, 2013 - 9:52AM USER: bshut
 FILE: P:\BC_PORTLAND\WTP_Fencing\Drawing00.dwg

Brown and Caldwell PORTLAND, OREGON SUBMITTED: _____ DATE: _____ PROJECT MANAGER APPROVED: _____ DATE: _____ BROWN AND CALDWELL	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY) DESIGNED: KS DRAWN: RNH CHECKED: BDT CHECKED: APPROVED:	EXTERNAL REFERENCE FILES 138564-TITLE-BLOCK-DESIGN.dwg WTP.dwg BDT-Breit-Tree-OR.dwg 45817-FWATR-OTM_DREF.dwg Drawing00-SPADE.dwg 45817-RWATR-2011.dwg	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">REV.</th> <th style="width: 60%;">DESCRIPTION</th> <th style="width: 10%;">BY</th> <th style="width: 10%;">APP.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REV.	DESCRIPTION	BY	APP.																			LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 23+00 - 27+46.37	FILENAME: DRAWING00 BC PROJECT NUMBER: 143012 SCALE: AS SHOWN DRAWING/FIGURE NUMBER: 10C-107 140 OF 1111
	REV.	DESCRIPTION	BY	APP.																							



Brown and Caldwell
 PORTLAND, OREGON
 SUBMITTED: _____ DATE: _____
 APPROVED: _____ DATE: _____

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)
 DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 CHECKED: _____
 APPROVED: _____

EXTERNAL REFERENCE FILES
 138564-TITLE BLOCK-DESIGN.dwg
 WTP.dwg
 BDT-Bratt-Test-OR.dwg
 45817-FWATR-DTM_DREF.dwg
 Drawing-KK-SHADE.dwg
 45817-RWATR-2011.dwg

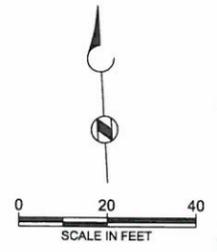
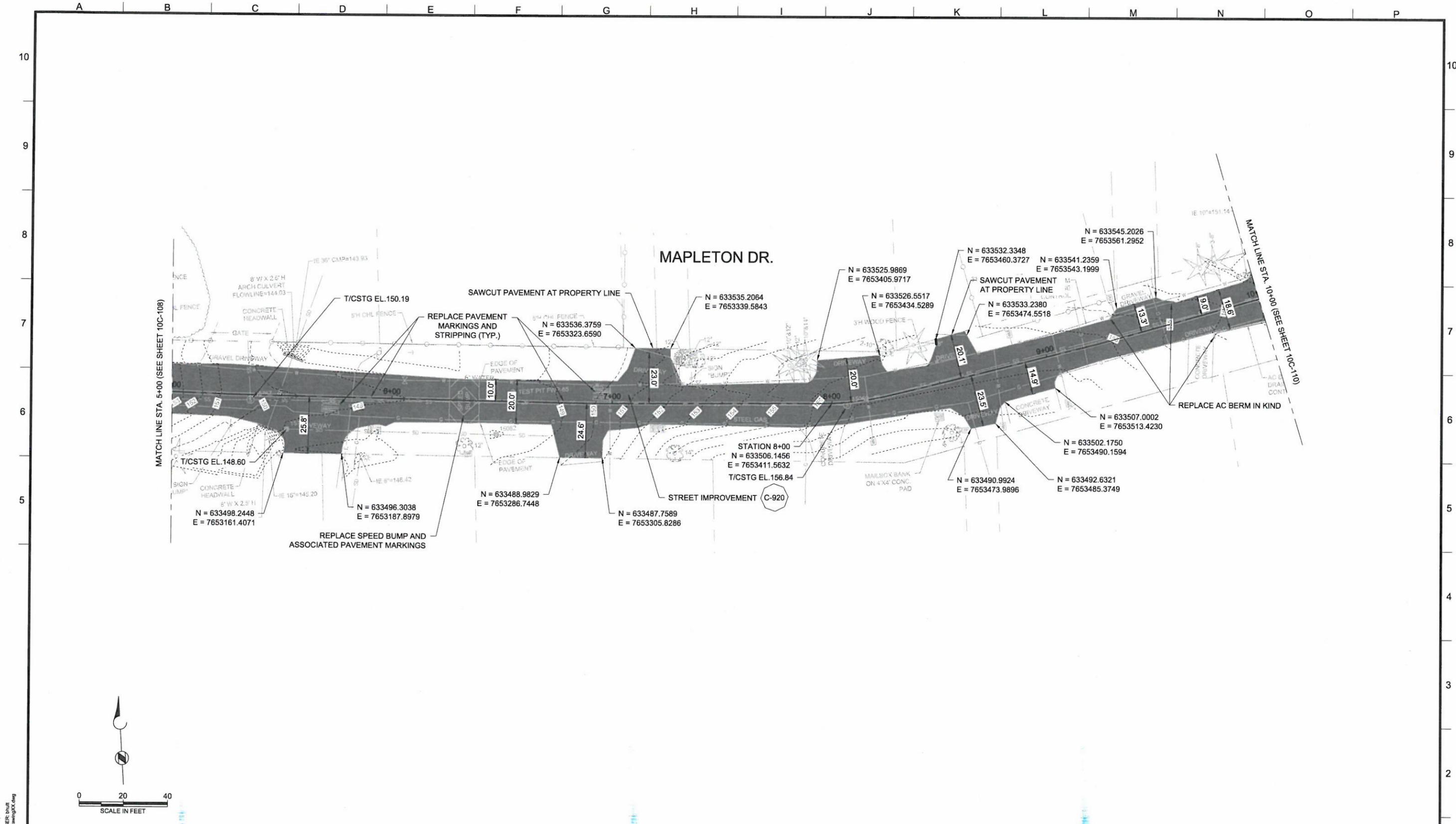
REVISIONS				
REV.	DESCRIPTION	BY	DATE	APP.



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 ADDENDUM 3
STREET RESURFACING PLAN
 STA. 0+00 - 5+00

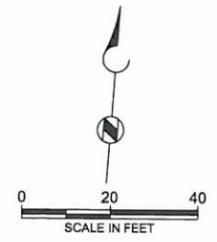
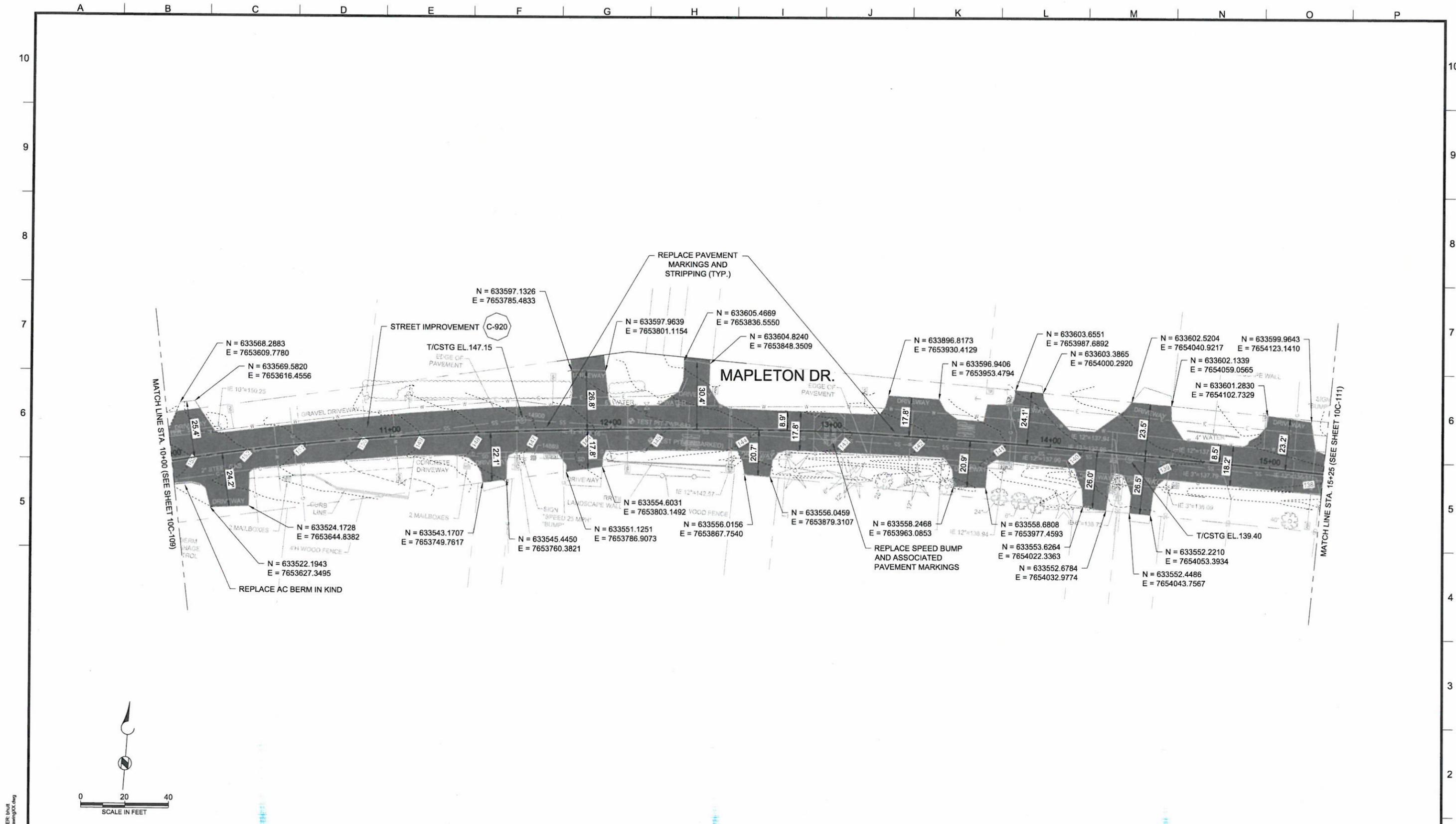
FILENAME
 DRAWINGXX
 BC PROJECT NUMBER
 143012
 SCALE
 AS SHOWN
 DRAWING/FIGURE NUMBER
10C-108
 141 OF 1111

PLOT DATE: May 29, 2013 - 8:53AM USER: bhut FILE: P:\BC_PORLAND\WTP_Fencing\Drawing10C.dwg



PLOT DATE: May 29, 2013 - 8:54AM USER: bhuitt
 FILE: P:\BC_PORTLAND\WTP_Fencing\Drawing\10C.dwg

Brown and Caldwell PORTLAND, OREGON SUBMITTED: _____ DATE: _____ PROJECT MANAGER APPROVED: _____ DATE: _____ BROWN AND CALDWELL	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY) DESIGNED: KS DRAWN: RNH CHECKED: BDT CHECKED: APPROVED:	EXTERNAL REFERENCE FILES 138564-TITLE BLOCK-DESIGN.dwg WTP.dwg BDT-8net-7esp-OR.dwg 45817-RWATR-DIM_REF.dwg Drawing\XC\SHADE.dwg 45817-RWATR2011.dwg	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">REV.</th> <th style="width: 45%;">DESCRIPTION</th> <th style="width: 10%;">BY</th> <th style="width: 10%;">DATE</th> <th style="width: 10%;">APP.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REV.	DESCRIPTION	BY	DATE	APP.																							LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 5+00 - 10+00	FILENAME: DRAWINGXX BC PROJECT NUMBER: 143012 SCALE: AS SHOWN DRAWING/FIGURE NUMBER: 10C-109 142 OF 1111
	REV.	DESCRIPTION	BY	DATE	APP.																											



Brown and Caldwell
 PORTLAND, OREGON
 SUBMITTED: _____ DATE: _____
 PROJECT MANAGER
 APPROVED: _____ DATE: _____
 BROWN AND CALDWELL

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 CHECKED:
 APPROVED:

EXTERNAL REFERENCE FILES

138564-TITLE BLOCK-DESIGN.dwg
WTP.dwg
BDT-Brett-Test-OR.dwg
45817-RWATR-2011-DREF.dwg
Drawing00-SHADE.dwg
45817-RWATR-2011.dwg

REVISIONS

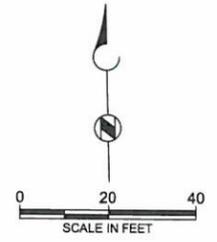
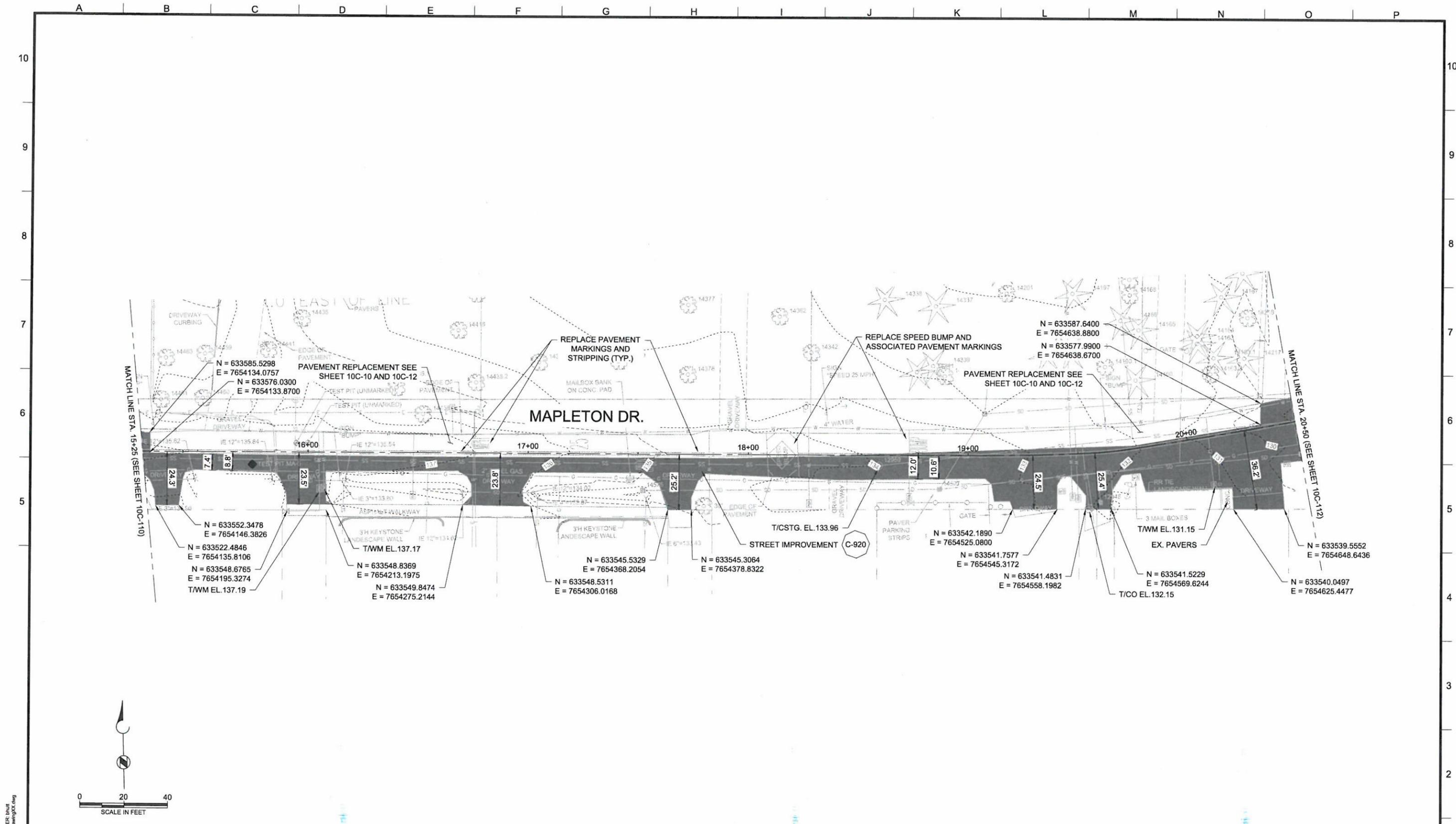
REV.	DESCRIPTION	BY	APP.

REGISTERED PROFESSIONAL ENGINEER
 15933 PE
 BRETT DOUGLAS TEELE
 OREGON
 EXPIRES: 06-30-2014

Lake Oswego - Tigard Water Partnership
 sharing water · connecting communities

LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 ADDENDUM 3
 STREET RESURFACING PLAN
 STA. 10+00 - 15+25

FILENAME DRAWINGXX
BC PROJECT NUMBER 143012
SCALE AS SHOWN
DRAWING/FIGURE NUMBER 10C-110
143 OF 1111



Brown and Caldwell
 PORTLAND, OREGON
 SUBMITTED: _____ DATE: _____
 PROJECT MANAGER
 APPROVED: _____ DATE: _____
 BROWN AND CALDWELL

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" SCALE ACCORDINGLY)
 DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 CHECKED:
 APPROVED:

EXTERNAL REFERENCE FILES

138564-TITLE BLOCK-DESIGN.dwg
WTP.dwg
BDT-Resurf-OR.dwg
15817-RWATK-DIML DREF.dwg
DrawingXX-SHADE.dwg
15817-RWATK-2011.dwg

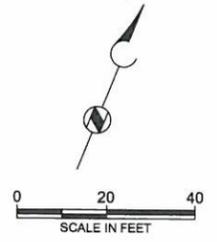
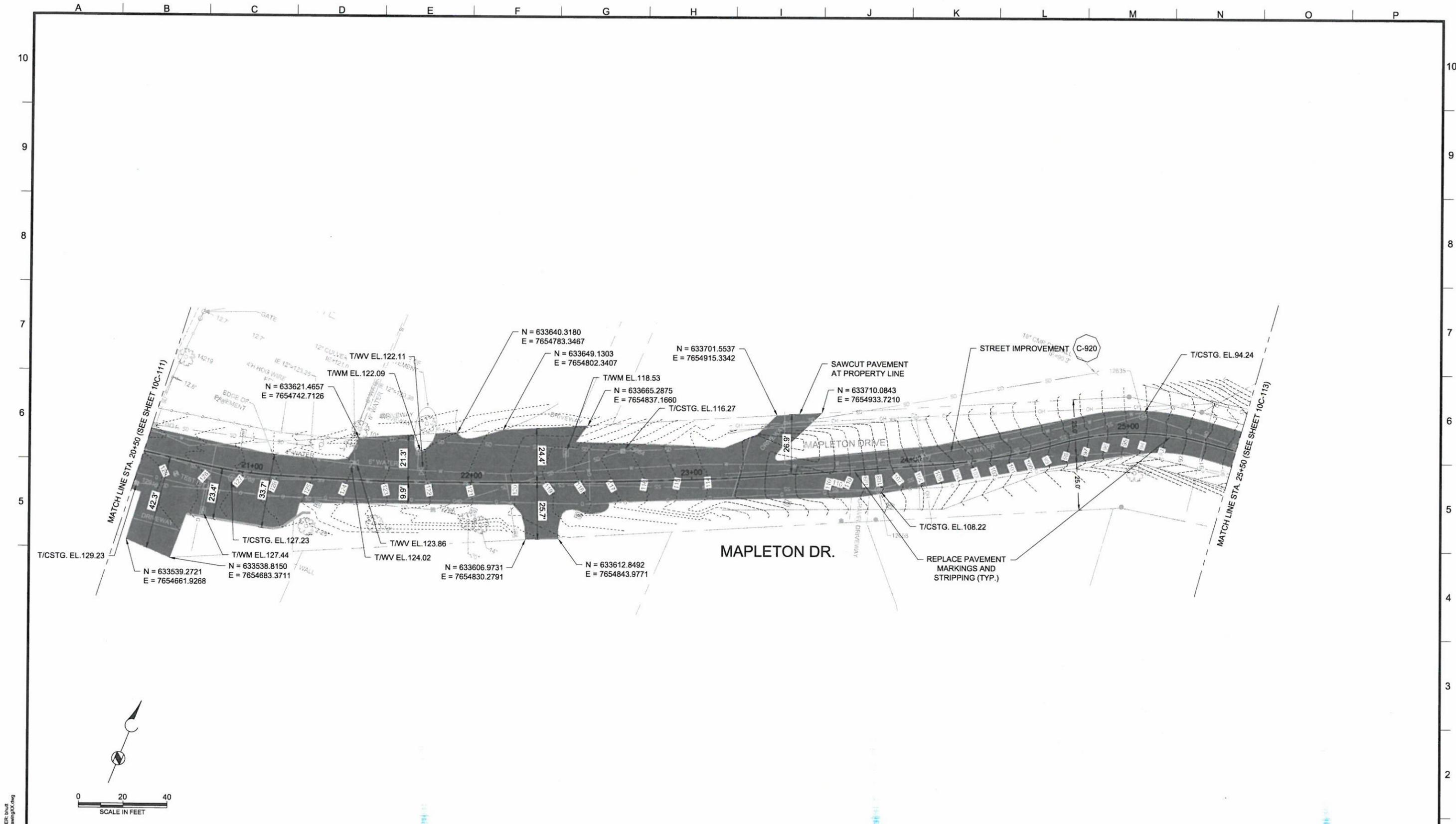
REVISIONS				
REV.	DESCRIPTION	BY	APP.	

REGISTERED PROFESSIONAL ENGINEER
 15933 PE
 OREGON
 BRETT DOUGLAS TEEL
 EXPIRES: 06-30-2014

Lake Oswego - Tigard Water Partnership
 sharing water - connecting communities

LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 ADDENDUM 3
 STREET RESURFACING PLAN
 STA. 15+25 - 20+50

FILENAME DRAWINGXX
BC PROJECT NUMBER 143012
SCALE AS SHOWN
DRAWING/FIGURE NUMBER 10C-111
144 OF 1111



Brown and Caldwell
 PORTLAND, OREGON

SUBMITTED: _____ DATE: _____
 PROJECT MANAGER

APPROVED: _____ DATE: _____
 BROWN AND CALDWELL

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 CHECKED: _____
 APPROVED: _____

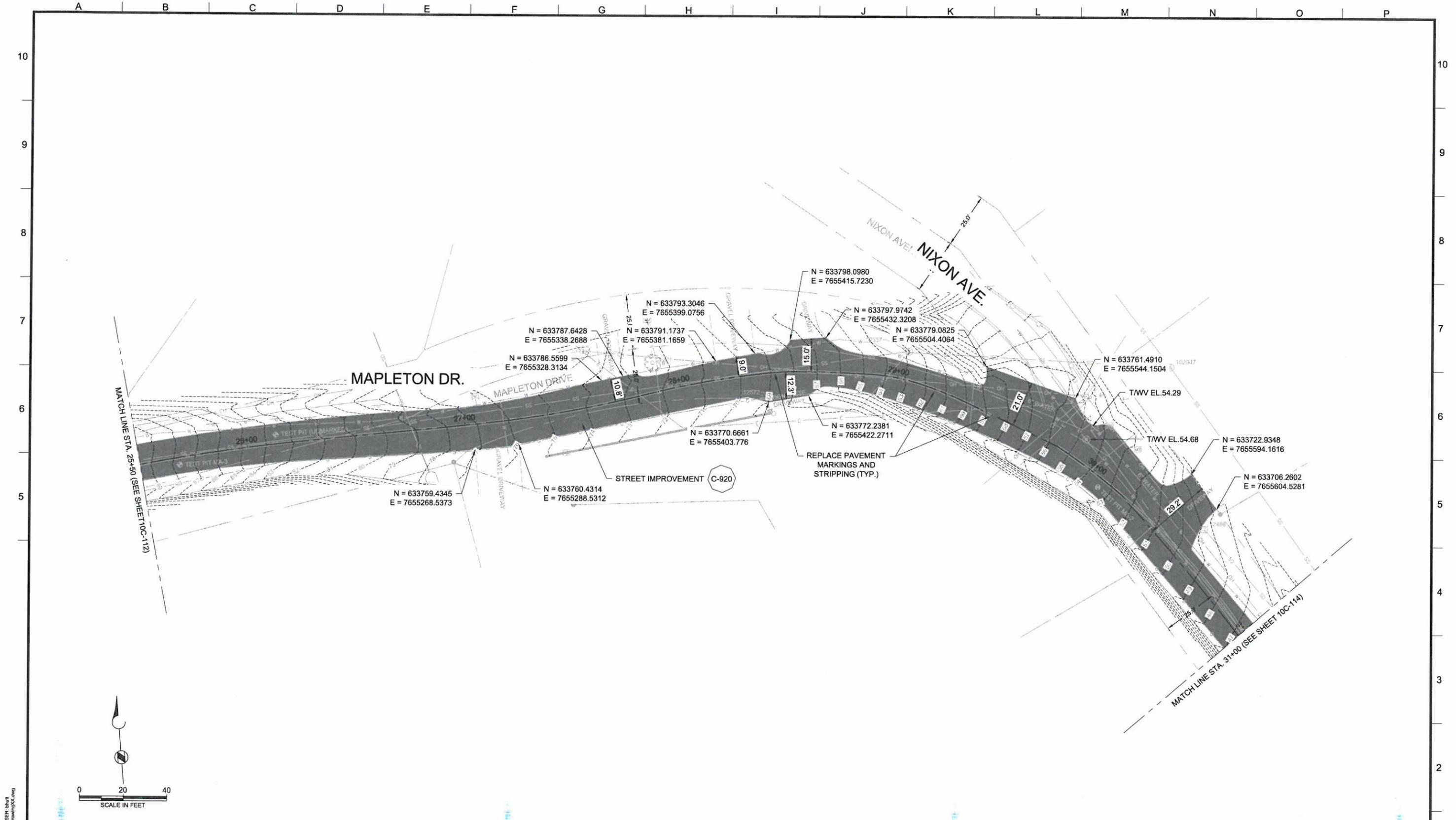
EXTERNAL REFERENCE FILES

138584-TITLE BLOCK-DESIGN.dwg
 WTP.dwg
 BDT-8net-Test-OR.dwg
 45817-RWATRC-DIM-DREF.dwg
 DrawingXX-SRADE.dwg
 45817-RWATRC2011.dwg

REVISIONS				
REV.	DESCRIPTION	BY	APP.	

LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 ADDENDUM 3
STREET RESURFACING PLAN
 STA. 20+50 - 25+50

FILENAME	DRAWINGXX
BC PROJECT NUMBER	143012
SCALE	AS SHOWN
DRAWING/FIGURE NUMBER	10C-112
145 OF 1111	



PLOT DATE: May 28, 2013 - 9:26AM
 USER: jhutt
 FILE: P:\BC_PORTLAND\WTP_Fencing\Drawing00.dwg



PORTLAND, OREGON

SUBMITTED: _____ DATE: _____
 PROJECT MANAGER
 APPROVED: _____ DATE: _____
 BROWN AND CALDWELL

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 CHECKED:
 APPROVED:

EXTERNAL REFERENCE FILES

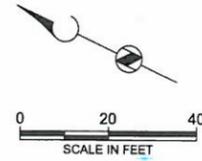
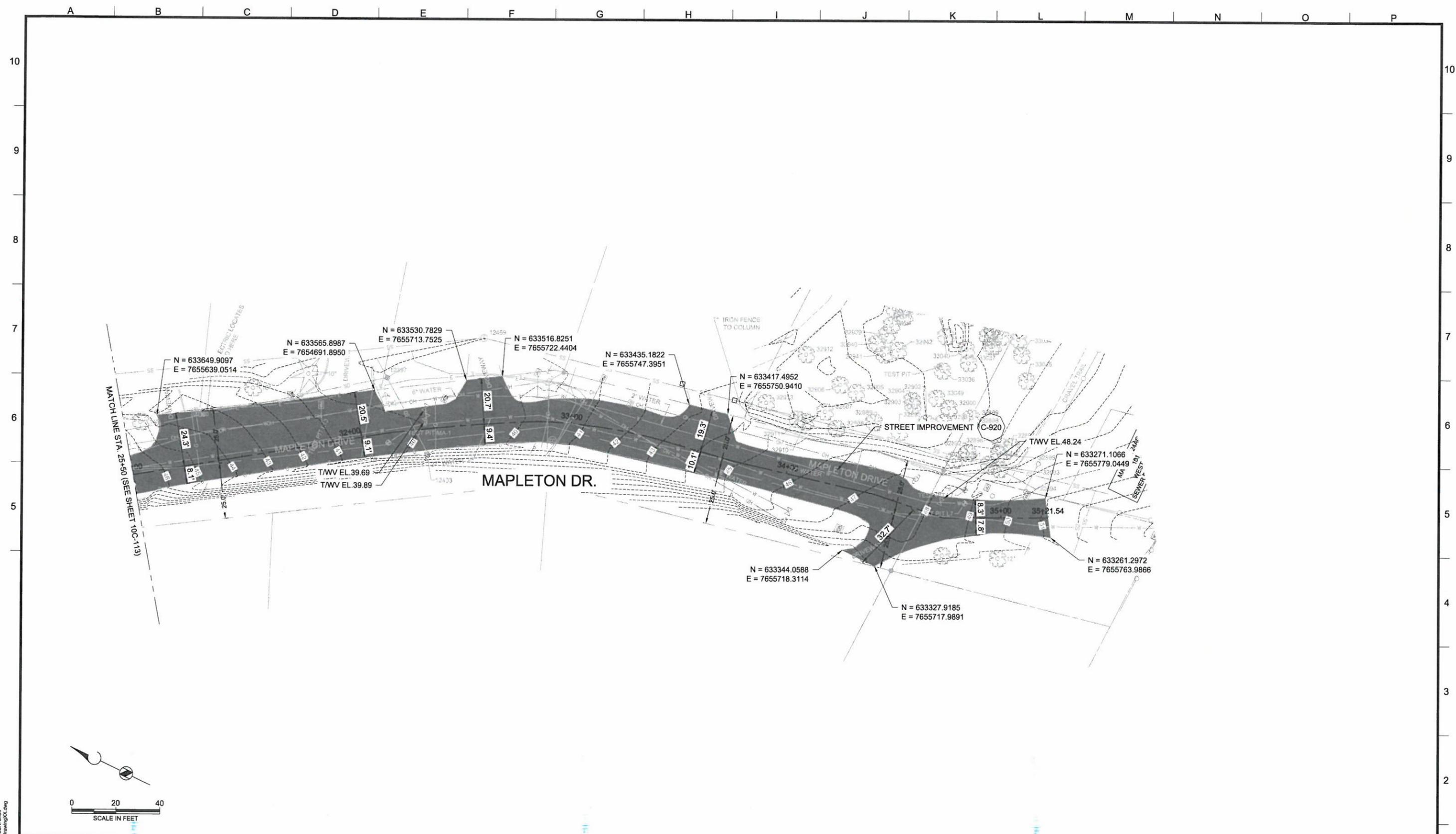
- 138564-TITLE BLOCK-DESIGN.dwg
- WTP.dwg
- 307-draw:Teel-OR.dwg
- 45817-FWATR-DTM_DREF.dwg
- DrawingXX-SHADE.dwg
- 45817-RWATR-2011.dwg

REVISIONS			
REV.	DESCRIPTION	BY	APP.



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 ADDENDUM 3
 STREET RESURFACING PLAN
 STA. 25+50 - 31+00

FILENAME	DRAWINGXX
BC PROJECT NUMBER	143012
SCALE	AS SHOWN
DRAWING FIGURE NUMBER	10C-113
146 OF 1111	



PLOT DATE: May 29, 2013 - 9:26AM USER: bmr
 FILE: P:\BC_PORTLAND\WTP_Fencing\Drawing00.dwg

Brown and Caldwell PORTLAND, OREGON SUBMITTED: _____ DATE: _____ PROJECT MANAGER APPROVED: _____ DATE: _____ BROWN AND CALDWELL	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" SCALE ACCORDINGLY)	EXTERNAL REFERENCE FILES 138564-TITLE BLOCK-DESIGN.dwg WTP.dwg BDT.dwg; Teel-OR.dwg 45817-FWATR-DTM_DREF.dwg DrawingXX-SHADE.dwg 45817-RWATR-2011.dwg	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>APP.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REV.	DESCRIPTION	BY	APP.																			LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 31+00 - 35+21	FILENAME DRAWINGXX BC PROJECT NUMBER 143012 SCALE AS SHOWN DRAWING/FIGURE NUMBER 10C-114 147 OF 1111
	REV.	DESCRIPTION	BY	APP.																							
DESIGNED: KS DRAWN: RNH CHECKED: BDT CHECKED: APPROVED:																											

A B C D E F G H I J K L M N O P

City of West Linn's Street Resurfacing Suggestions

Provided by Khoi Le 08/07/2013

Khoi Le 08/07/2013

GENERAL NOTES:

1. CONTRACTOR SHALL PROVIDE ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES. PROVIDE A 12-FOOT WIDE ACCESS FOR EMERGENCY VEHICLES TO PASS THROUGH THE WORK ZONE.
2. TOTAL APPROXIMATE AREA OF RESURFACING: MAPLETON-9312 YD2, KENTHORPE-6792 YD2. CONTRACTOR SHALL ASSUME THAT THE RESULTS OF PROOF-ROLLING WILL INDICATE THAT 15% OF THE TOTAL AREA WILL REQUIRE REPAIR TO THE EXISTING AGGREGATE BASE. REPAIR CONSISTS OF OVEREXCAVATING SOFT AREAS AND REPLACING WITH STRUCTURAL AGGREGATE BASE.
3. CONTRACTOR SHALL NOTIFY ENGINEER A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION ON RESIDENTS DRIVEWAYS. THE CONTRACTOR SHALL MINIMIZE THE DURATION AND LIMIT THE DURATION OF ANY RESIDENTIAL DRIVEWAY CLOSURE TO NO MORE THAN ONE WORK SHIFT AT A TIME.
4. CONTRACTOR SHALL PREVENT DAMAGE TO EXISTING AGGREGATE BASE DURING REMOVAL OF AC PAVEMENT.
5. PROTECT ALL UTILITIES, TREES, SIGNS, ETC. IN PLACE. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES, TREES, SIGNS, ETC. RESULTING FROM THE STREET RESURFACING CONSTRUCTION.
6. STREET RESURFACING WORK SHALL BE DURING PHASE C AND THE TIMING OF THE WORK SHALL BE COORDINATED WITH THE ENGINEER. PRIOR TO STARTING THE RESURFACING WORK THE CONTRACTOR SHALL SUBMIT A STREET RESURFACING PLAN AND A TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL. STREET RESURFACING ACTIVITIES ARE SUBJECT TO THE REQUIREMENTS STATED IN SECTION 013130 AND 015526.
7. MATERIALS REMOVED UNDER THIS WORK WHICH ARE NOT RECYCLED AND USED ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AT THE POINT OF REMOVAL AND SHALL BE DISPOSED OF OFF SITE IN MANNER THAT MEETS ALL LAWS AND REGULATIONS.
8. THE EXISTING SURFACING SHALL NOT BE REMOVED MORE THAN FIVE DAYS PRIOR TO CONSTRUCTION OF THE NEW SURFACING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
9. MANHOLES, INLETS, WATER VALVE BOXES AND OTHER SUCH STRUCTURES SHALL BE MADE CLEAN AND READY FOR ASPHALT PAVEMENT.
10. PAINT VERTICAL SURFACES THAT WILL COME IN CONTACT WITH ASPHALT PAVEMENT WITH TACK COAT MATERIAL TO PROVIDE A GOOD BOND AND SEAL. COVER TOP SURFACES WITH PAPER OR OTHER MATERIAL TO PREVENT ADHERENCE OF ASPHALT PAVEMENT, TACK COAT OR PRIME COAT.
11. CONTRACTOR SHALL BE AWARE THAT OVERHEAD POWER LINES EXIST THROUGHOUT THE AREA AND SHALL TAKE CAUTION DURING CONSTRUCTION TO PREVENT INJURY AND DAMAGE.
12. CONTRACTOR SHALL REPLACE SPEED BUMPS AND DRAINAGE BERMS IN KIND.
13. CONTRACTOR SHALL FURNISH AND APPLY WATER FOR ROADWAY SUBGRADES, ROADBEDS, BACKFILL, SUBBASES, BASES AND SURFACINGS, AND WATER USED FOR THE ALLEVIATION OR PREVENTION OF DUST WITHIN THE PROJECT LIMITS. WATER SHALL BE FREE OF SILTS AND OTHER DELETERIOUS MATTER. MAKE ALL NECESSARY ARRANGEMENTS AND PAY ALL COSTS FOR OBTAINING WATER. MAINTAIN AN ADEQUATE SUPPLY OF WATER AT ALL TIMES TO COMPLETE THE REQUIRED WORK. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS NECESSARY FOR THE PROCUREMENT OF WATER AND ITS APPLICATION. WATER SHALL BE OBTAINED ONLY FROM A METERED HYDRANT ON 8TH STREET FOR WATER TRUCK AFTER SETTING UP AN ACCOUNT WITH THE CITY OF WEST LINN FINANCE DEPARTMENT. USE OF A METER AND DOUBLE CHECK BACKFLOW DEVICE ON A HYDRANT ON THE PROJECT SITE SHALL ONLY BE ALLOWED WITH THE APPROVAL OF THE CITY ENGINEER. IF ALLOWED, THE CONTRACTOR SHALL OBTAIN A HYDRANT METER FROM THE CITY ENGINEER FOR THE PURPOSES OF MEASURING ALL WATER USED ON THE PROJECT. WATER BY MEANS OF TANK TRUCKS EQUIPPED WITH SPRAY BARS, BY HOSE AND NOZZLE, OR BY OTHER APPROVED EQUAL MEANS WHICH ENSURE UNIFORM AND CONTROLLED APPLICATION. THE USE OF SPLASH BOARDS WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL.
14. REMOVE AND DISPOSE OF ALL EXCAVATED OR CONSTRUCTION MATERIALS, EQUIPMENT AND TRASH OF ALL KINDS RESULTING FROM THE WORK. CLEAN ALL DRAINAGE FACILITIES SUCH AS INLETS, CATCH BASINS, CULVERTS AND OPEN DITCHES OF ALL EXCESS MATERIAL OR DEBRIS WHICH IS THE RESULT OF THE WORK. CLEAN ALL PAVEMENT SURFACES, WHETHER NEW OR EXISTING WITHIN THE LIMITS OF THE PROJECT. ALL HAUL ROUTES WILL BE KEPT FREE OF DUST, DIRT, GRAVEL AND DEBRIS AT ALL TIMES. CLEAN EXISTING IMPROVEMENTS AND HAND BROOM OR FLUSH ALL SIDEWALKS. CLEAN ALL PROPERTIES WHICH WERE DISTURBED DURING CONSTRUCTION OF THE PROJECT. REPAIR OR REPLACE ALL CURBS, SIDEWALKS, DRIVEWAYS AND OTHER STRUCTURES DAMAGED DURING CONSTRUCTION OF THE WORK.
15. SAW CUT THE EXISTING PAVEMENT WHERE SHOWN ON THE PLANS. THE SAW CUT SHALL BE A STRAIGHT LINE AND THE SAW CUT PAVEMENT EDGES SHALL BE FREE OF IRREGULARITIES. PROVIDE A SMOOTH, SOUND EDGE FOR JOINING THE NEW PAVEMENT.
16. IMMEDIATELY AFTER THE NEW PAVING IS COMPLETED, APPLY A SEAL COAT OF LIQUID ASPHALT TO ALL JOINTS BETWEEN THE NEW AND ORIGINAL ASPHALT PAVEMENT. THE SEAL COAT SHALL BE A MINIMUM OF 12 INCHES IN WIDTH AND SHALL BE CENTERED ON THE JOINT. THE LIQUID ASPHALT SHALL BE APPLIED TO THE POINT THAT IT BEGINS TO RUN OFF. THE MINIMUM APPLICATION RATE SHALL BE 1.7 GALLONS PER 100 LINEAR FEET. IMMEDIATELY AFTER THE LIQUID ASPHALT HAS BEEN APPLIED AND BEFORE THE ASPHALT HAS SOLIDIFIED, COVER THE SEAL COAT ASPHALT WITH CLEAN DRY MASONRY SAND. THE SAND SHALL BE APPLIED IN A LAYER THICK ENOUGH TO PREVENT TRACKING OF SEAL COAT. BEFORE OPENING THE STREET TO TRAFFIC, THE CONTRACTOR SHALL CLEAN UP ALL LOOSE SAND.
17. PROVIDE WHATEVER PROTECTIVE COVERINGS MAY BE NECESSARY TO PROTECT THE EXPOSED PORTIONS OF PRIVATE DRIVEWAYS, CULVERTS, CURBS, GUTTERS, POSTS, GUARD FENCES, ROAD SIGNS AND ANY OTHER STRUCTURES FROM SPLASHING OIL AND ASPHALT FROM THE PAVING OPERATIONS. REMOVE ANY OIL, ASPHALT, DIRT OR ANY OTHER UNDESIRABLE MATTER THAT MAY COME UPON THESE STRUCTURES BY REASON OF THE PAVING OPERATIONS.
18. THE LENGTH OF THE CONSTRUCTION ZONE SHALL BE LIMITED TO 150 FEET.
19. PROVIDE 24-HOUR PER DAY, 7-DAY PER WEEK VEHICULAR ACCESS TO ALL STREETS.
20. PROVIDE A 5-FOOT WIDE PEDESTRIAN AND BICYCLE ACCESS WAY AROUND THE WORK ZONE.
21. RE-OPEN AND MAINTAIN FULLY FUNCTIONAL STREETS OUTSIDE OF WORK HOURS.
22. PROVIDE TEMPORARY PARKING WITHIN 200-FEET OF A RESIDENT'S HOME DURING THE TIME THAT ANY RESIDENTIAL DRIVEWAY IS NOT ACCESSIBLE.
23. COMPLY WITH THE AMERICAN WITH DISABILITY ACT, TO THE EXTENT PRACTICAL, FOR ALL PEDESTRIAN ACCESS AROUND OR THROUGH THE CONSTRUCTION AREA TO HOMES AND BUSINESSES.

STREET RESURFACING WORK TO BE DONE:

1. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING PAVEMENT TO THE LIMITS SHOWN ON THE DRAWINGS. THE EXISTING AGGREGATE BASE SHALL BE PROOF-ROLLED AND REPAIRED AS NEEDED. NEW AC PAVEMENT SHALL BE CONSTRUCTED IN TWO LIFTS. FINISHED GRADE OF STREET SHALL MATCH EXISTING GRADE. CONTRACTOR SHALL ADD PAVEMENT MARKINGS TO MATCH EXISTING. TRAFFIC CONTROL SHALL BE PROVIDED FOR THE DURATION OF THE WORK

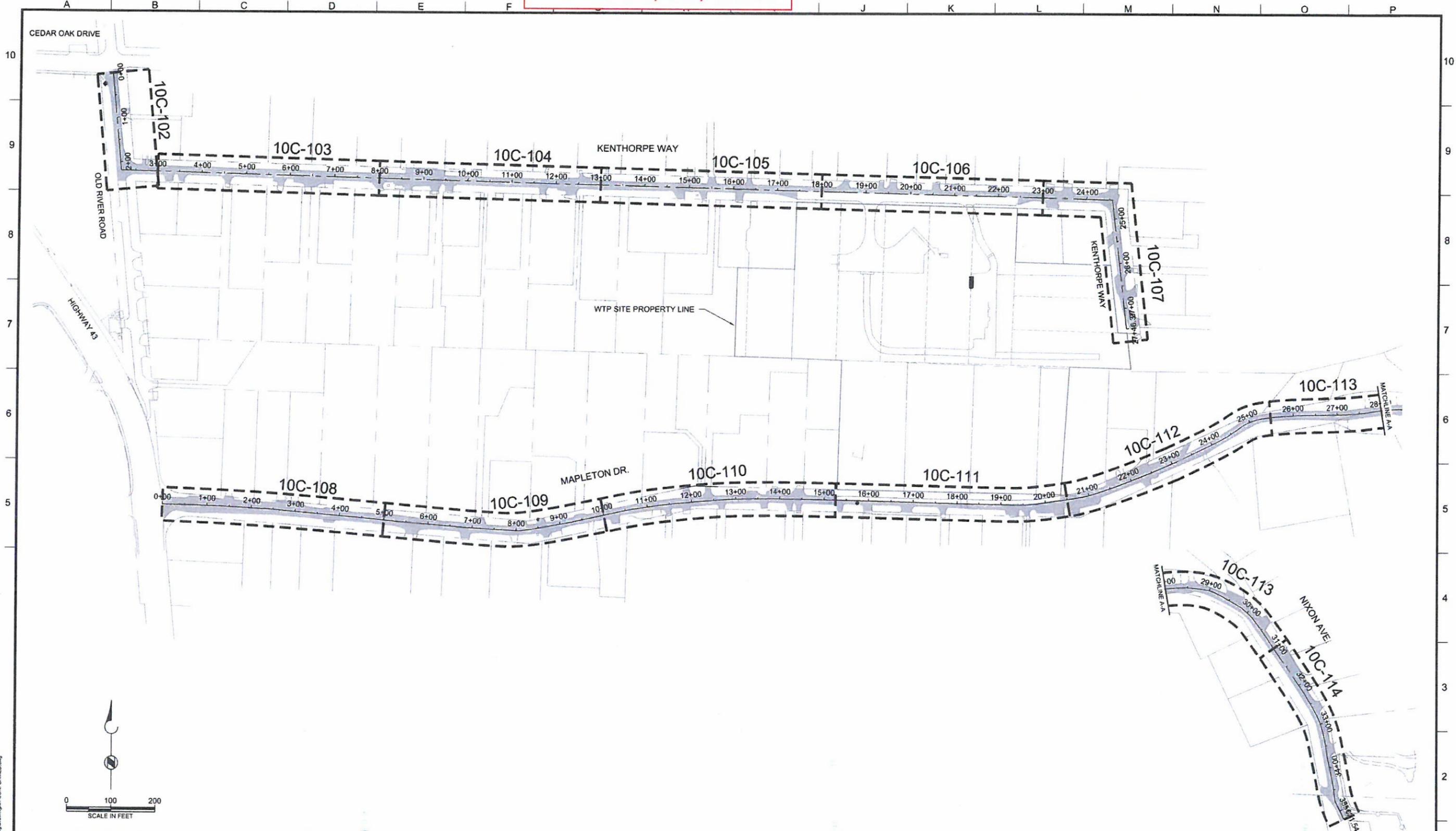
LEGEND

- PAVEMENT REPLACEMENT (SEE GENERAL NOTES)
- NATURAL GAS
- WATER MAIN
- SANITARY SEWER
- STORM DRAIN
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- WOOD FENCE
- CHAIN LINK FENCE
- RIGHT OF WAY / PROPERTY LINE
- MAJOR CONTOURS (5' INTERVAL)
- MINOR CONTOURS (1' INTERVAL)
- SANITARY MH (NUMBER)
- STORM MH (NUMBER)
- WATER VALVE
- SIGN
- MAILBOX
- UTILITY POLE
- PINE TREE (DIA.)
- DECIDUOUS TREE (DIA.)

PLOT DATE: July 11, 2013 8:30AM USER: kml FILE: C:\Users\kml\Desktop\10C-100\10C-100.dwg

	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5">REVISIONS</th> </tr> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>CONFORMED DRAWING</td> <td>RNH</td> <td>7/10/13</td> <td>KS</td> </tr> </tbody> </table>	REVISIONS					REV.	DESCRIPTION	BY	DATE	APP.	0	CONFORMED DRAWING	RNH	7/10/13	KS	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5">CONFORMED DRAWINGS</th> </tr> </thead> <tbody> <tr> <td colspan="5" style="font-size: small;">This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.</td> </tr> </tbody> </table>	CONFORMED DRAWINGS					This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.							LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN GENERAL NOTES AND LEGEND	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: x-small;">FILENAME DRAWING: 10C-CONFORMED</td> </tr> <tr> <td style="font-size: x-small;">BC PROJECT NUMBER 143012</td> </tr> <tr> <td style="font-size: x-small;">SCALE AS SHOWN</td> </tr> <tr> <td style="font-size: x-small;">DRAWING FIGURE NUMBER 10C-100</td> </tr> <tr> <td style="font-size: x-small;">137 OF 1116</td> </tr> </table>	FILENAME DRAWING: 10C-CONFORMED	BC PROJECT NUMBER 143012	SCALE AS SHOWN	DRAWING FIGURE NUMBER 10C-100	137 OF 1116
	REVISIONS																																				
REV.	DESCRIPTION	BY	DATE	APP.																																	
0	CONFORMED DRAWING	RNH	7/10/13	KS																																	
CONFORMED DRAWINGS																																					
This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.																																					
FILENAME DRAWING: 10C-CONFORMED																																					
BC PROJECT NUMBER 143012																																					
SCALE AS SHOWN																																					
DRAWING FIGURE NUMBER 10C-100																																					
137 OF 1116																																					
SUBMITTED: DATE: _____ PROJECT MANAGER	DESIGNED: KS DRAWN: RNH CHECKED: BDT CHECKED: _____ APPROVED: _____																																				

Khoi Le 08/07/2013



PLOT DATE: July 11, 2013 8:00AM USER: khoi.le
 FILE C:\Users\khle\Documents\WTP_10C\10C-101.dwg

Brown and Caldwell

PORTLAND, OREGON

SUBMITTED: *[Signature]* DATE: _____
 PROJECT MANAGER

APPROVED: _____ DATE: _____
 BROWN AND CALDWELL

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

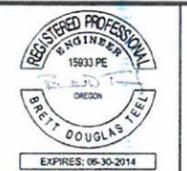
DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 CHECKED: _____
 APPROVED: _____

REVISIONS

REV.	DESCRIPTION	BY	DATE	APP.
0	CONFORMED DRAWING	RNH	7/10/13	KS

CONFORMED DRAWINGS

This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.

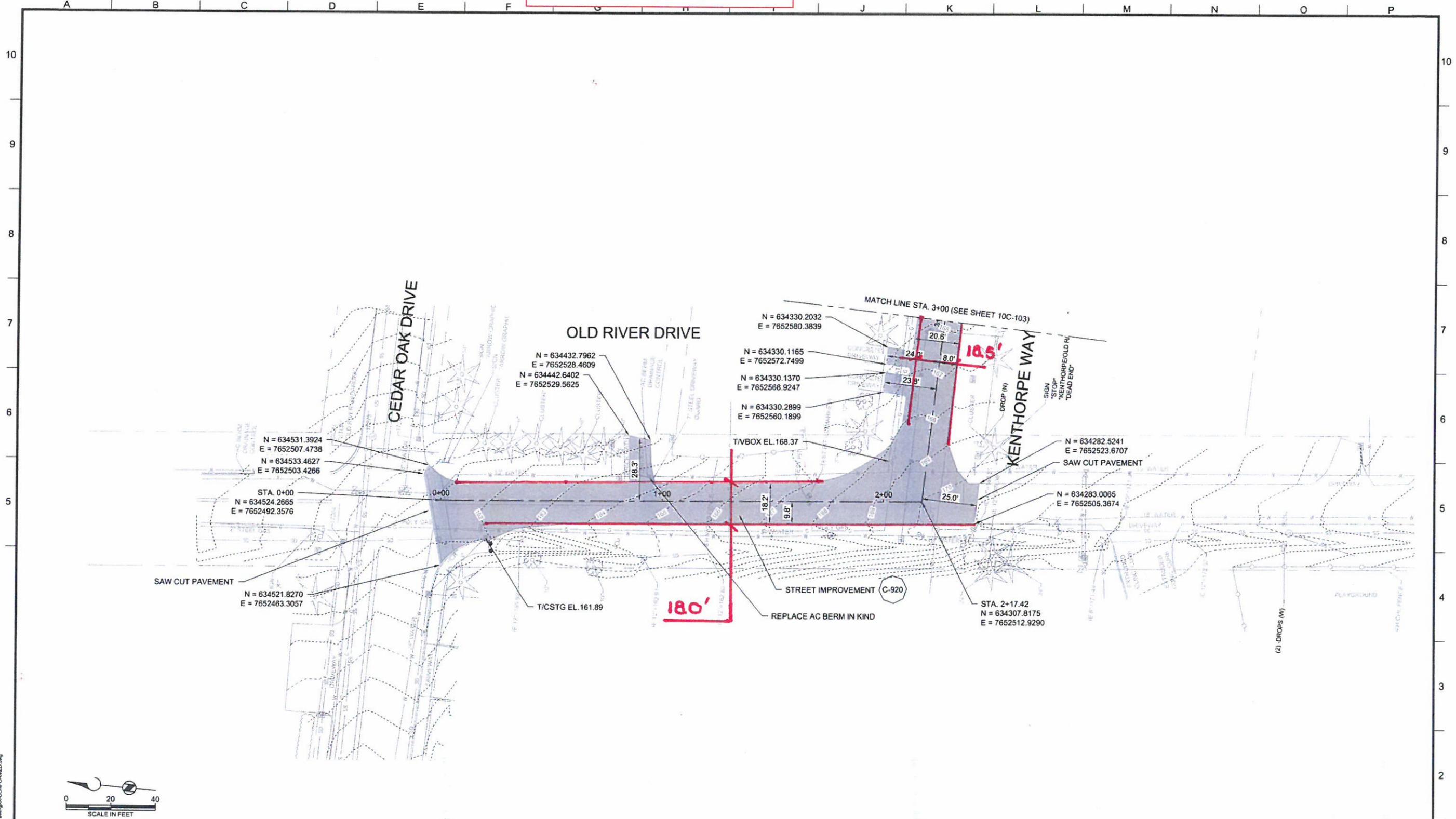


LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

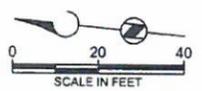
ADDENDUM 3
 STREET RESURFACING PLAN
 SHEET INDEX

FILENAME	10C-101
DRAWING NUMBER	143012
SCALE	AS SHOWN
DRAWING NUMBER	10C-101
SHEET NUMBER	138 OF 1116

Khoi Le 08/07/2013

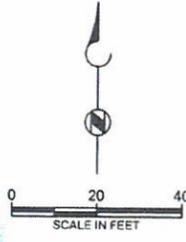
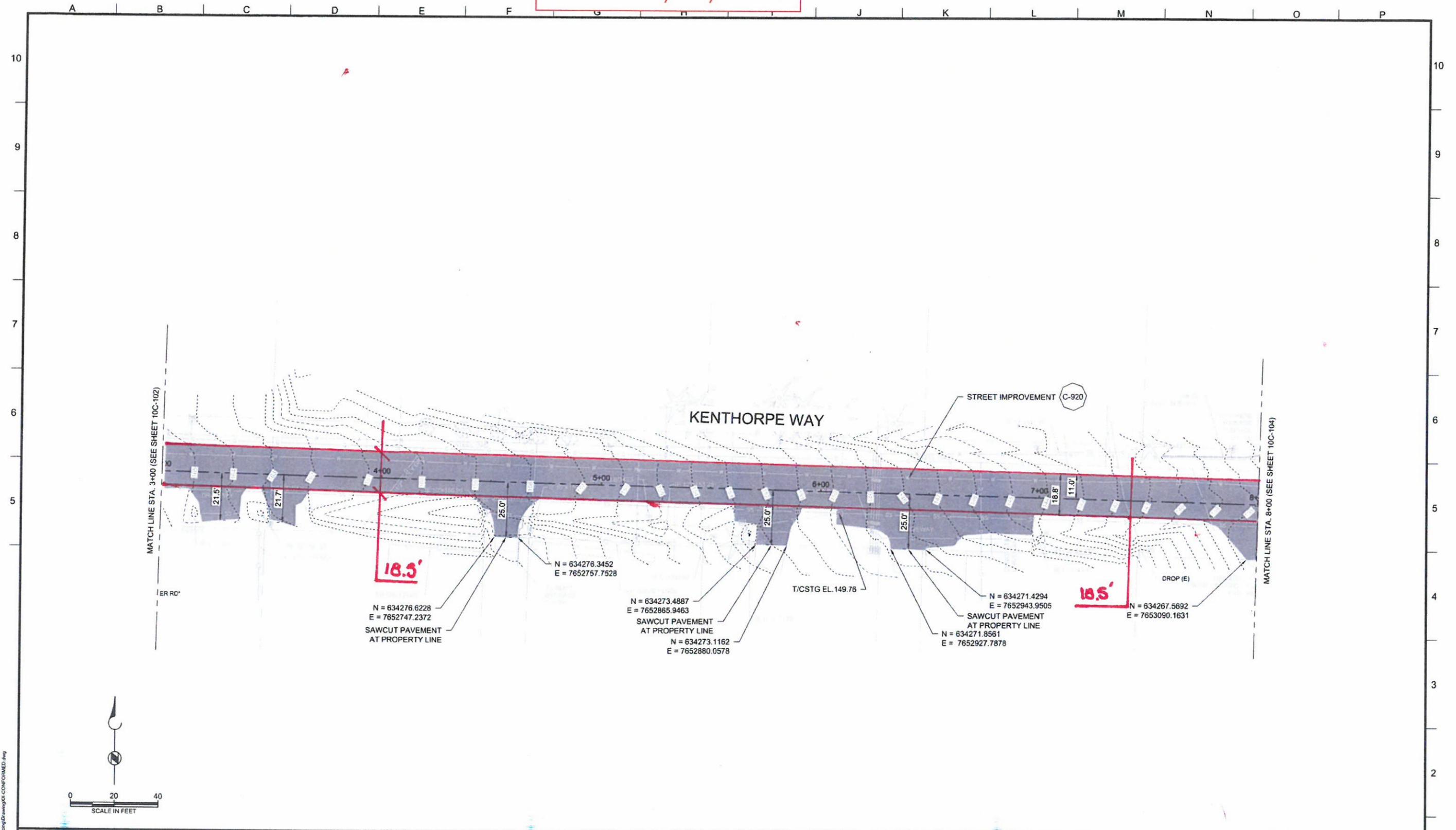


PLOT DATE: July 11, 2013 - 8:12AM USER: bcaul FILE C:\Users\bcaul\Documents\WTP_July07\Drawings\CONFORMED.dwg



Brown and Caldwell PORTLAND, OREGON	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)	DESIGNED: KS DRAWN: RNH CHECKED: BDT CHECKED: APPROVED:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5">REVISIONS</th> </tr> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>CONFORMED DRAWING</td> <td>RNH</td> <td>7/10/13</td> <td>KS</td> </tr> </tbody> </table>	REVISIONS					REV.	DESCRIPTION	BY	DATE	APP.	0	CONFORMED DRAWING	RNH	7/10/13	KS	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">CONFORMED DRAWINGS</th> </tr> </thead> <tbody> <tr> <td style="font-size: x-small;"> This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern. </td> <td style="text-align: center;"> </td> </tr> </tbody> </table>	CONFORMED DRAWINGS		This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.			LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 0+00 - 3+00	FILENAME: DRAWINGXX-CONFORMED BC PROJECT NUMBER: 143012 SCALE: AS SHOWN DRAWING FIGURE NUMBER: 10C-102 139 OF 1116
	REVISIONS																									
REV.	DESCRIPTION	BY	DATE	APP.																						
0	CONFORMED DRAWING	RNH	7/10/13	KS																						
CONFORMED DRAWINGS																										
This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.																										
SUBMITTED: DATE: _____ APPROVED: _____ DATE: _____																										

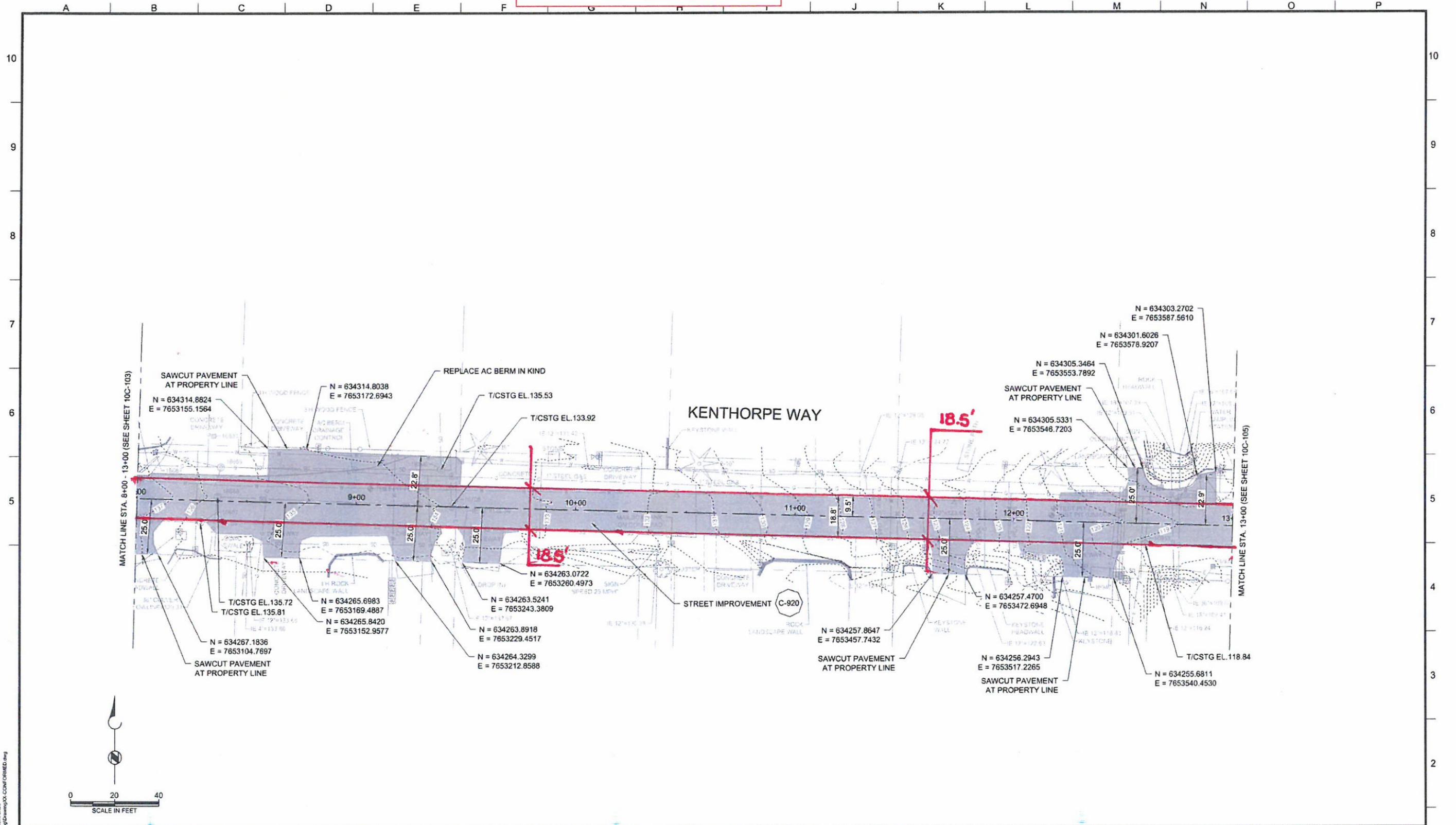
Khoi Le 08/07/2013



PLOT DATE: July 11, 2013, 9:11AM USER: bcaut FILE: C:\Users\bcaut\My Documents\10C-103\10C-103.dwg

Brown and Caldwell PORTLAND, OREGON SUBMITTED: _____ DATE: _____ APPROVED: _____ DATE: _____	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" = SCALE ACCORDINGLY)	DESIGNED: KS DRAWN: RNH CHECKED: BDT CHECKED: _____ APPROVED: _____	<table border="1"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>CONFORMED DRAWING</td> <td>RNH</td> <td>7/10/13</td> <td>KS</td> </tr> </tbody> </table>	REV.	DESCRIPTION	BY	DATE	APP.	0	CONFORMED DRAWING	RNH	7/10/13	KS	CONFORMED DRAWINGS This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.			LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 3+00 - 8+00	FILENAME: DRAWINGXX-CONFORMED BC PROJECT NUMBER: 143012 SCALE: AS SHOWN DRAWING FIGURE NUMBER: 10C-103 140 OF 1116
	REV.	DESCRIPTION	BY	DATE	APP.													
0	CONFORMED DRAWING	RNH	7/10/13	KS														
1																		

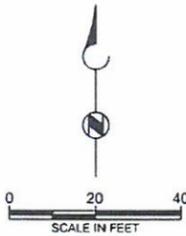
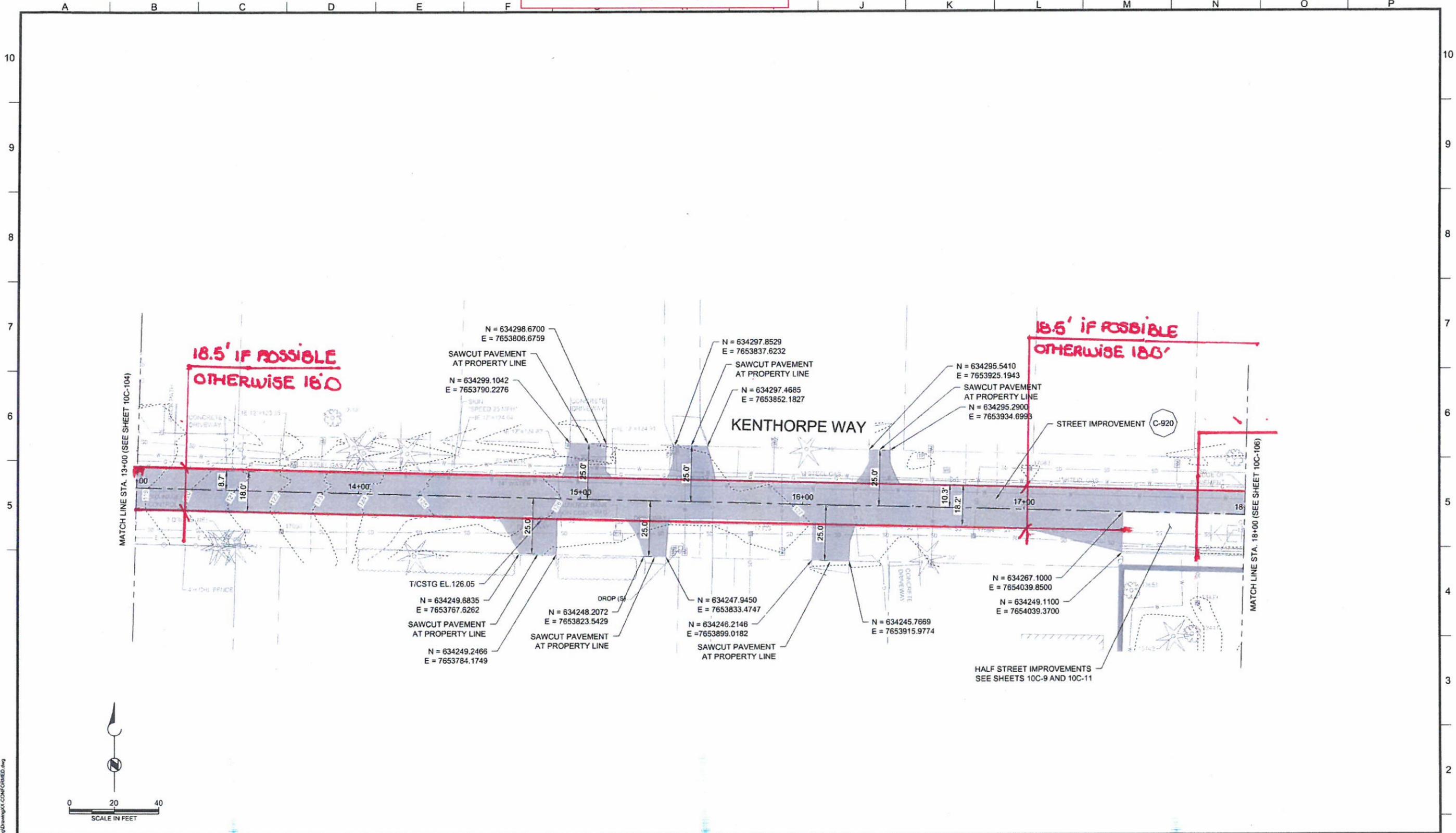
Khoi Le 08/07/2013



PLOT DATE: July 11, 2013 - 8:11 AM USER: khle
 FILE: C:\Users\khle\Documents\Drawings\10C-104-CONFORMED.dwg

Brown and Caldwell PORTLAND, OREGON SUBMITTED: _____ DATE: _____ PROJECT MANAGER APPROVED: _____ DATE: _____ BROWN AND CALDWELL	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)	DESIGNED: KS DRAWN: RNH CHECKED: BDT CHECKED: _____ APPROVED: _____	<table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th colspan="5">REVISIONS</th> </tr> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>CONFORMED DRAWING</td> <td>RNH</td> <td>7/10/13</td> <td>KS</td> </tr> </tbody> </table>	REVISIONS					REV.	DESCRIPTION	BY	DATE	APP.	0	CONFORMED DRAWING	RNH	7/10/13	KS	<table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th colspan="2">CONFORMED DRAWINGS</th> </tr> </thead> <tbody> <tr> <td style="width: 50%;"> This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern. </td> <td style="width: 50%; text-align: center;">  </td> </tr> </tbody> </table>	CONFORMED DRAWINGS		This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.			LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 8+00 - 13+00	FILENAME DRAWING: 10C-CONFORMED BC PROJECT NUMBER 143012 SCALE AS SHOWN DRAWING/FIGURE NUMBER 10C-104 141 OF 1116
	REVISIONS																									
REV.	DESCRIPTION	BY	DATE	APP.																						
0	CONFORMED DRAWING	RNH	7/10/13	KS																						
CONFORMED DRAWINGS																										
This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.																										

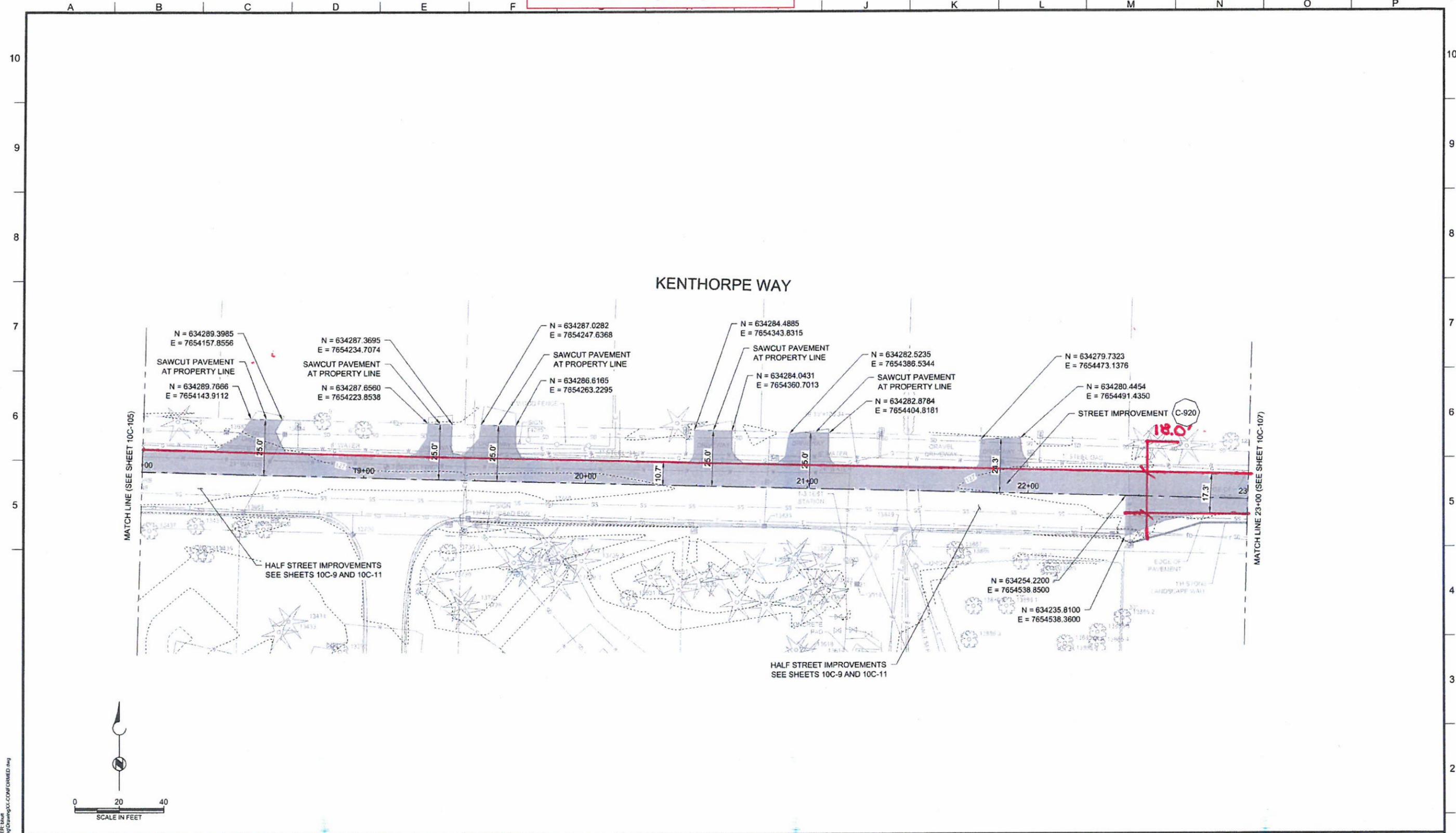
Khoi Le 08/07/2013



PLOT DATE: July 11, 2013 8:10AM USER: khle
 FILE: C:\Users\khle\My Documents\WTP_Fencing\Drawings\CONFORMED.dwg

Brown and Caldwell PORTLAND, OREGON	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)	REVISIONS	CONFORMED DRAWINGS			LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 13+00 - 18+00	FILENAME DRAWING: CONFORMED SC PROJECT NUMBER 143012 SCALE AS SHOWN DRAWING FIGURE NUMBER 10C-105 142 OF 1116									
	SUBMITTED: <i>[Signature]</i> DATE: _____ PROJECT MANAGER APPROVED: _____ DATE: _____ BROWN AND CALDWELL	DESIGNED: KS DRAWN: RNH CHECKED: BDT CHECKED: _____ APPROVED: _____	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>CONFORMED DRAWING</td> <td>RNH</td> <td>7/10/13</td> <td>KS</td> </tr> </tbody> </table>	REV.	DESCRIPTION	BY	DATE	APP.	0	CONFORMED DRAWING	RNH	7/10/13	KS	This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.		
REV.	DESCRIPTION	BY	DATE	APP.												
0	CONFORMED DRAWING	RNH	7/10/13	KS												

Khoi Le 08/07/2013



PLOT DATE: July 11, 2013 - 8:30AM USER: bhar
 FILE: C:\Users\Bhar\Documents\WTP_Fencing\Drawings\CONFORMED.dwg

Brown and Caldwell
 PORTLAND, OREGON

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 CHECKED: _____
 APPROVED: _____

REVISIONS				
REV.	DESCRIPTION	BY	DATE	APP.
0	CONFORMED DRAWING	RNH	7/10/13	KS

CONFORMED DRAWINGS

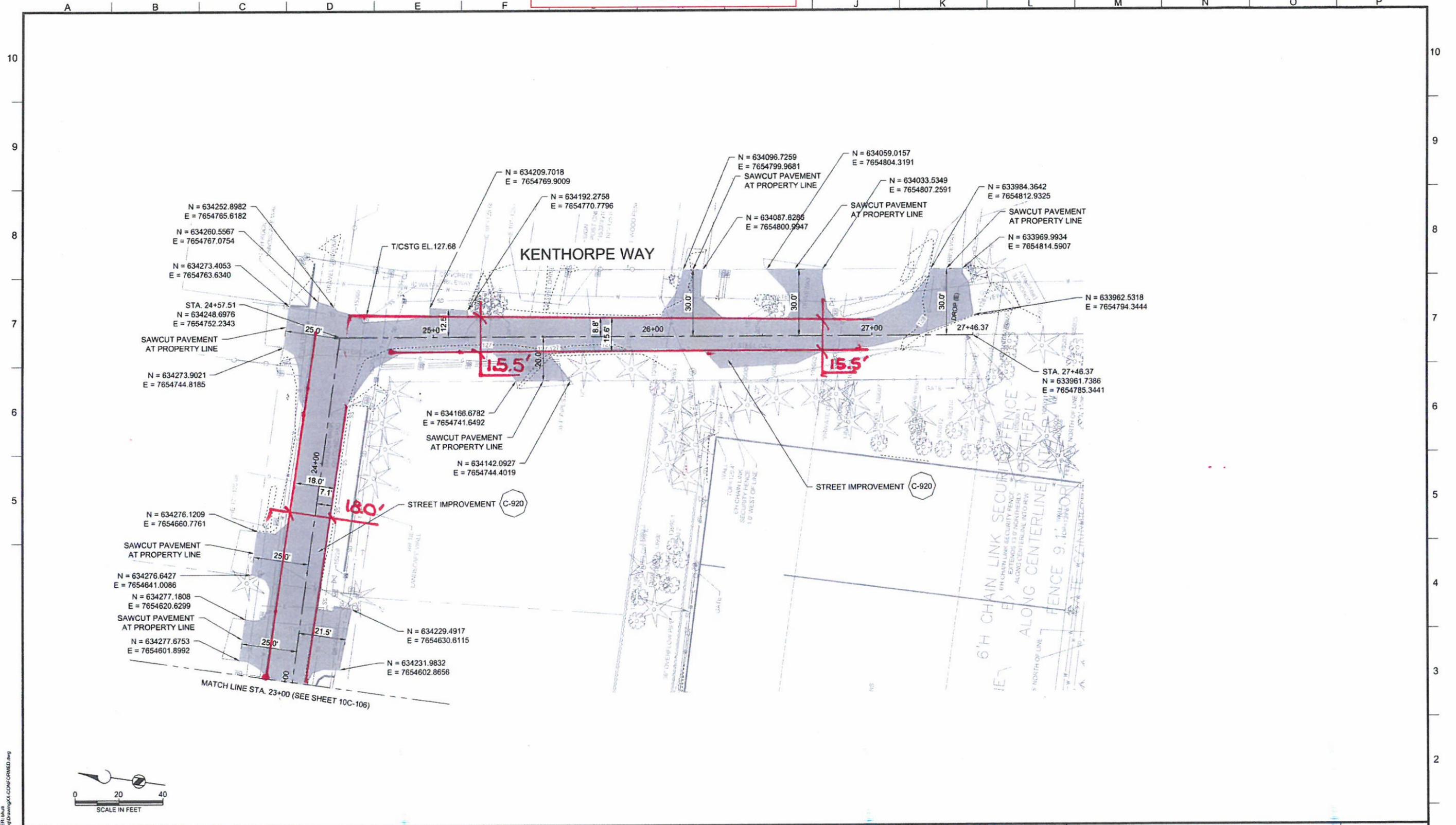
This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.



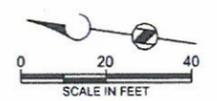
LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 ADDENDUM 3
 STREET RESURFACING PLAN
 STA. 18+00 - 23+00

FILENAME DRAWINGXXX-CONFORMED
BC PROJECT NUMBER 143012
SCALE AS SHOWN
DRAWING FIGURE NUMBER 10C-106
143 OF 1116

Khoi Le 08/07/2013

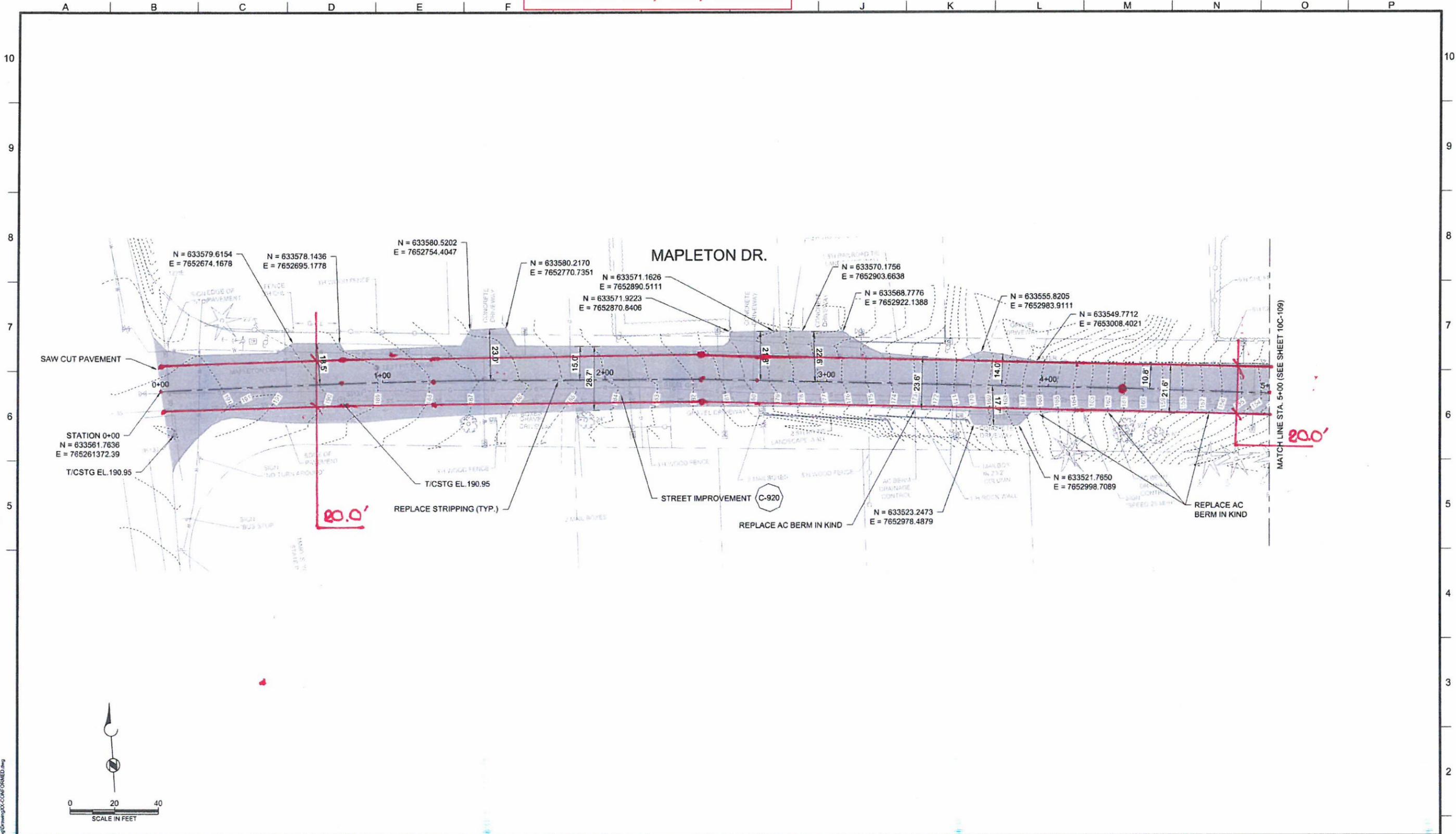


PLOT DATE: July 11, 2013 10:58 AM USER: khle
 FILE: C:\Users\khle\Documents\143012\143012.dwg



Brown and Caldwell PORTLAND, OREGON SUBMITTED: _____ DATE: _____ PROJECT MANAGER APPROVED: _____ DATE: _____ BROWN AND CALDWELL	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" SCALE ACCORDINGLY)	REVISIONS <table border="1"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>CONFORMED DRAWING</td> <td>RNH</td> <td>7/10/13</td> <td>KS</td> </tr> </tbody> </table>	REV.	DESCRIPTION	BY	DATE	APP.	0	CONFORMED DRAWING	RNH	7/10/13	KS	CONFORMED DRAWINGS This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.			LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 23+00 - 27+46.37	FILENAME DRAWING: 143012-CONFORMED BC PROJECT NUMBER 143012 SCALE AS SHOWN DRAWING FIGURE NUMBER 10C-107 144 OF 1116
	REV.	DESCRIPTION	BY	DATE	APP.												
0	CONFORMED DRAWING	RNH	7/10/13	KS													
DESIGNED: KS DRAWN: RNH CHECKED: BDT APPROVED: _____	CONFORMED DRAWINGS This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.	CONFORMED DRAWINGS This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.	CONFORMED DRAWINGS This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.	CONFORMED DRAWINGS This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.	CONFORMED DRAWINGS This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.	CONFORMED DRAWINGS This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.											

Khoi Le 08/07/2013



PLOT DATE: July 11, 2013 - 8:14 AM USER: bcaul
 FILE: C:\Users\bcaul\Desktop\WTP_Engrg\Drawings\CONFORMED.dwg

Brown and Caldwell
 PORTLAND, OREGON

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: KS
 DRAWN: RNH
 CHECKED: BDT
 APPROVED:

REVISIONS				
REV.	DESCRIPTION	BY	DATE	APP.
0	CONFORMED DRAWING	RNH	7/10/13	KS

CONFORMED DRAWINGS

This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.

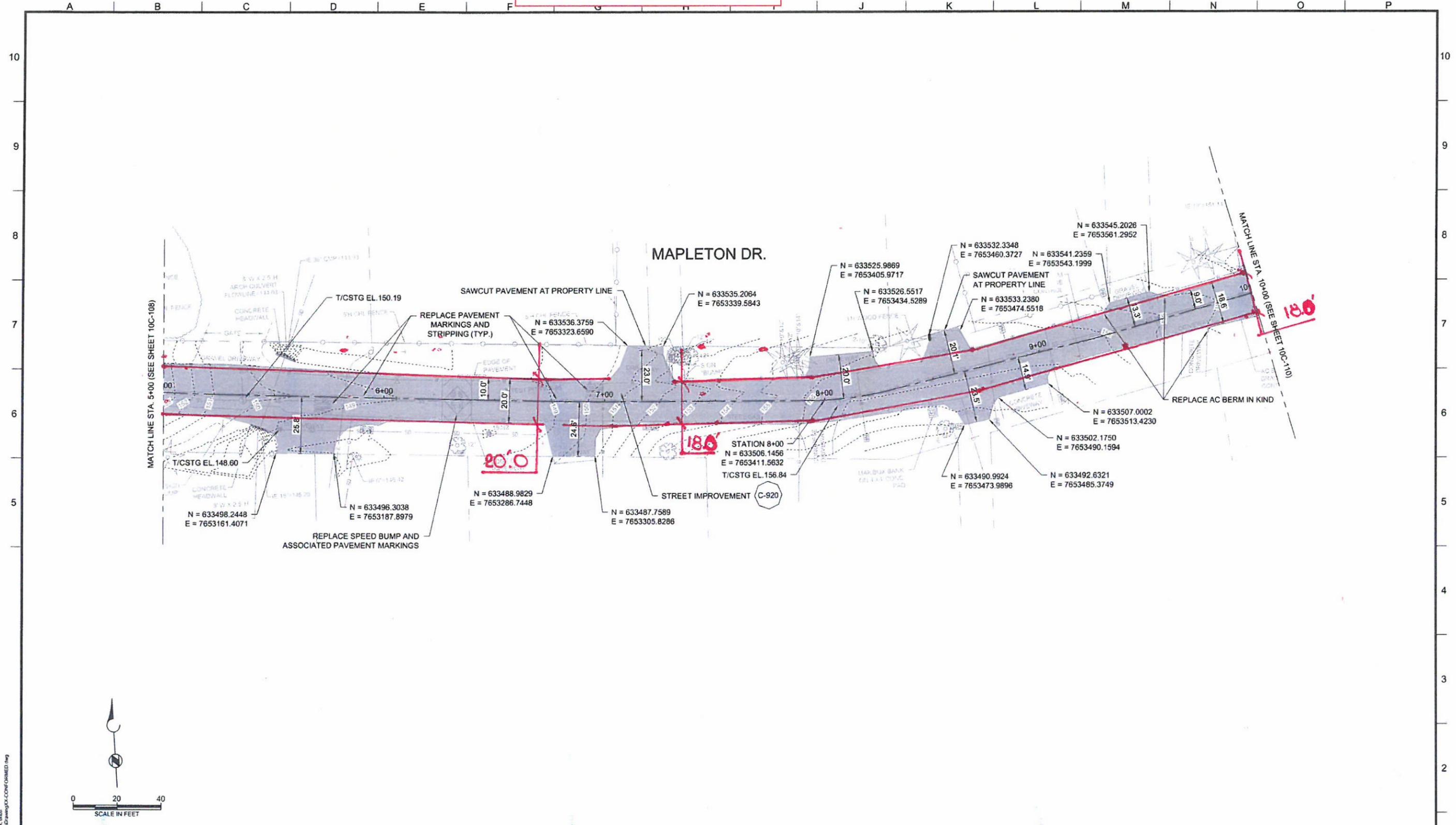


LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 ADDENDUM 3
STREET RESURFACING PLAN
 STA. 0+00 - 5+00

FILENAME DRAWINGXX-CONFORMED
SC PROJECT NUMBER 143012
SCALE AS SHOWN
DRAWING/Figure NUMBER 10C-108
145 OF 1116

A B C D E F G H I J K L M N O P

Khoi Le 08/07/2013



PLOT DATE: July 11, 2013 - 8:11 AM USER: bluf
 FILE: C:\Users\bluf\My Documents\WTP_Facility\Drawings\CONFORMED.dwg

Brown and Caldwell

PORTLAND, OREGON

SUBMITTED: _____ DATE: _____
 PROJECT MANAGER
 APPROVED: _____ DATE: _____
 BROWN AND CALDWELL

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: KS
 DRAWN: RNH
 CHECKED: BOT
 CHECKED: _____
 APPROVED: _____

REVISIONS				
REV.	DESCRIPTION	BY	DATE	APP.
0	CONFORMED DRAWING	RNH	7/10/13	KS

CONFORMED DRAWINGS

This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT

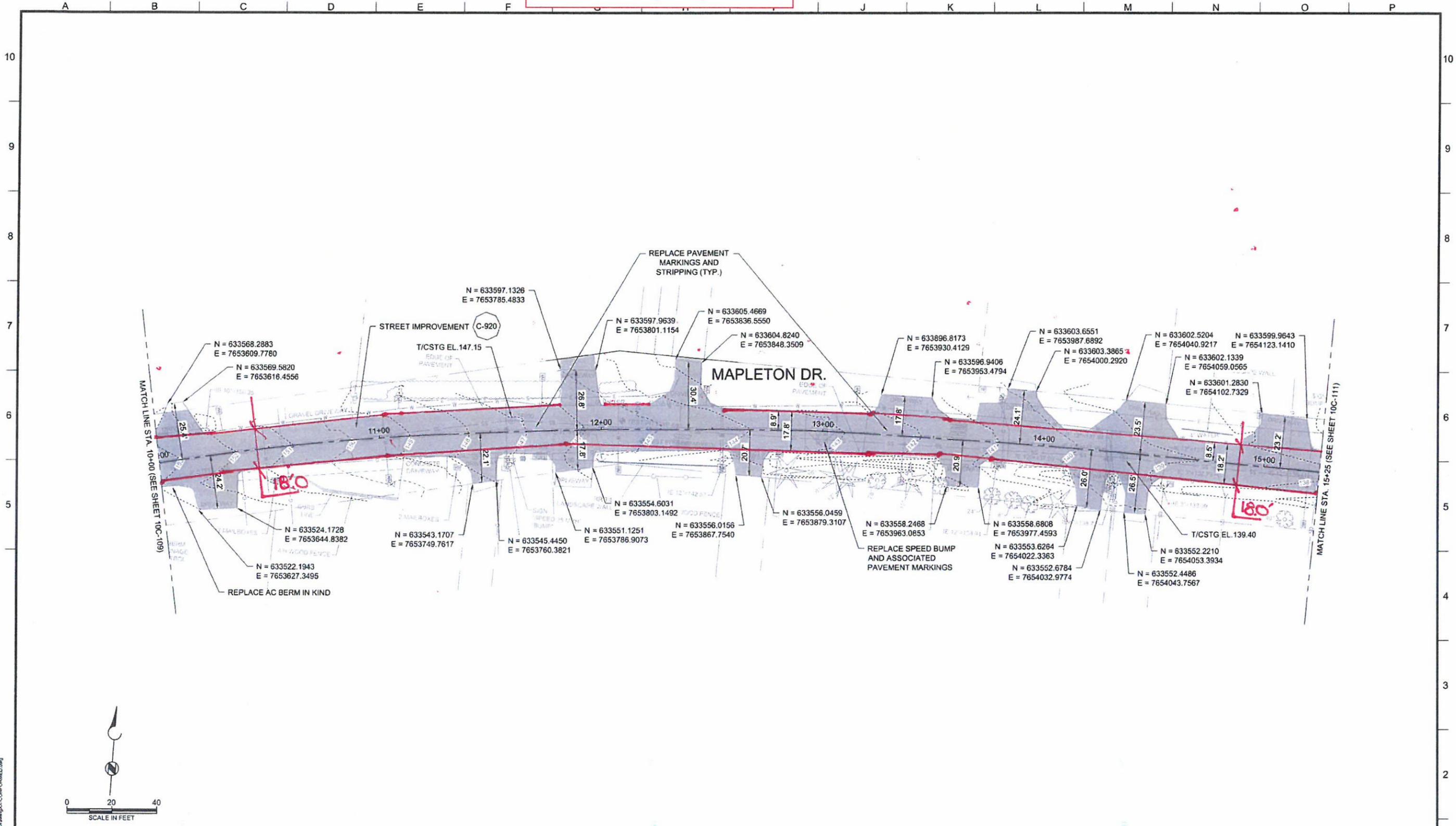
ADDENDUM 3

STREET RESURFACING PLAN

STA. 5+00 - 10+00

FILENAME DRAWINGXX-CONFORMED
BC PROJECT NUMBER 143012
SCALE AS SHOWN
DRAWING/FIGURE NUMBER 10C-109
146 OF 1116

Khoi Le 08/07/2013



PLOT DATE: July 11, 2013 8:30AM USER: bhuat
 FILE: C:\Users\bdouglas\Documents\10C-110-111\10C-110-111.dwg

Brown and Caldwell
 PORTLAND, OREGON

SUBMITTED: _____ DATE: _____
 PROJECT MANAGER

APPROVED: _____ DATE: _____
 BROWN AND CALDWELL

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: KS
DRAWN: RNH
CHECKED: BDT
CHECKED: BDT
APPROVED: _____

REVISIONS				
REV.	DESCRIPTION	BY	DATE	APP.
0	CONFORMED DRAWING	RNH	7/10/13	KS

CONFORMED DRAWINGS

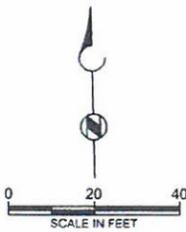
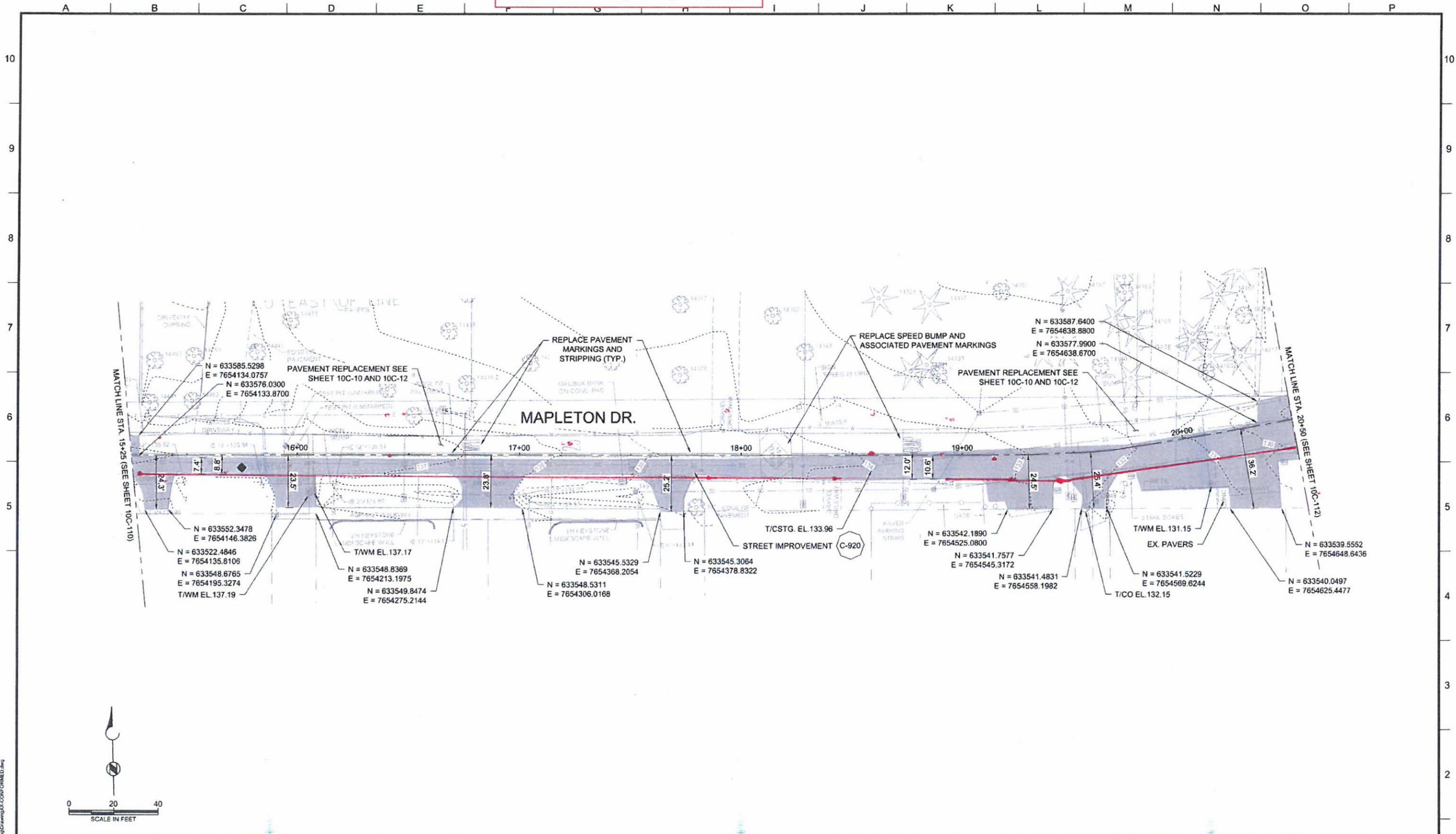
This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.



LAKE OSWEGO - TIGARD WATER TREATMENT PLANT
 ADDENDUM 3
STREET RESURFACING PLAN
 STA. 10+00 - 15+25

FILENAME DRAWINGXX-CONFORMED
BC PROJECT NUMBER 143012
SCALE AS SHOWN
DRAWING/Figure NUMBER 10C-110
147 OF 1116

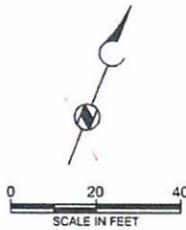
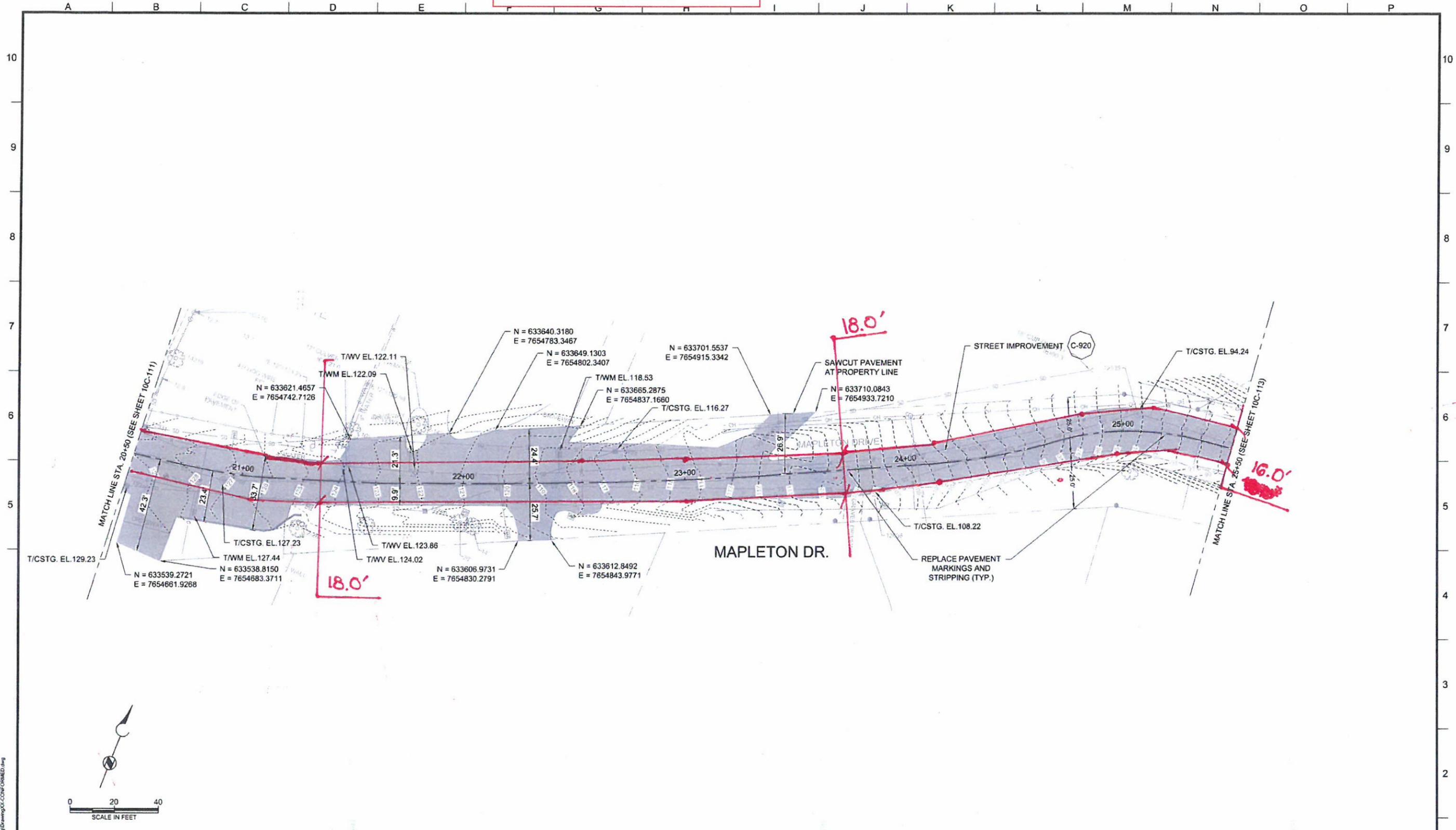
Khoi Le 08/07/2013



PLOT DATE: July 11, 2013 - 7:59AM USER: bnl
 FILE: C:\Users\bnl\Desktop\WTP_10C-111.dwg

Brown and Caldwell PORTLAND, OREGON SUBMITTED: _____ DATE: _____ APPROVED: _____ DATE: _____	LINE IS 2 INCHES AT FULL SIZE <small>(IF NOT 2" SCALE ACCORDINGLY)</small>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5">REVISIONS</th> </tr> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>CONFORMED DRAWING</td> <td>RNH</td> <td>7/10/13</td> <td>KS</td> </tr> </tbody> </table>	REVISIONS					REV.	DESCRIPTION	BY	DATE	APP.	0	CONFORMED DRAWING	RNH	7/10/13	KS	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">CONFORMED DRAWINGS</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="font-size: small;"> This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern. </td> </tr> </tbody> </table>	CONFORMED DRAWINGS			This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.					LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 15+25 - 20+50	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: x-small;">FILENAME</td> <td>DRAWINGXX-CONFORMED</td> </tr> <tr> <td style="font-size: x-small;">BC PROJECT NUMBER</td> <td>143012</td> </tr> <tr> <td style="font-size: x-small;">SCALE</td> <td>AS SHOWN</td> </tr> <tr> <td style="font-size: x-small;">DRAWING FIGURE NUMBER</td> <td>10C-111</td> </tr> <tr> <td style="font-size: x-small;">148 OF 1116</td> <td></td> </tr> </table>	FILENAME	DRAWINGXX-CONFORMED	BC PROJECT NUMBER	143012	SCALE	AS SHOWN	DRAWING FIGURE NUMBER	10C-111	148 OF 1116	
	REVISIONS																																					
REV.	DESCRIPTION	BY	DATE	APP.																																		
0	CONFORMED DRAWING	RNH	7/10/13	KS																																		
CONFORMED DRAWINGS																																						
This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.																																						
FILENAME	DRAWINGXX-CONFORMED																																					
BC PROJECT NUMBER	143012																																					
SCALE	AS SHOWN																																					
DRAWING FIGURE NUMBER	10C-111																																					
148 OF 1116																																						

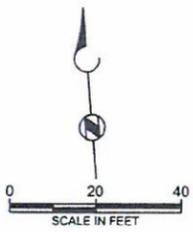
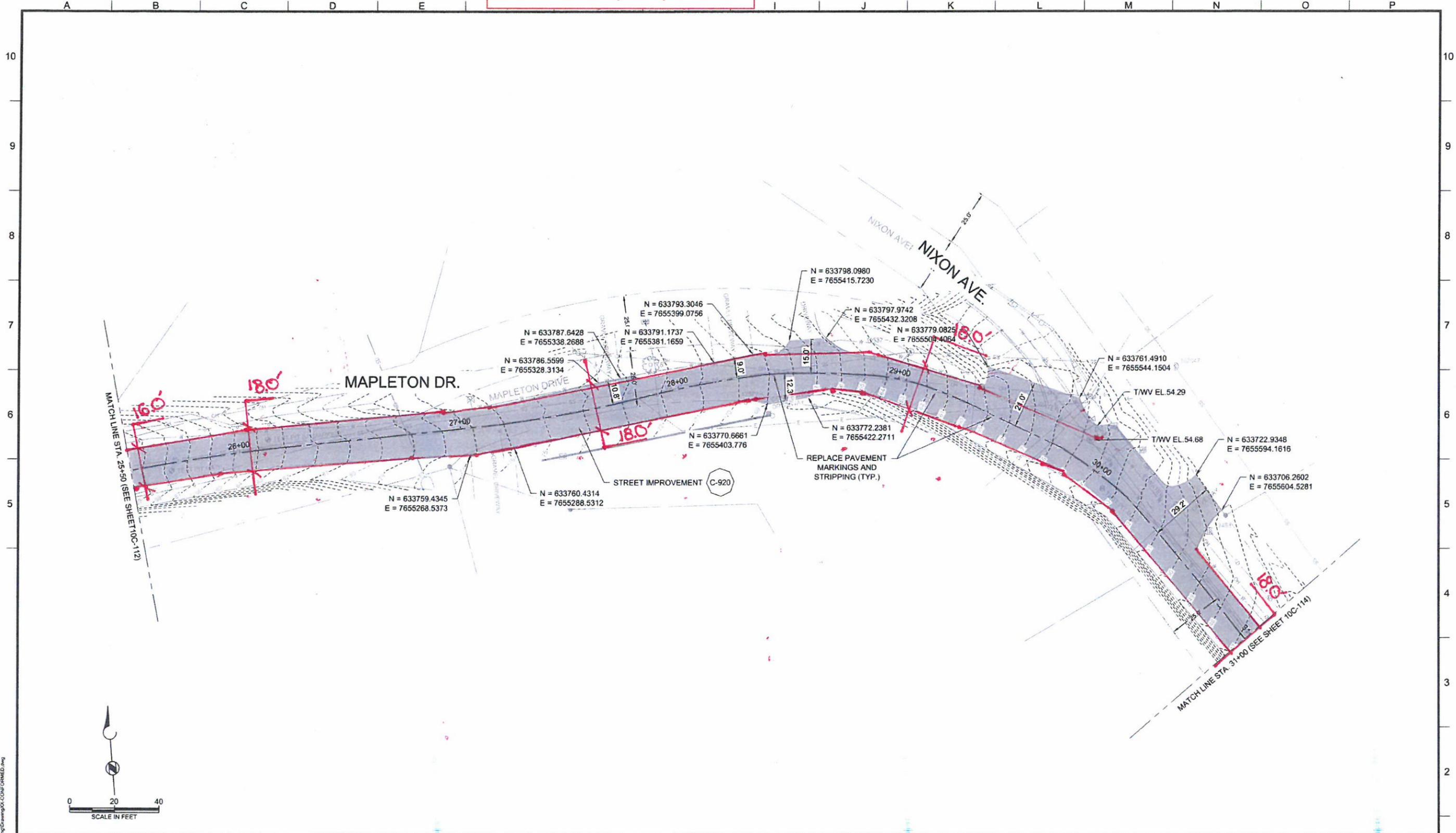
Khoi Le 08/07/2013



PLOT DATE: July 11, 2013 7:59AM USER: bhar
 FILE: C:\Users\bhar\Desktop\WTP_Fencing\Drawing\10C-CONFORMED.dwg

Brown and Caldwell PORTLAND, OREGON	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" SCALE ACCORDINGLY)	DESIGNED: KS DRAWN: RNH CHECKED: BDT CHECKED: _____ APPROVED: _____	<table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th colspan="5">REVISIONS</th> </tr> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>CONFORMED DRAWING</td> <td>RNH</td> <td>7/10/13</td> <td>KS</td> </tr> </tbody> </table>	REVISIONS					REV.	DESCRIPTION	BY	DATE	APP.	0	CONFORMED DRAWING	RNH	7/10/13	KS	<table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th colspan="5">CONFORMED DRAWINGS</th> </tr> </thead> <tbody> <tr> <td colspan="5" style="font-size: 6px;"> This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern. </td> </tr> </tbody> </table>	CONFORMED DRAWINGS					This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.							LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 20+50 - 25+50	FILENAME: DRAWINGXX-CONFORMED BC PROJECT NUMBER: 143012 SCALE: AS SHOWN DRAWING/Figure NUMBER: 10C-112 149 OF 1116
	REVISIONS																																
REV.	DESCRIPTION	BY	DATE	APP.																													
0	CONFORMED DRAWING	RNH	7/10/13	KS																													
CONFORMED DRAWINGS																																	
This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.																																	
SUBMITTED: _____ DATE: _____ PROJECT MANAGER																																	
APPROVED: _____ DATE: _____ BROWN AND CALDWELL																																	

Khoi Le 08/07/2013



PLOT DATE: July 11, 2013, 7:58AM USER: lnhut
 FILE: C:\Users\lbnh\Documents\WTP_Facility\Drawings\CONFORMED.dwg

Brown and Caldwell PORTLAND, OREGON	LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)	REVISIONS	CONFORMED DRAWINGS			LAKE OSWEGO - TIGARD WATER TREATMENT PLANT ADDENDUM 3 STREET RESURFACING PLAN STA. 25+50 - 31+00	FILENAME DRAWINGXXX-CONFORMED BC PROJECT NUMBER 143012 SCALE AS SHOWN DRAWING FIGURE NUMBER 10C-113 150 OF 1116									
	SUBMITTED: _____ DATE: _____ APPROVED: _____ DATE: _____	DESIGNED: KS DRAWN: RNH CHECKED: BDT APPROVED: _____	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>CONFORMED DRAWING</td> <td>RNH</td> <td>7/10/13</td> <td>KS</td> </tr> </tbody> </table>	REV.	DESCRIPTION	BY	DATE	APP.	0	CONFORMED DRAWING	RNH	7/10/13	KS	<p style="font-size: x-small;">This drawing is a conformed drawing and is not a part of the contract documents. This drawing is provided as a courtesy to the contractor. In the event of a discrepancy between the conformed drawing and the contract documents, the contract documents shall govern.</p>		
REV.	DESCRIPTION	BY	DATE	APP.												
0	CONFORMED DRAWING	RNH	7/10/13	KS												

