

AWWU PLAN SET NO. 9892

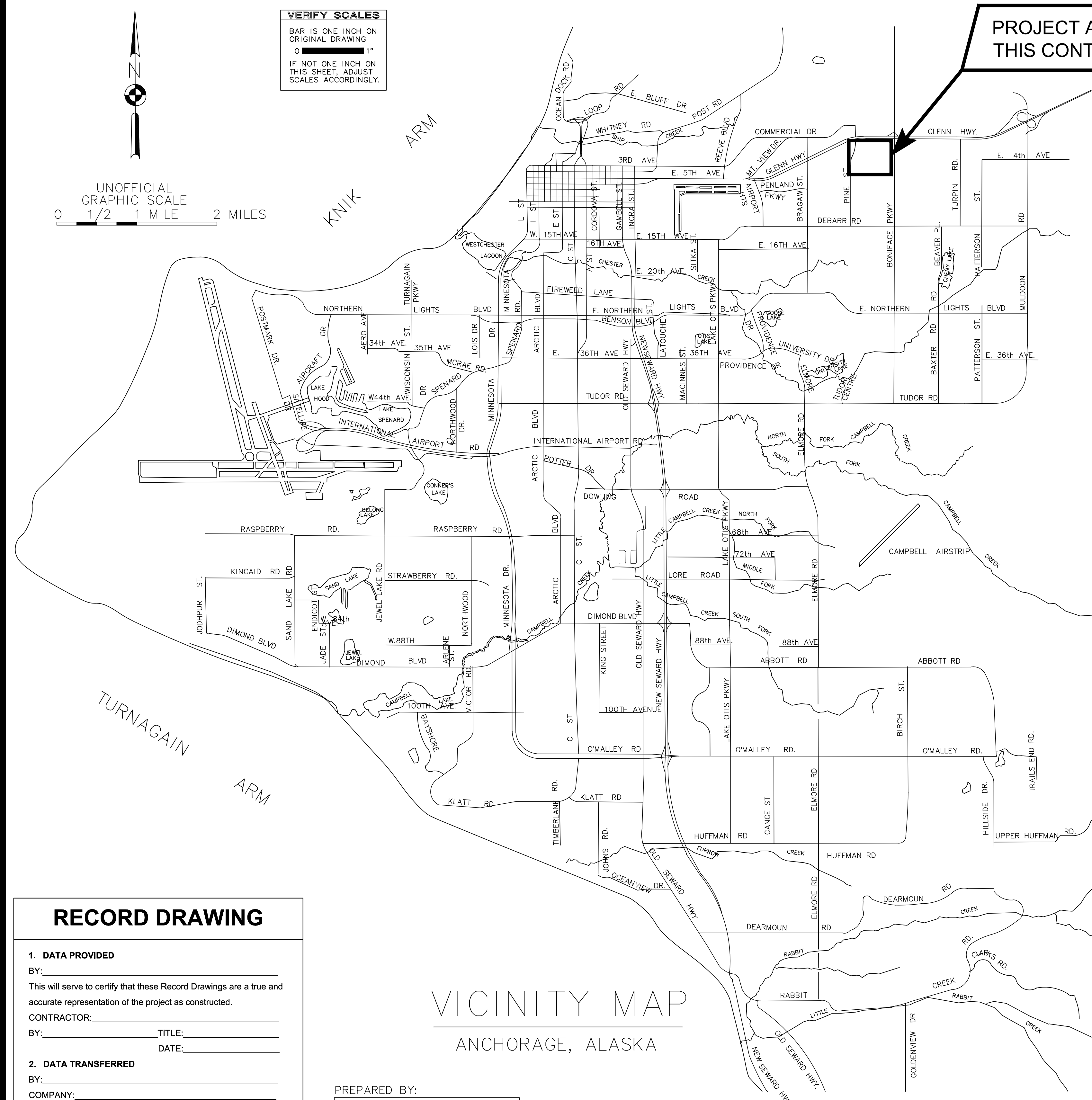
**MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY**

**WONDER PARK SEWER
UPGRADE - PHASE III**

**AWWU PROJECT ID NUMBER:
000006490 (SWR)
APRIL 2014**

PAGE NO.	SHEET NO.	SHEET TITLE
1	G1	COVER SHEET AND INDEX
2	G2	LEGEND AND ABBREVIATIONS
3	G3	PROJECT LIMITS
4	V1	SURVEY CONTROL - DIG LOCATION NO. 14
5	SS1	NOTES AND TYPICAL TRENCH SECTION
6	SS2	SEWER KEY MAP AND SHEET LAYOUT
7	SS3	TRENCHLESS SEWER REPAIRS - SOUTHEAST WONDER PARK
8	SS4	TRENCHLESS SEWER REPAIRS - EAST WONDER PARK
9	SS5	TRENCHLESS SEWER REPAIRS - NORTHEAST WONDER PARK
10	SS6	TRENCHLESS SEWER REPAIRS - SOUTHWEST WONDER PARK
11	SS7	TRENCHLESS SEWER REPAIRS - WEST WONDER PARK
12	SS8	TRENCHLESS SEWER REPAIRS - NORTHWEST WONDER PARK
13	SS9	SEWER REPAIRS - DIG LOCATION NO.s 1-4
14	SS10	SEWER REPAIRS - DIG LOCATION NO.s 5-9
15	SS11	SEWER REPAIRS - DIG LOCATION NO.s 10-12
16	SS12	SEWER REPAIRS - DIG LOCATION NO. 13
17	SS13	SEWER REPAIRS - DIG LOCATION NO. 14 PLAN-PROFILE
18	SS14	SEWER REPAIRS - DIG LOCATION NO. 14 WORK AREA
19	SS15	SEWER REPAIRS - DIG LOCATION NO. 14 ACCESS CORRIDOR
20	SS16	SEWER REPAIRS - DIG LOCATION NO. 14 CROSS SECTIONS
21-26	L1-L6	LANDSCAPE PLAN
27	L7	LANDSCAPE DETAILS

WONDER PARK SEWER UPGRADE - PHASE III
INVITATION TO BID NO. 2014-C-0XX
AWWU PROJECT ID NO. 000006490 (SWR)



PROJECT AREA
THIS CONTRACT

VICINITY MAP
ANCHORAGE, ALASKA

RECORD DRAWING

1. DATA PROVIDED
BY: _____
This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
CONTRACTOR: _____
BY: _____ TITLE: _____
DATE: _____

2. DATA TRANSFERRED
BY: _____
COMPANY: _____
DATE: _____

3. DATA TRANSFER CHECKED
Based on periodic field observations by the Engineer (or an Individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
BY: _____
COMPANY: _____
BY: _____ TITLE: _____
DATE: _____

PREPARED BY:

3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252

3900 ARCTIC BLVD, SUITE 204
ANCHORAGE, ALASKA 99503
TEL: (907) 562-1468

landscape architecture, planning & environmental

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

UNOFFICIAL GRAPHIC SCALE
0 1/2 1 MILE 2 MILES

PLOT DATE: 3/31/2014 1:16 PM

PLOT SCALE:

ACAD FILE: j:\subarea\031302 Wonder Park Sewer Phase III\00 CAD\01 Working Set\01 Civil\LEGEND.dwg

PLAN LEGEND

Table with 4 columns: SYMBO, EXISTING, PROPOSED, SYMBO, EXISTING, PROPOSED. Lists symbols for storm drain manhole, catch basin, sanitary sewer manhole, SSMH cleaning upgrades, SSMH replace or repair, sanitary sewer/subdrain cleanout, sewer service connection, cesspool/septic tank, water well, watertight manhole, water key box/valve marker, water valve box, fire hydrant, dry well, stubout, gas valve, gas meter, underground electric pedestal, electrical manhole, electrical meter, JB type IA, JB type II, JB type III, electrical vault, luminaire, utility pole, and guy anchor.

Table with 4 columns: SYMBO, EXISTING, PROPOSED, SYMBO, EXISTING, PROPOSED. Lists symbols for controller or ATR cabinet, load center, switch cabinet, electric transformer, joint use power & tele. pole, telephone manhole, underground tele. pedestal, underground TV cable pedestal, underground fiber optic pedestal, footing drain service, traffic signal pole/luminare, traffic signal pole, cluster mailbox, parcel ID, parking meter, and stop! no access.

PLAN LEGEND

Table with 4 columns: SYMBO, EXISTING, PROPOSED, SYMBO, EXISTING, PROPOSED. Lists symbols for centerline, property line, row line, easement line, section line, unpaved (gravel) edge of road/driveway, edge of pavement, stream/edge of waterway, driveway pavement removal, driveway concrete removal, curb & gutter, curb & gutter/pathway removal, pathway, roadway pavement removal, drainage swale, drainage arrow, bluff area/earthwork slope, culvert, chainlink fence, wood fence, deciduous tree/shrub, coniferous tree/shrub, vegetation & brush, guardrail/handrail, street sign, test boring or test hole, mailbox, house or structure, contour line, spot elevation, iron pin (rebar) / iron pipe, benchmark, temporary benchmark, brass cap monu./blm corner, pk nail, spike or concrete nail, alcap or plastic cap, fill slope limits, cut slope limits, retaining wall, storm drain line, sanitary sewer pipe, sanitary sewer pipe to be cleaned and inspected, sanitary sewer flow direction, water line, gas line, electric line (underground), electric line (overhead), electric & telephone (overhead), telephone line (underground), telephone line (overhead), cable tv line (underground), cable tv line (overhead), fiber optic (underground), fuel/oil line, and traffic line.

NOTE: LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT USED ON THIS PROJECT.

PROFILE LEGEND

Table with 4 columns: SYMBO, EXISTING, PROPOSED, SYMBO, EXISTING, PROPOSED. Lists symbols for left finish grade, right finish grade, grade of pavement at center line, ground over pipe, approximate excavation limits, pipe (profile), pipe (section), water level, insulation, concrete, gravel, compacted soil, natural soil, metal grating, textured concrete/paver, horizontal drain, telephone crossing, gas crossing, electric crossing, cable crossing, and fiber optic crossing.

CALL BEFORE YOU DIG!!!

Table with 2 columns: Company Name, Statewide Phone Number. Lists Alaska Digline, Inc. (811), Alaska Railroad (265-2520), Military Fuel Lines (552-3760), and State Storm Drains (333-2411).

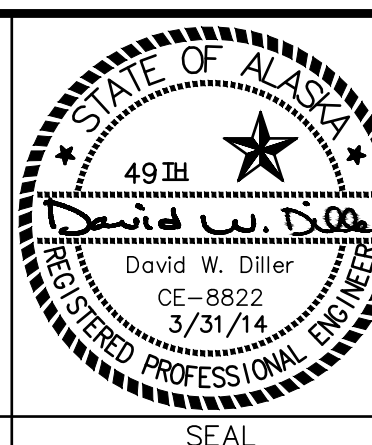
COMMON ABBREVIATIONS

Table with 4 columns: ABBR., DESCRIPTION, ABBR., DESCRIPTION. Lists abbreviations for asphalt concrete, approximate, all-weather wood, bench mark, beginning of project, curb and gutter, catch basin, catch basin manhole, closed circuit television, cast iron, cured in place pipe, centerline, corrugated metal pipe, cleanout, construction, corrugated polyethylene pipe, ductile iron, diameter, ductile iron pipe, detectable warning, east, electric/electrical, elevation, end of project, existing, furnish and install, finished grade, grade break, gate valve, junction box, load center, in accordance with, invert elevation, information, intersection, invert, linear foot, left, luminaire, maximum, manhole, minimum, monument, mean sea level, north, not applicable, not in contract, no., number, not to scale, no water table, on center, on center each way, outside diameter, overhead, point of curvature, portland concrete cement, point of continuous curvature, point of intersection, property line, precoated corrugated metal pipe, perforated corrugated polyethylene pipe, point of tangency, point of vertical curvature, point of vertical intersection, point of vertical tangent, remove & replace, rehabilitation, right of way, right, south, schedule, sidewalk, sanitary sewer/stainless steel, section corner, street intersection, station/stationing, standard, structure, top back of curb, to be determined, temporary bench mark, temporary construction easement, temporary construction permit, telephone, test hole, typical, underground, unless otherwise noted, utility, valve box, vertical curve, west.

VERIFY SCALE and RECORD DRAWING tables. Includes columns for DATA, DRAWN BY, CHECKED BY, REV, DATE, DESCRIPTION, and BY. Includes a note: 'Note: To be filled out on original drawings upon project completion.'

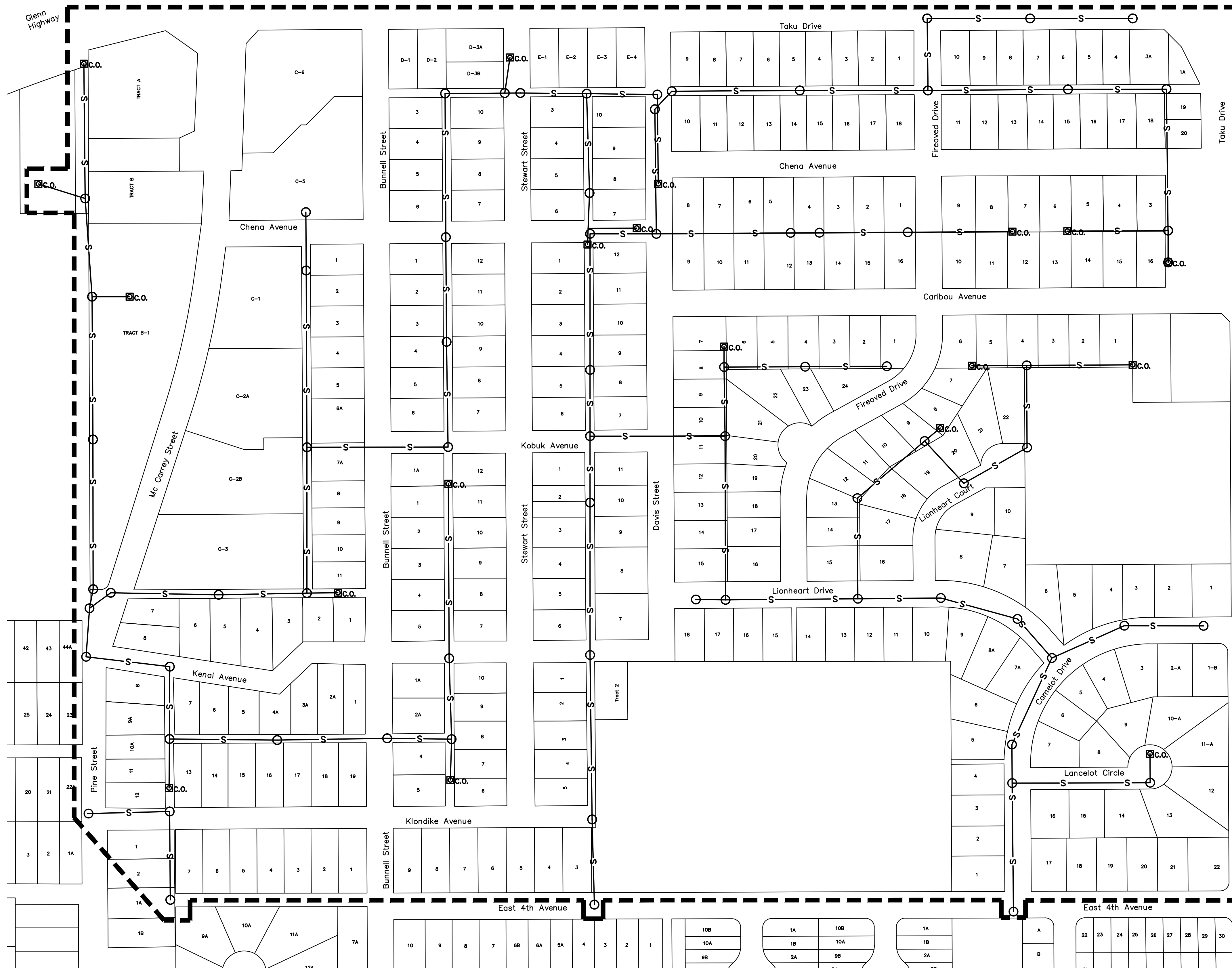
RECORD DRAWING table with 3 columns: 1. DATA PROVIDED BY, 2. DATA TRANSFERRED BY, 3. Based on periodic field observations by the Engineer. Includes fields for CONTRACTOR, DATE, COMPANY, and TITLE.

REUSE OF DOCUMENTS. THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY. WONDER PARK SEWER UPGRADE PHASE III. LEGEND AND ABBREVIATIONS. Includes fields for HORIZ SCALE, VERT SCALE, DATE, GRID, and sheet number (2 of 27).

AWWU PLAN SET NO. 9892



PROJECT LIMITS

- NOTES:**
1. PROJECT WORK CONSISTS OF ONLY THOSE SEWER LINES AND MANHOLES CONTAINED WITHIN THE PROJECT LIMITS AS SHOWN HERE.
 2. SEWER LINES EXTENDING BEYOND THE PROJECT LIMITS ARE NOT SHOWN FOR CLARITY. SEE SHEET SS2 FOR THESE ADDITIONAL LINES.

VERIFY SCALE THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING. 0" = 1"

DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

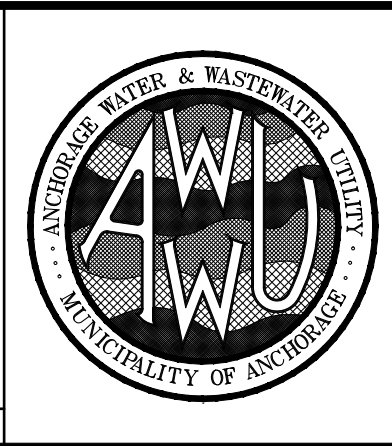
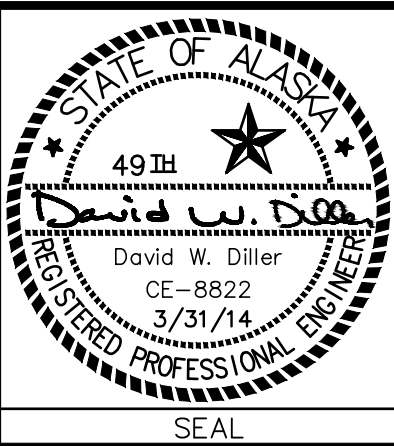
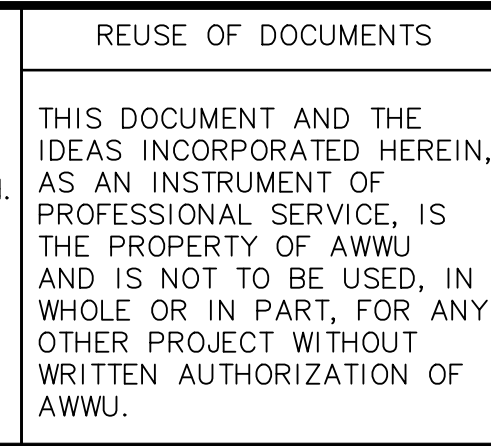
1. DATA PROVIDED BY: _____
 This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
 CONTRACTOR: _____
 BY: _____ TITLE: _____
 DATE: _____

2. DATA TRANSFERRED BY: _____
 COMPANY: _____
 DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
 DATA TRANSFER CHECKED BY: _____
 COMPANY: _____
 BY: _____ TITLE: _____
 DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE
 WATER & WASTEWATER UTILITY
 WONDER PARK SEWER UPGRADE PHASE III

PROJECT LIMITS

HORIZ SCALE: N/A	DATE: APR 2014	GRID: SW1237	G3 of G3	3 of 27
VERT SCALE: N/A	PROJ. ID.: 000006490 (SWR)			

Horizontal Control

Coordinate System:
This project is located entirely within the Anchorage Bowl 2000 adjustment, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the Alaska Department of Transportation.

Basis of Coordinates:

The Basis of Coordinates is NGS Station O'Malley, located near the intersection of the New Seward Highway and O'Malley Road. Said station has Anchorage Bowl 2000 coordinates of 303939.2310 N, 353362.5446 E. U.S. Survey Feet.

Basis of Bearings:

The Basis of Bearings is a local plane bearing between NGS Station O'Malley and NGS Station Loop 2 USE RM 3 1964. NGS Station Loop 2 USE RM 3 1964 bears N 01°43'26.4" E a distance of 49488.4476 feet from NGS Station O'Malley. NGS Station Loop 2 USE RM 3 1964 has Anchorage Bowl 2000 coordinates of 353405.2778 N, 354851.3982 E. U.S. Survey Feet.

Translation Parameters:

To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +2,296,868.6878 N U.S. Survey Feet, +1,312,517.4904 E U.S. Survey Feet, and scale using 0.9998910192.

Vertical Control

Vertical control is based on the MOA Benchmark CB 6B, Elevation = 177.05 feet (GAAB), a brass cap set vertically in the northwest wall of the boiler room of Wonder Park Elementary School, as described on page D-6 of the MOA Benchmark Book. Datum is (U.S.C. & G.S.) M.S.L. 1972 Adjusted. Control Point number 351.

General Survey Notes

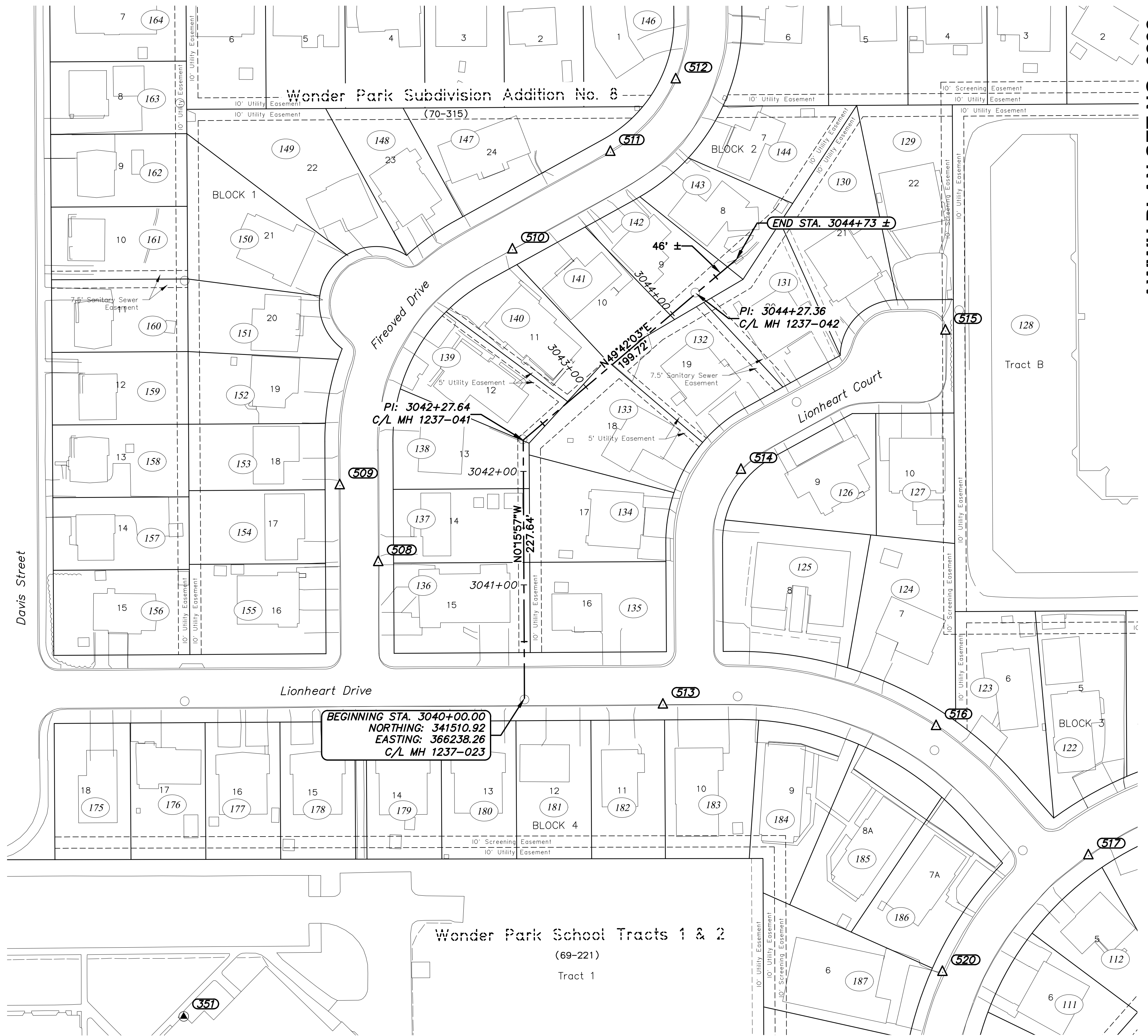
- Phase II field survey was performed by CRW Engineering Group, LLC from June 25, 2012 to November 1, 2012. Phase III field survey was performed from October 24 to November 2, 2013. Field survey information for both phases of this project is located in the following CRW Engineering Group, LLC field books: Field Book No. 80, pages 43 through 71, Field Book No. 97, pages 1 through 56, and Field Book No. 98, pages 1 through 31.
- Underground street light lines exist within the project area.
- A title search was not performed. Easements of record other than those shown on the recorded plats are not shown hereon.
- All disturbed property corners shall be replaced by the contractor in accordance with Special Provision 65.02, Article 2.1 Project Control.

Horizontal Control			
Point No	Northing	Easting	Description
508	341630.74	366109.61	1" Brass Plug "CRW CONTROL" set in concrete curbline
509	341698.43	366075.67	1" Brass Plug "CRW CONTROL" set in concrete curbline
510	341906.15	366227.85	1" Brass Plug "CRW CONTROL" set in concrete curbline
511	341992.20	366314.17	1" Brass Plug "CRW CONTROL" set in concrete curbline
512	342056.08	366371.82	1" Brass Plug "CRW CONTROL" set in concrete curbline
513	341505.15	366360.49	1" Brass Plug "CRW CONTROL" set in concrete curbline
514	341712.02	366429.30	1" Brass Plug "CRW CONTROL" set in concrete curbline
515	341834.63	366609.48	1" Brass Plug "CRW CONTROL" set in concrete curbline
516	341486.21	366601.25	1" Brass Plug "CRW CONTROL" set in concrete curbline
517	341372.30	366735.47	1" Brass Plug "CRW CONTROL" set in concrete curbline
520	341269.55	366606.84	1" Brass Plug "CRW CONTROL" set in concrete curbline

Vertical Control				
Point No	Northing	Easting	Elevation	Description
351	341231	365938	177.05	MOA Benchmark CB 6B

LEGEND

- Existing Copperweld
- Existing Benchmark
- Control set by CRW
- Control Point Number
- Parcel ID Number



PLOT DATE: 3/31/2014 10:12 AM

PLOT SCALE:

ACAD FILE: J:\subarea\10313.02 Wonder Park Sewer Phase III\00 CAD\01 Working Set\02 Survey\03 Survey Control\10313.02 SCS.dwg

AWWU PLAN SET NO. 9892

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE HORZ SCALE: 1"=50' VERT SCALE: N/A	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						
PLAN CHECK					REVISIONS				

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

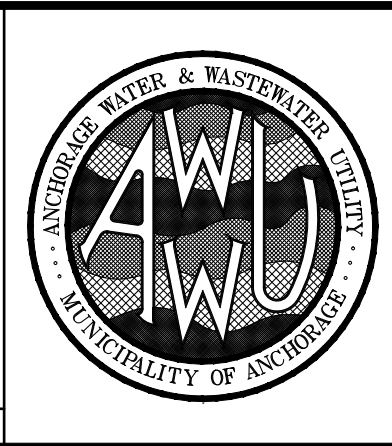
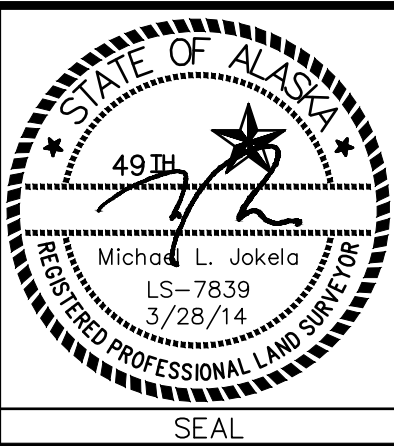
1. DATA PROVIDED BY: _____
This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
CONTRACTOR: _____ TITLE: _____
DATE: _____

2. DATA TRANSFERRED BY: _____
DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
DATA TRANSFER CHECKED BY: _____
COMPANY: _____ TITLE: _____
BY: _____ DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY

WONDER PARK SEWER UPGRADE PHASE III

**SURVEY CONTROL
DIG LOCATION NO. 14**

HORZ SCALE: GRAPHIC
VERT SCALE: N/A
DATE: APR 2014
GRID: SW1237
PROJ. ID.: 000006490 (SWR)

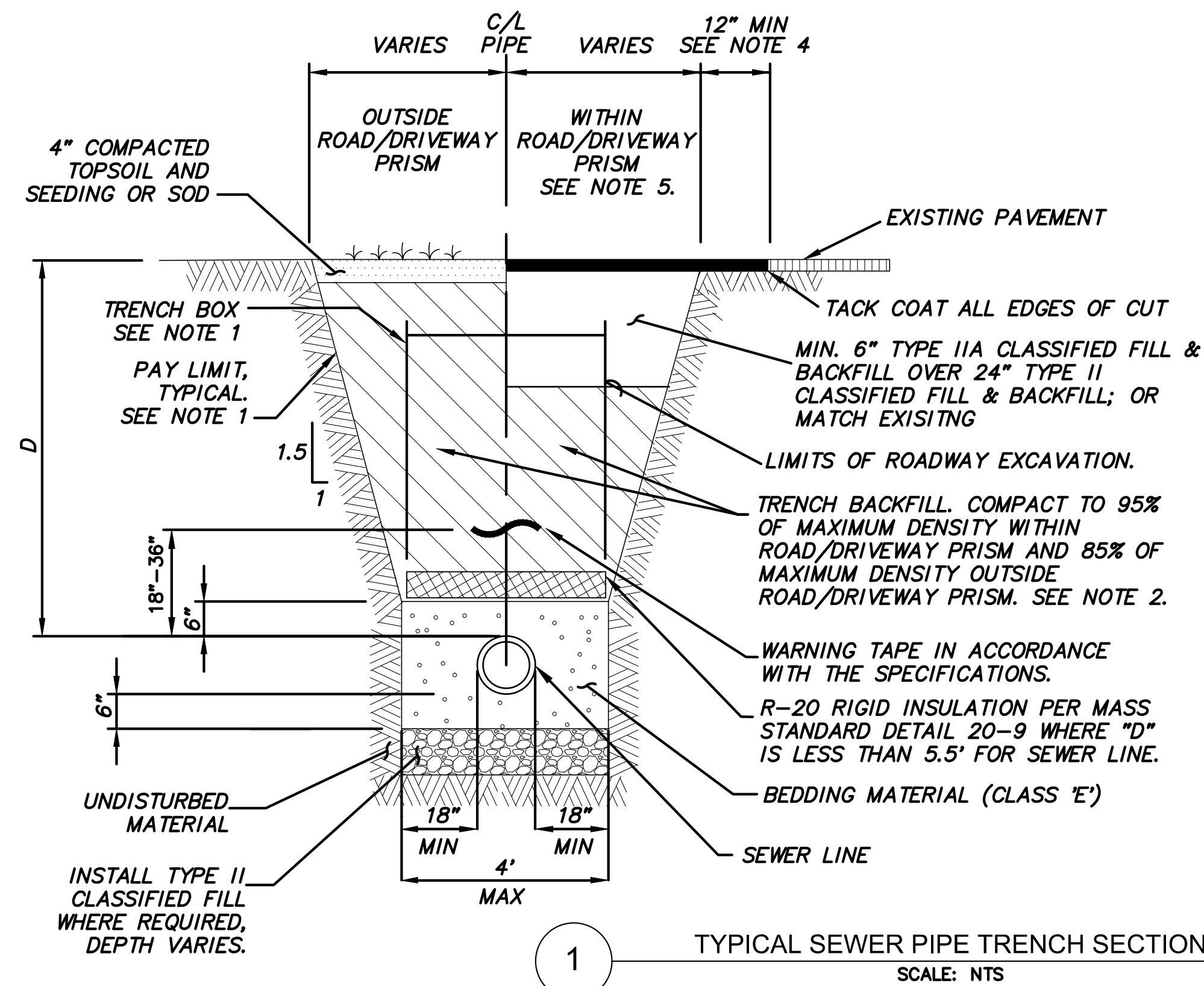
V1 of 4
1 of 27

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE INSTALLED AS SPECIFIED IN THE MOST CURRENT EDITIONS OF THE MUNICIPALITY OF ANCHORAGE (MOA) STANDARD SPECIFICATIONS (HEREINAFTER REFERRED TO AS MASS); THE AWWU DESIGN AND CONSTRUCTION PRACTICES MANUAL (DCPM); AND THE SPECIAL PROVISIONS.
- MAINTAIN A MINIMUM OF TEN (10) FEET HORIZONTAL AND EIGHTEEN (18) INCHES VERTICAL SEPARATION BETWEEN WATER AND SANITARY OR STORM SEWER MAINS AND SERVICES. SANITARY AND STORM SEWER PIPE JOINTS SHALL BE PLACED AT LEAST NINE (9) FEET FROM ANY WATERLINE CROSSING.
- MAINTAIN A MINIMUM OF 36-INCHES OF VERTICAL SEPARATION BETWEEN ANY STORM SEWER (STORM DRAIN OR FOOTING DRAIN) AND WATERLINE (MAINS OR SERVICES) OR SANITARY SEWER (MAINS OR SERVICES). IF 36-INCHES CANNOT BE MAINTAINED, PROVIDE A MINIMUM R-20 INSULATION.
- MOST PROPERTY LINES SHOWN WERE NOT SURVEYED BUT WERE OBTAINED FROM MUNICIPAL GRID MAPS. CONTRACTOR TO VERIFY ROW, EASEMENT, AND TCP BOUNDARIES PRIOR TO BEGINNING WORK.
- HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL VERIFY AND RECORD THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD AND RECORD ANY CHANGES ON THE CONTRACTOR RECORD DRAWINGS.
- TOPOGRAPHIC FEATURES WERE OBTAINED FROM AERIAL IMAGERY BY AEROMAP. THEIR LOCATIONS ARE NOT EXACT, AND/OR ITEMS MAY BE MISSING. CONTRACTOR TO VERIFY LOCATION AND EXISTENCE OF ALL FEATURES IN AND AROUND THE WORK SITES. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED PROPERTY, INCLUDING DRAINAGE SWALES, DISTURBED BY CONTRACT ACTIVITIES TO PRECONSTRUCTION CONDITION OR AS SHOWN ON THE PLANS.
- IN CASE OF CONFLICT BETWEEN STATIONING OR DIMENSIONED LOCATION OF PIPE OR FITTINGS, USE DIMENSIONED LOCATIONS RELATIVE TO THE CENTERLINE AND PROPERTY LINE. THE DIMENSIONED LOCATIONS SHALL GOVERN.
- THE CONTRACTOR SHALL RECORD SURVEY NOTES IN A FORMAT SIMILAR TO THAT SHOWN IN MASS DIVISION 65 FOR SUBMITTAL WITH RECORD DRAWING PLANS PRIOR TO CONTRACT FINAL PAYMENT.
- ALL WATER/SEWER PIPE INSULATION SHALL BE RIGID BOARD, HIGH DENSITY POLYSTYRENE MIN. 60 P.S.I., FOR UNDERGROUND INSTALLATIONS EQUIVALENT TO R-20.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS AS NECESSARY TO COMPLY WITH FEDERAL, STATE, AND MUNICIPAL LAWS THAT PROHIBIT UNPERMITTED DISCHARGE OF POLLUTANTS, INCLUDING SEDIMENTS, THAT ARE A RESULT OF EROSION AND OTHER CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CONDUCT ALL WORK SO SEDIMENT IS NOT TRANSPORTED ONTO THE ROADWAY OR ADJACENT PROPERTY. AT A MINIMUM, THE CONTRACTOR SHALL SWEEP UP ANY SEDIMENT TRACKED ONTO PAVED SURFACES IN PUBLIC RIGHT-OF-WAY WITHIN 24 HOURS OF THE TRACKING TO MINIMIZE THE WASH-OFF OF SEDIMENT INTO THE STORM DRAINS OR WATERWAYS.
- WATER RESULTING FROM CONTRACTOR'S DEWATERING EFFORT MAY NOT BE PUMPED OR OTHERWISE DIVERTED INTO EXISTING STORM DRAINS UNLESS PERMITS ARE OBTAINED BY THE CONTRACTOR, INCLUDING BUT NOT LIMITED TO, THOSE REQUIRED BY THE MOA STORM WATER PLAN REVIEW OFFICE. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE ALLOWED TO DIVERT WATER FROM AN EXCAVATION ONTO ROADWAYS. CONTRACTOR SHALL PROVIDE A DISPOSAL SITE FOR EXCESS WATER AND SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS AND APPROVALS. CONTRACTOR SHALL PROVIDE COPIES OF NECESSARY PERMITS AND APPROVALS TO THE MOA RIGHT OF WAY PERMIT OFFICE.
- "BOP" IS DEFINED AS THE OUTSIDE BOTTOM OF PIPE. INVERT "INV" IS DEFINED AS THE INSIDE BOTTOM OF PIPE.
- "REMOVE AND REPLACE" OR "R&R" WHERE SHOWN ON THE DRAWINGS MEANS TO REMOVE MATERIALS AND TO FURNISH AND INSTALL NEW MATERIALS.
- SKEW ALL ROAD ASPHALT JOINTS PER MASS SECTION 40.06, ARTICLE 6.5K.
- AERIAL PHOTOGRAPHY WAS TAKEN BY PICTRONICS IN 2012.
- SEE LANDSCAPING SHEETS FOR VEGETATION REMOVAL & ALSO PROPOSED LANDSCAPING IMPROVEMENTS.
- CERTAIN QUANTITIES IN THE BID TAB WERE INCREASED TO COVER ANTICIPATED WORK THAT MAY BE DONE AS SEWER PIPE DESIGN-BUILD WORK.
- WATER KEY MAP IS INCLUDED IN SECTION XI OF THE CONTRACT SPECIFICATIONS.

SEWER NOTES

- AWWU AND EXISTING CUSTOMERS SHALL BE NOTIFIED SEVENTY-TWO (72) HOURS IN ADVANCE OF SANITARY SEWER SERVICE INTERRUPTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO BYPASS PUMP THE SANITARY SEWER SERVICE FLOWS IF THE OUTAGE EXCEEDS 6-HOURS. THE CONTRACTOR SHALL HAVE A BYPASS SANITARY SEWAGE FLOW PLAN REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO INTERRUPTION.
- SEWER MAIN STATIONING, IF GIVEN, IS PIPE CENTERLINE STATIONING.
- LOCATION OF SANITARY SEWER MANHOLES WHERE STATIONING INFORMATION IS NOT PROVIDED IS APPROXIMATE AND IS BASED ON CCTV DATA AND RECORD DRAWING INFORMATION. ACTUAL LOCATION MAY VARY.
- LOCATION OF EXISTING SEWER SERVICES IS APPROXIMATE AND IS BASED ON CCTV DATA, CONNECT CARDS, AND RECORD DRAWING INFORMATION. ACTUAL LOCATION MAY VARY.
- ALL MANHOLES SHALL HAVE A MINIMUM OF ONE SIX INCH (6") GRADE RING. MAXIMUM GRADE RING ADJUSTMENT SHALL NOT EXCEED EIGHTEEN INCHES (18").
- SANITARY SEWER SERVICES SHALL BE 4-INCH DUCTILE IRON PIPE CLASS 50 UNLESS NOTED ON PLANS WITH A MINIMUM SLOPE FOR 4-INCH SERVICES TO BE 2%.
- SEWER SERVICES SHALL BE PLACED NO CLOSER THAN: 15 FEET HORIZONTALLY MEASURED TO ANY FIRE HYDRANT OR FIRE HYDRANT LEG; 10 FEET HORIZONTALLY MEASURED TO ANY WATER MAIN, WATER SERVICE, STORM SEWER, FOOTING DRAIN, STREET LIGHT, TRANSFORMER PAD, ELECTRICAL/TELEPHONE/CABLE BOX; AND 5 FEET HORIZONTALLY MEASURED TO ANY SIDE LOT LINE.
- THE CONTRACTOR SHALL RELOCATE ANY SEWER SERVICE CONNECTIONS INSTALLED WITH LESS THAN MINIMUM STANDARD DISTANCES PRIOR TO ACCEPTANCE BY AWWU.
- PRIOR TO INSTALLATION OF NEW PIPING, CONTRACTOR IS TO VERIFY SEWER SERVICE AND MAIN ELEVATIONS CLEARANCE BENEATH/ABOVE STORM DRAIN AND/OR WATER MAIN PIPING. NOTIFY ENGINEER IMMEDIATELY IF CONFLICTS EXIST.
- PROVIDE SEWER FLOW CONTROL DURING ALL SEWER REMOVAL AND REPLACEMENT WORK. SEE SPECIFICATIONS.
- SEWER SERVICE LATERALS ARE ONLY SHOWN WHERE ANTICIPATED WORK OTHER THAN CLEANING AND PIPE INSPECTION IS TO TAKE PLACE. THIS WORK INCLUDES PIPE REMOVAL, TRENCHLESS SPOT REPAIRS, AND CIPP LINING.
- CONTRACTOR SHALL INSTALL RESTRAINED FITTINGS ON ALL MECHANICAL JOINTS.



SEWER PIPE TRENCH SECTION NOTES

- TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH ALL LOCAL, STATE, AND OSHA REGULATIONS AND REQUIREMENTS. INDICATED TRENCH WALL SLOPES AND DIMENSIONS ARE FOR PAY QUANTITY DETERMINATIONS ONLY. IT IS ASSUMED THAT A TRENCH BOX WILL BE UTILIZED.
- REUSE EXCAVATED TRENCH MATERIAL MEETING TYPE III CLASSIFIED OR BETTER OR AS APPROVED BY THE ENGINEER. NATIVE TRENCH MATERIAL NOT MEETING THESE REQUIREMENTS SHALL BE REMOVED AND REPLACED WITH TYPE II CLASSIFIED MATERIAL.
- REMOVE AND DISPOSE OF ALL ORGANIC MATERIALS IN ACCORDANCE WITH MASS SECTION 20.13.
- IN PREPARATION FOR AND IMMEDIATELY PRIOR TO PAVING, CONTRACTOR SHALL SAW CUT AND REMOVE AN ADDITIONAL 12 INCHES FROM EXISTING PAVEMENT EDGE. THE ENGINEER MAY REQUIRE MORE THAN 12 INCHES ADDITIONAL CUT IF THE EXISTING PAVEMENT HAS BEEN LIFTED IN THE REMOVAL PROCESS, IF THE JOINT DOES NOT OCCUR ON UNDISTURBED MATERIAL, OR IF THE JOINT IS LOCATED WITHIN THE TRAVEL LANE.
- WITHIN PAVED ROADS: MIN. 2" AC PAVEMENT (CLASS E) OVER 2" LEVELING COURSE, OR MATCH EXISTING. WITHIN ALLEYS: MIN. 3" LEVELING COURSE COMPACTED TO 95% MAX. DENSITY.

1 TYPICAL SEWER PIPE TRENCH SECTION
SCALE: NTS

PLOT DATE: 3/31/2014 10:13 AM
PLOT SCALE:
ACAD FILE: j:\substation\03013.02 Wonder Park Sewer Phase III\00 CAD\01 Working Set\01 Civil\03013.02 Sewer Key Map.dwg

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE HORZ SCALE: N/A VERT SCALE: N/A	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						
PLAN CHECK					REVISIONS				

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

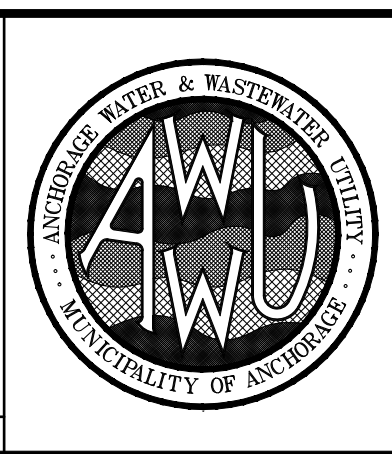
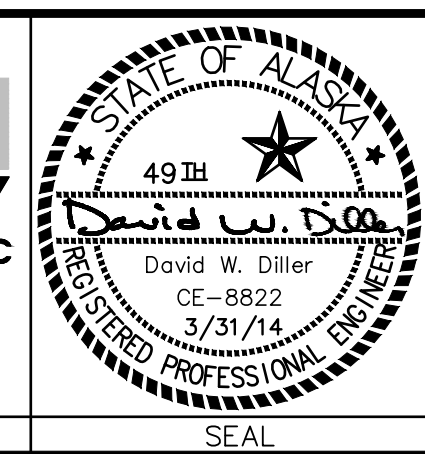
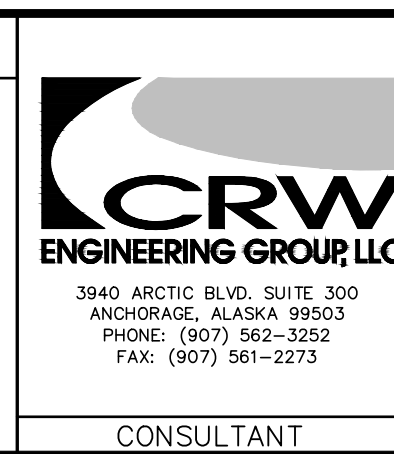
1. DATA PROVIDED BY: _____
This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
CONTRACTOR: _____
BY: _____ TITLE: _____
DATE: _____

2. DATA TRANSFERRED BY: _____
COMPANY: _____
DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
DATA TRANSFER CHECKED BY: _____
COMPANY: _____
BY: _____ TITLE: _____
DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY			
WONDER PARK SEWER UPGRADE PHASE III			
NOTES AND TYPICAL TRENCH SECTION			
HORZ SCALE: N/A	DATE: APR 2014	GRID: SW1237	SS1
VERT SCALE: N/A			5 of 27
PROJ. ID.: 000006490 (SWR)			

ACAD FILE: J:\substation\0313.02 Wonder Park Sewer Phase III\00 CAD\01 Working Set\01 Civil\0313.02 Sewer Key Map.dwg PLOT DATE: 3/31/2014 10:13 AM PLOT SCALE:

AWWU PLAN SET NO. 9892

SHEET SS8

SHEET SS7

SHEET SS6

SHEET SS5

SHEET SS4

SHEET SS3



APPROXIMATE SHEET BOUNDARY LINE
SHEET NUMBER, TYP.

DIG LOCATIONS	
#	SHEET NUMBER
1-4	SS9
5-9	SS10
10-12	SS11
13	SS12
14	SS13, SS14, SS15, SS16

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE HORZ SCALE: N/A VERT SCALE: N/A	
DATA	DRAWN BY	CHECKED BY	DATE	REV	DATE	DESCRIPTION	BY
BASE							
TOPOGRAPHY							
PROFILE							
SANITARY SEWER							
STORM SEWER							
WATER							
GAS							
PLAN CHECK		REVISIONS					

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

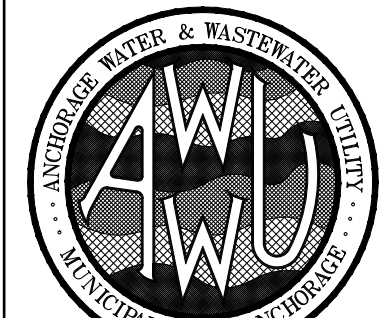
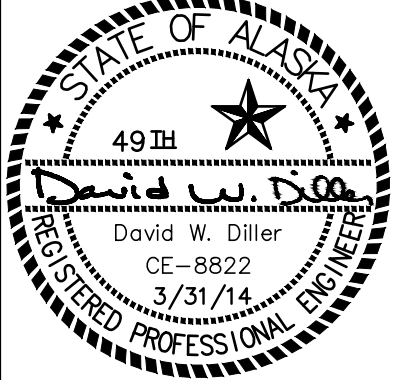
1. DATA PROVIDED BY: _____
This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
CONTRACTOR: _____ TITLE: _____
DATE: _____

2. DATA TRANSFERRED BY: _____
COMPANY: _____
DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
DATA TRANSFER CHECKED BY: _____
COMPANY: _____
BY: _____ TITLE: _____
DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY

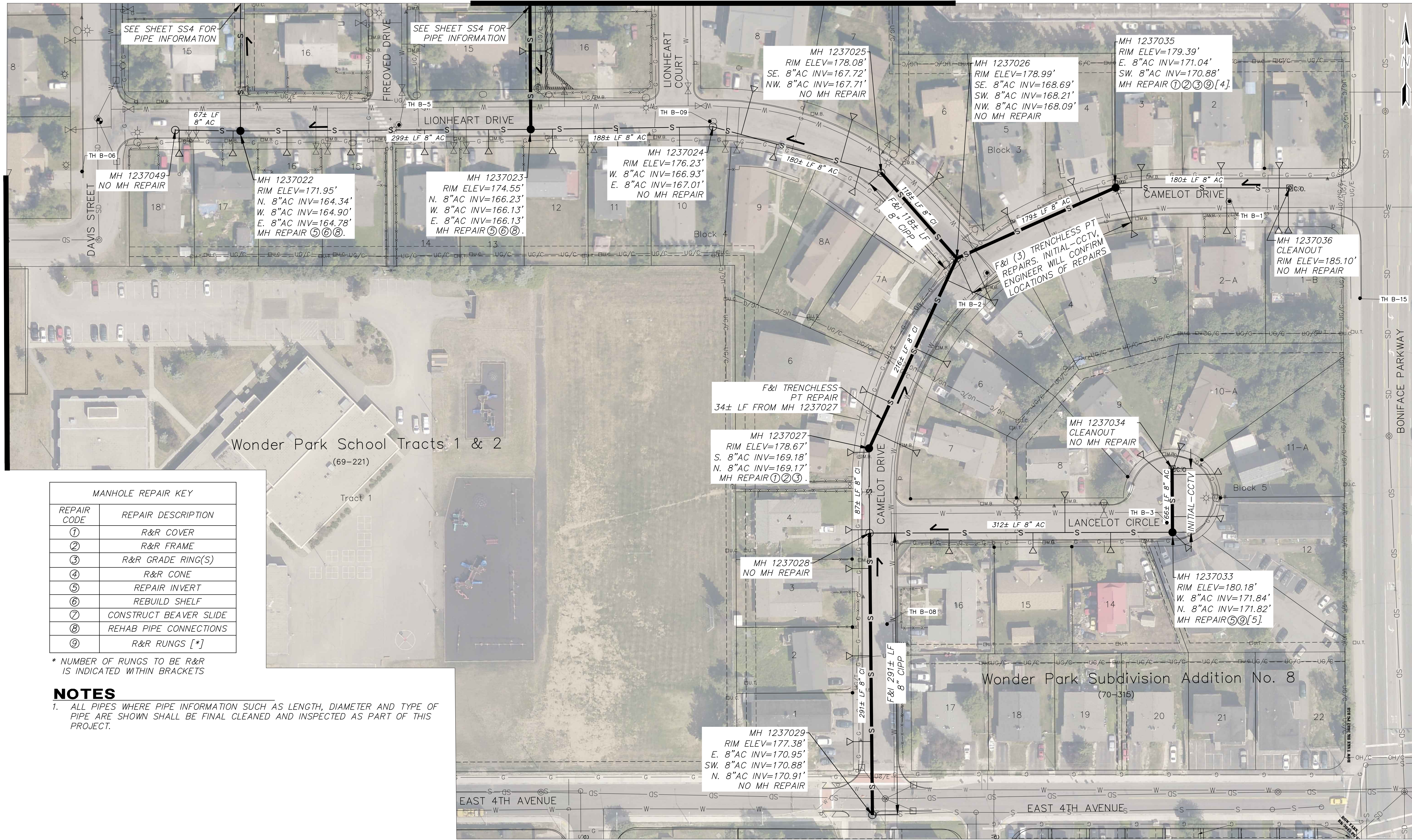
WONDER PARK SEWER UPGRADE PHASE III

SEWER KEY MAP AND SHEET LAYOUT

HORZ SCALE: N/A
VERT SCALE: N/A
DATE: APR 2014
GRID: SW1237
SS2 of SS16
6 of 27
PROJ. ID.: 000006490 (SWR)

SEE SHEET SS4

AWWU PLAN SET NO. 9892



Wonder Park School Tracts 1 & 2
(69-221)

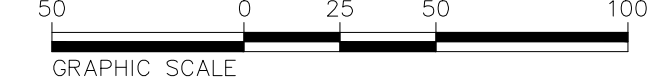
Wonder Park Subdivision Addition No. 8
(70-315)

MANHOLE REPAIR KEY	
REPAIR CODE	REPAIR DESCRIPTION
①	R&R COVER
②	R&R FRAME
③	R&R GRADE RING(S)
④	R&R CONE
⑤	REPAIR INVERT
⑥	REBUILD SHELF
⑦	CONSTRUCT BEAVER SLIDE
⑧	REHAB PIPE CONNECTIONS
⑨	R&R RUNGS [*]

* NUMBER OF RUNGS TO BE R&R IS INDICATED WITHIN BRACKETS

NOTES

- ALL PIPES WHERE PIPE INFORMATION SUCH AS LENGTH, DIAMETER AND TYPE OF PIPE ARE SHOWN SHALL BE FINAL CLEANED AND INSPECTED AS PART OF THIS PROJECT.



VERIFY SCALE

THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.



IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.

FULL SIZE SCALE
HORZ SCALE: 1"=50'
VERT SCALE: N/A

RECORD DRAWING

Note: To be filled out on original drawings upon project completion.

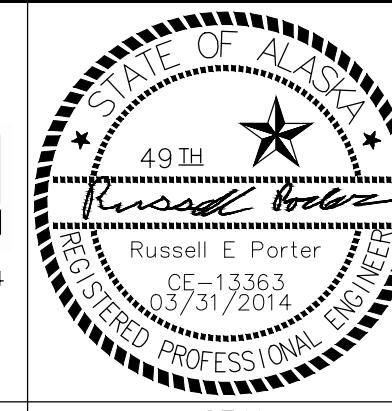
1. DATA PROVIDED BY: _____
 This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
 CONTRACTOR: _____
 BY: _____ TITLE: _____
 DATE: _____

2. DATA TRANSFERRED BY: _____
 COMPANY: _____
 DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
 DATA TRANSFER CHECKED BY: _____
 COMPANY: _____
 BY: _____ TITLE: _____
 DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY

WONDER PARK SEWER UPGRADE PHASE III

**TRENCHLESS SEWER REPAIRS
SOUTHEAST WONDER PARK**

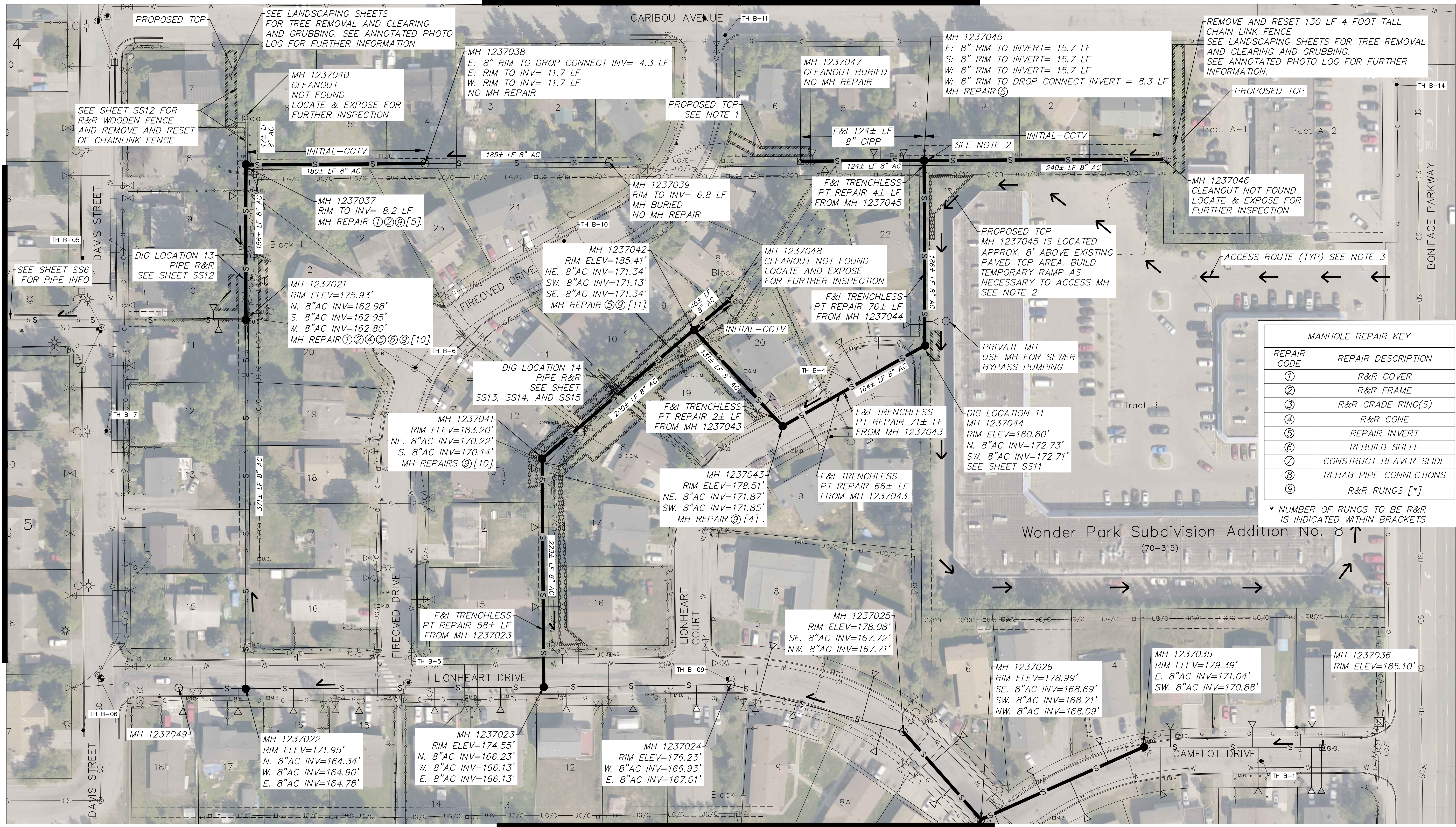
HORZ SCALE: 1"=50'	DATE: APRIL 2014	GRID: SW1237	SS3 of SS16	7 of 27
VERT SCALE: N/A				
PROJ. ID.: 000006490 (SWR)				

ACAD FILE: S:\020 Wonder Park\10 - ACAD Base Sheets\10313.02 Base - Stephi Revised 100% 3-25-2014.dwg

PLOT SCALE:

PLOT DATE: 3/31/2014 6:56 AM

SEE SHEET SS6



MANHOLE REPAIR KEY

REPAIR CODE	REPAIR DESCRIPTION
①	R&R COVER
②	R&R FRAME
③	R&R GRADE RING(S)
④	R&R CONE
⑤	REPAIR INVERT
⑥	REBUILD SHELF
⑦	CONSTRUCT BEAVER SLIDE
⑧	REHAB PIPE CONNECTIONS
⑨	R&R RUNGS [*]

* NUMBER OF RUNGS TO BE R&R IS INDICATED WITHIN BRACKETS

NOTES

- CONTRACTOR SHALL USE EXISTING GATE TO ACCESS MH 1237047. MH IS LOCATED IN THE BACKYARD OF LOT 6. DO NOT DAMAGE EXISTING TREES IN FRONT YARD. SEE ANNOTATED PHOTO LOG FOR FURTHER ACCESS INFORMATION.
- MH 1237045 IS LOCATED IN BACKYARD OF LOT 4. REMOVE AND RESET 130 LF OF 4 FT TALL CHAIN-LINK FENCE. SEE LANDSCAPING SHEETS FOR TREE REMOVAL, TREE REPLACEMENT, AND CLEARING AND GRUBBING.
- CONTRACTOR TO USE ACCESS ROUTE TO GAIN ACCESS TO TCP LOCATED IN TRACT B FOR WORK ON LOT 4. ACCESS ROUTE IS NOT TO BE USED FOR STORAGE OF MATERIALS OR STAGING OF EQUIPMENT. CONTRACTOR SHALL KEEP ONE LANE OF TRAFFIC AT LEAST 12- FEET WIDE OPEN FOR BUSINESS ACCESS TO TRACT B. SEE ANNOTATED PHOTO LOG FOR FURTHER INFORMATION REGARDING ACCESS.
- ALL PIPES WHERE PIPE INFORMATION SUCH AS LENGTH, DIAMETER AND TYPE OF PIPE ARE SHOWN SHALL BE FINAL CLEANED AND INSPECTED.

VERIFY SCALE

THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.

DATA	DRAWN BY	CHECKED BY	DATE
BASE			
TOPOGRAPHY			
PROFILE			
SANITARY SEWER			
STORM SEWER			
WATER			
GAS			

RECORD DRAWING

Note: To be filled out on original drawings upon project completion.

DATE	DESCRIPTION	BY

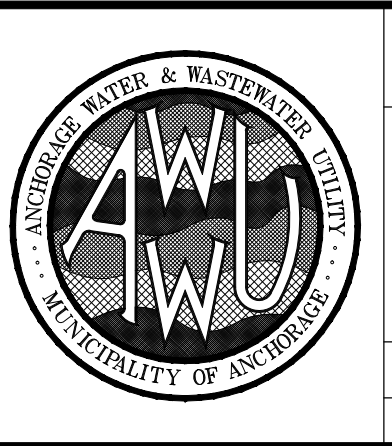
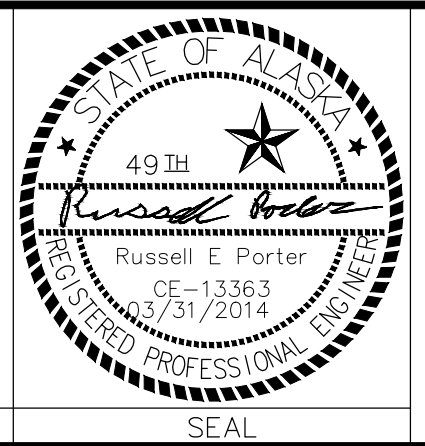
REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.

DATE: _____

Stephi ENGINEERING LLC

3900 ARCTIC BLVD, SUITE 204 ANCHORAGE, ALASKA 99503 TEL: (907) 562-1468



MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY

WONDER PARK SEWER UPGRADE PHASE III

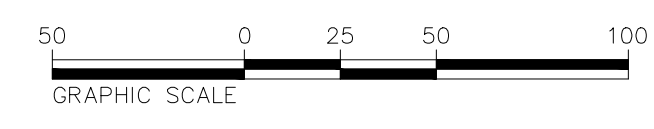
**TRENCHLESS SEWER REPAIRS
EAST WONDER PARK**

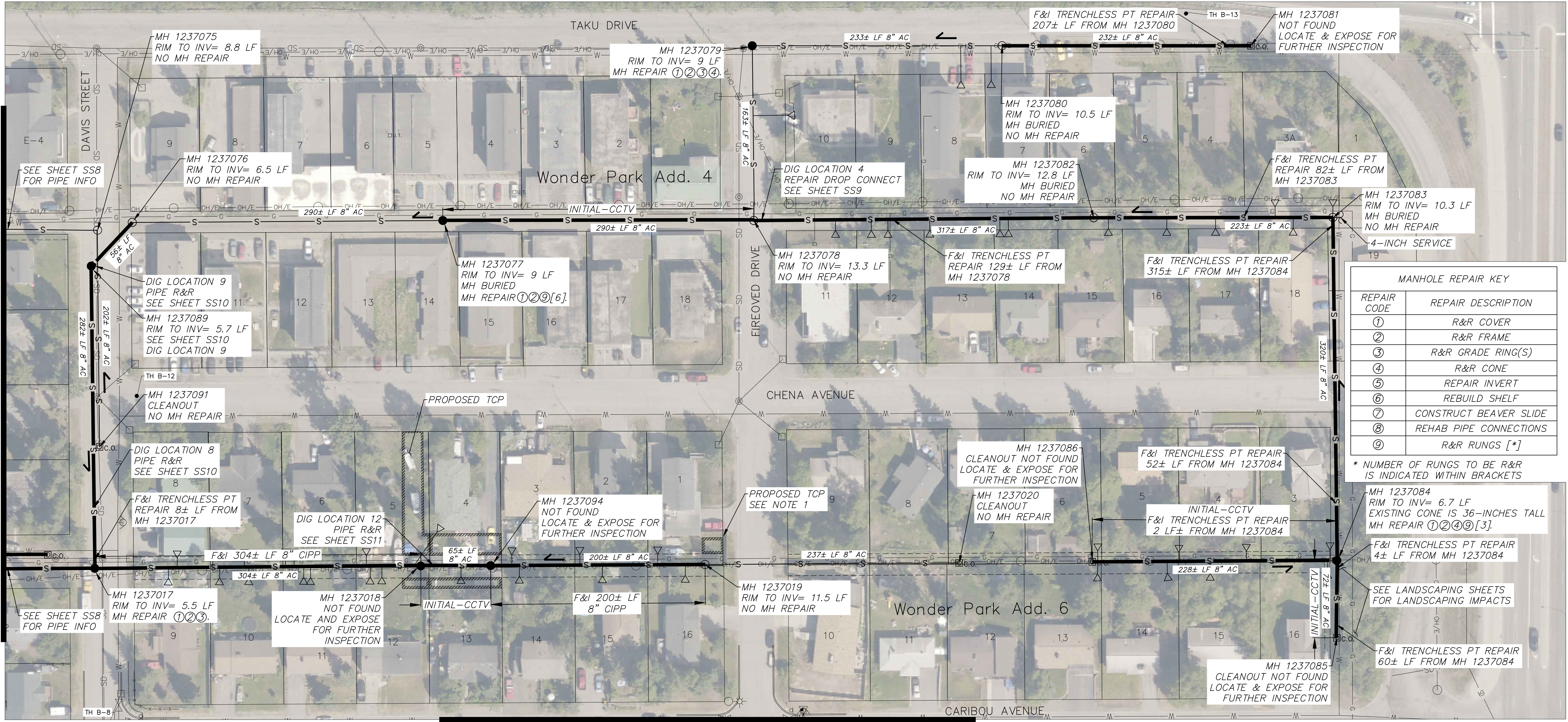
HORIZ SCALE: 1"=50'
VERT SCALE: N/A
DATE: APRIL 2014
GRID: SW1237
PROJ. ID.: 000006490 (SWR)

SS4 of SS16
8 of 27

ACAD FILE: S:\1020 Wonder Park\10 - ACAD\Bases Sheets\10313.02 Base - Stephi Revised 100% 3-25-2014.dwg

SEE SHEET SS7



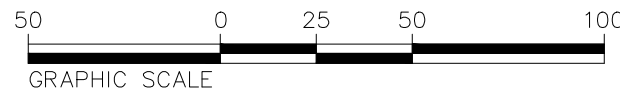


MANHOLE REPAIR KEY	
REPAIR CODE	REPAIR DESCRIPTION
①	R&R COVER
②	R&R FRAME
③	R&R GRADE RING(S)
④	R&R CONE
⑤	REPAIR INVERT
⑥	REBUILD SHELF
⑦	CONSTRUCT BEAVER SLIDE
⑧	REHAB PIPE CONNECTIONS
⑨	R&R RUNGS [*]

* NUMBER OF RUNGS TO BE R&R IS INDICATED WITHIN BRACKETS

NOTES

- CONTRACTOR SHALL ACCESS LOT 1 BY USE OF EXISTING WOODEN GATE. CONTRACTOR SHALL GIVE 48 HOURS NOTICE TO PROPERTY OWNERS PRIOR TO DOING WORK IN LOT 1.
- ALL PIPES WHERE PIPE INFORMATION SUCH AS LENGTH, DIAMETER AND TYPE OF PIPE ARE SHOWN SHALL BE FINAL CLEANED AND INSPECTED AS PART OF THIS PROJECT.



ACAD FILE: S:\020 Wonder Park\10 - ACAD\Base Sheets\10313.02 Base - Stephi Revised 100% 3-25-2014.dwg

VERIFY SCALE

THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.

0" 1"

DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						

PLAN CHECK

RECORD DRAWING

Note: To be filled out on original drawings upon project completion.

1. DATA PROVIDED BY: _____

This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.

CONTRACTOR: _____

BY: _____ TITLE: _____

DATE: _____

2. DATA TRANSFERRED BY: _____

COMPANY: _____

DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.

DATA TRANSFER CHECKED BY: _____

COMPANY: _____

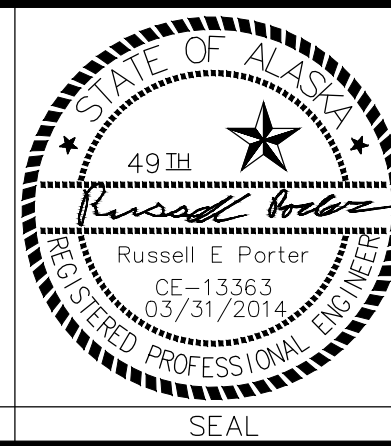
BY: _____ TITLE: _____

DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.

CONSULTANT



MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY

WONDER PARK SEWER UPGRADE PHASE III

**TRENCHLESS SEWER REPAIRS
NORTHEAST WONDER PARK**

HORIZ SCALE: 1"=50'
VERT SCALE: N/A

DATE: APRIL 2014

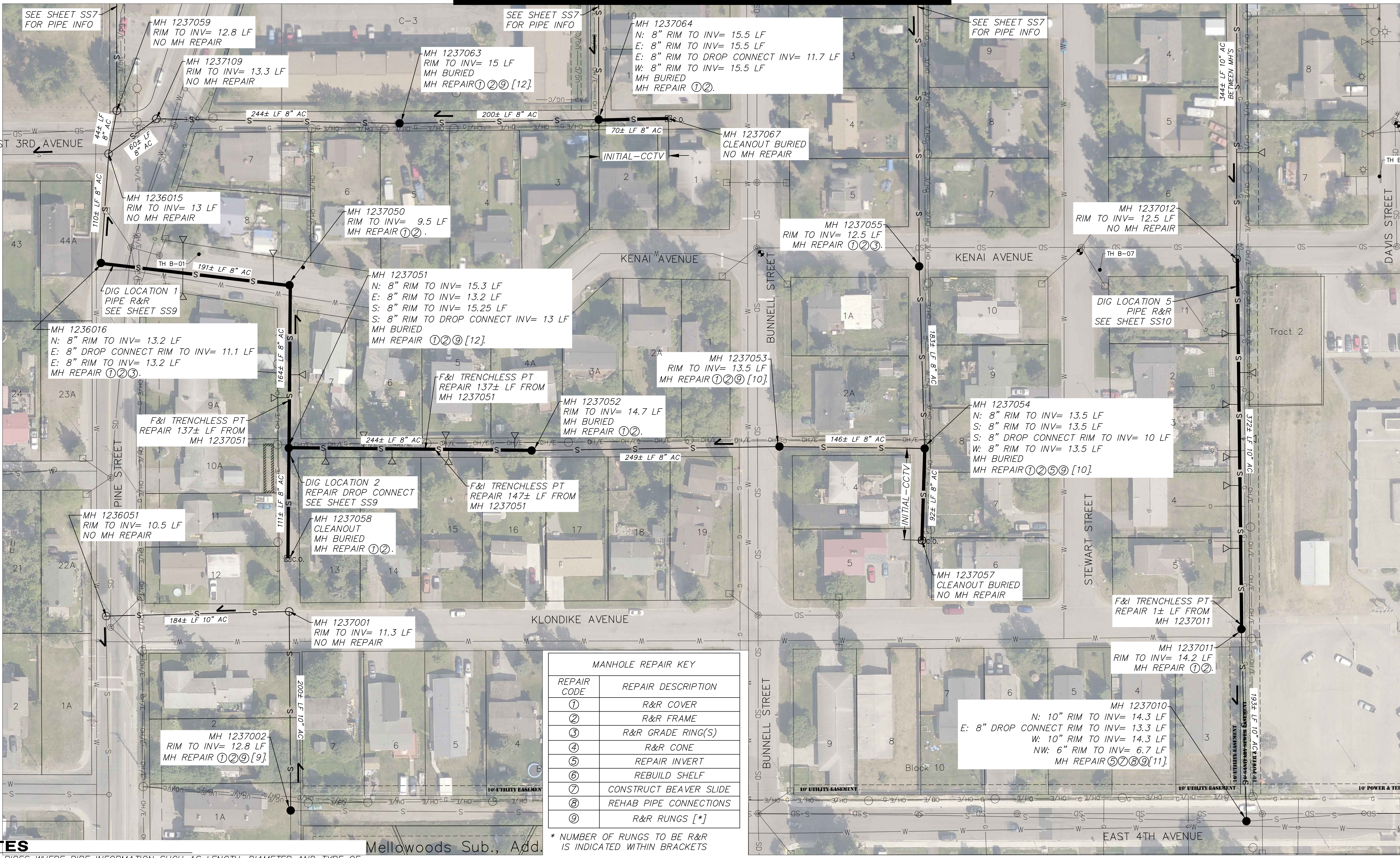
GRID: SW1237

SS5 of SS16

9 of 27

PROJ. ID.: 0000006490 (SWR)

SEE SHEET SS7



MANHOLE REPAIR KEY	
REPAIR CODE	REPAIR DESCRIPTION
①	R&R COVER
②	R&R FRAME
③	R&R GRADE RING(S)
④	R&R CONE
⑤	REPAIR INVERT
⑥	REBUILD SHELF
⑦	CONSTRUCT BEAVER SLIDE
⑧	REHAB PIPE CONNECTIONS
⑨	R&R RUNGS [*]

* NUMBER OF RUNGS TO BE R&R IS INDICATED WITHIN BRACKETS

NOTES

- ALL PIPES WHERE PIPE INFORMATION SUCH AS LENGTH, DIAMETER AND TYPE OF PIPE ARE SHOWN SHALL BE FINAL CLEANED AND INSPECTED AS PART OF THIS PROJECT.

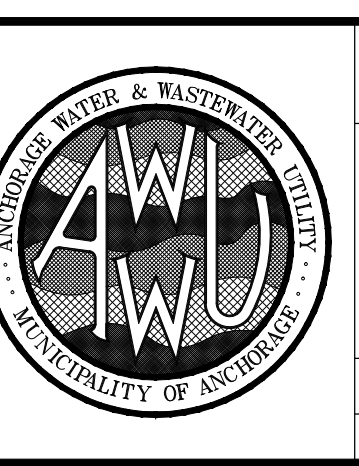
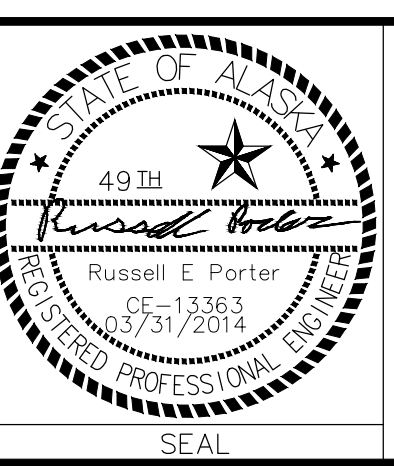
VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	DRAWN BY	CHECKED BY	DATE	REVISION	DATE	DESCRIPTION	BY	DATE	DESCRIPTION
BASE									
TOPOGRAPHY									
PROFILE									
SANITARY SEWER									
STORM SEWER									
WATER									
GAS									
PLAN CHECK				REVISIONS					

RECORD DRAWING		Note: To be filled out on original drawings upon project completion.	
1. DATA PROVIDED BY:	_____	3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.	_____
2. DATA TRANSFERRED BY:	_____	CONTRACTOR:	_____
DATE:	_____	BY:	_____
DATE:	_____	TITLE:	_____
DATE:	_____	DATE:	_____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.

Steph Engineering LLC
3900 ARCTIC BLVD, SUITE 204 ANCHORAGE, ALASKA 99503 TEL: (907) 562-1468



MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY

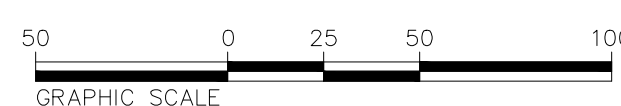
WONDER PARK SEWER UPGRADE PHASE III

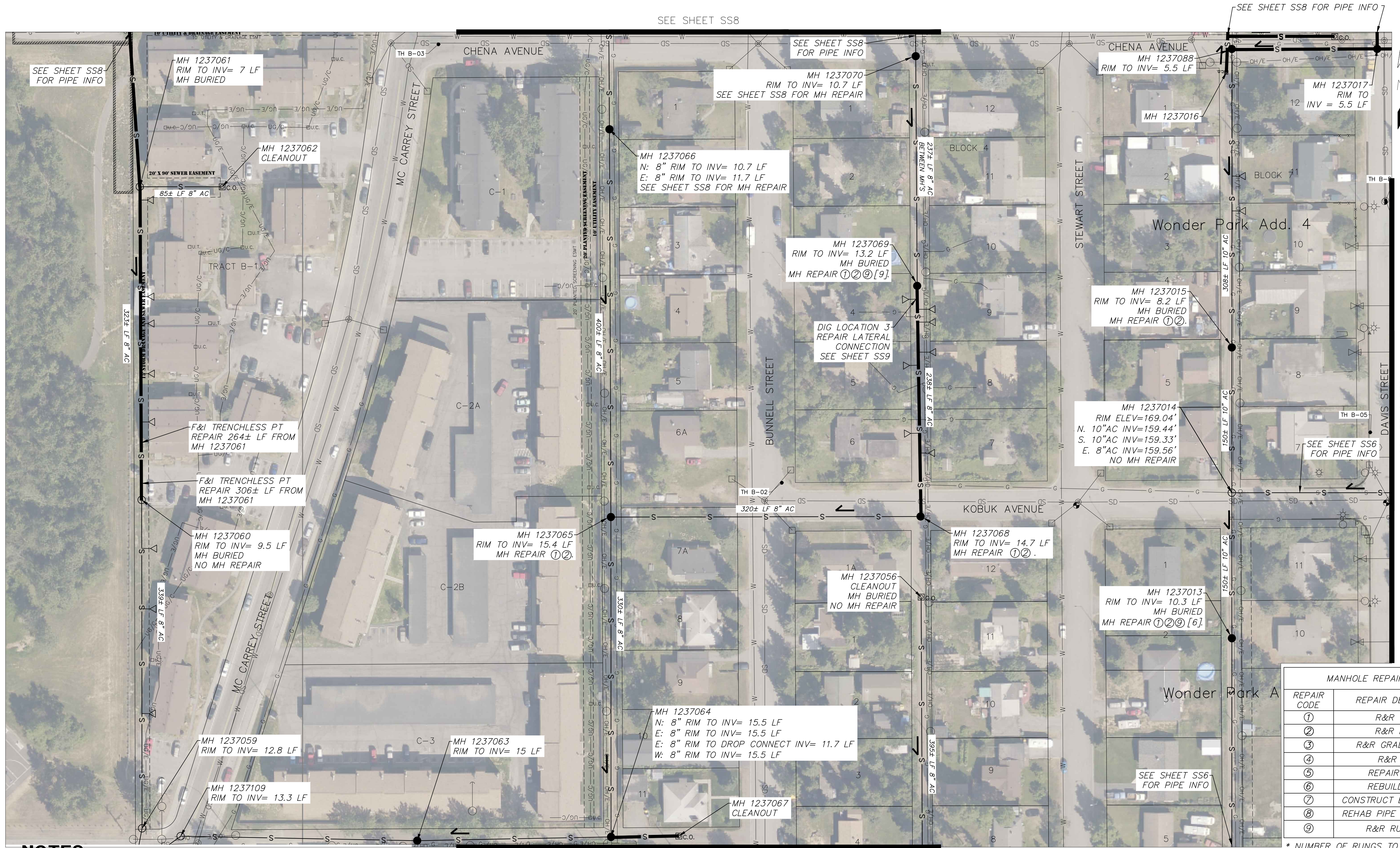
**TRENCHLESS SEWER REPAIRS
SOUTHWEST WONDER PARK**

HORIZ SCALE: 1"=50'
VERT SCALE: N/A
DATE: APRIL 2014
GRID: SW1237
SS6 of SS16
10 of 27
PROJ. ID.: 0000006490 (SWR)

ACAD FILE: S:\1020 Wonder Park\10 - ACAD\Bose Sheets\1031302 Base - Steph Revised 100% 3-25-2014.dwg

SEE SHEET SS3





MANHOLE REPAIR KEY	
REPAIR CODE	REPAIR DESCRIPTION
①	R&R COVER
②	R&R FRAME
③	R&R GRADE RING(S)
④	R&R CONE
⑤	REPAIR INVERT
⑥	REBUILD SHELF
⑦	CONSTRUCT BEAVER SLIDE
⑧	REHAB PIPE CONNECTIONS
⑨	R&R RUNGS [*]

* NUMBER OF RUNGS TO BE R&R IS INDICATED WITHIN BRACKETS

NOTES
 1. ALL PIPES WHERE PIPE INFORMATION SUCH AS LENGTH, DIAMETER AND TYPE OF PIPE ARE SHOWN SHALL BE FINAL CLEANED AND INSPECTED AS PART OF THIS PROJECT.

VERIFY SCALE

THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.

0" — 1"

DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						
PLAN CHECK		REVISIONS							

RECORD DRAWING

Note: To be filled out on original drawings upon project completion.

1. DATA PROVIDED BY: _____

This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.

CONTRACTOR: _____

BY: _____ TITLE: _____

DATE: _____

2. DATA TRANSFERRED BY: _____

COMPANY: _____

DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.

DATA TRANSFER CHECKED BY: _____

COMPANY: _____

BY: _____ TITLE: _____

DATE: _____

REUSE OF DOCUMENTS

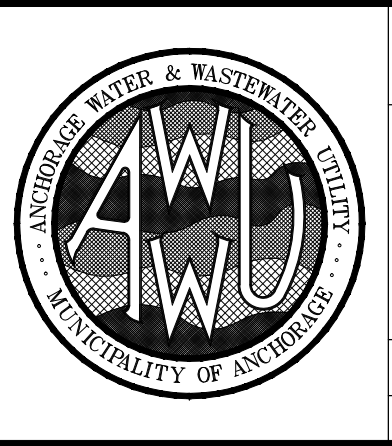
THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.

CONSULTANT

Steph Engineering LLC

3900 ARCTIC BLVD, SUITE 204
 ANCHORAGE, ALASKA 99503
 TEL: (907) 562-1468

49TH
 Russell E. Porter
 REGISTERED PROFESSIONAL ENGINEER
 0575172874



MUNICIPALITY OF ANCHORAGE
 WATER & WASTEWATER UTILITY

WONDER PARK SEWER UPGRADE PHASE III

**TRENCHLESS SEWER REPAIRS
 WEST WONDER PARK**

HORIZ SCALE: 1"=50'
 VERT SCALE: N/A

DATE: APRIL 2014

GRID: SW1237

SS7 of SS16

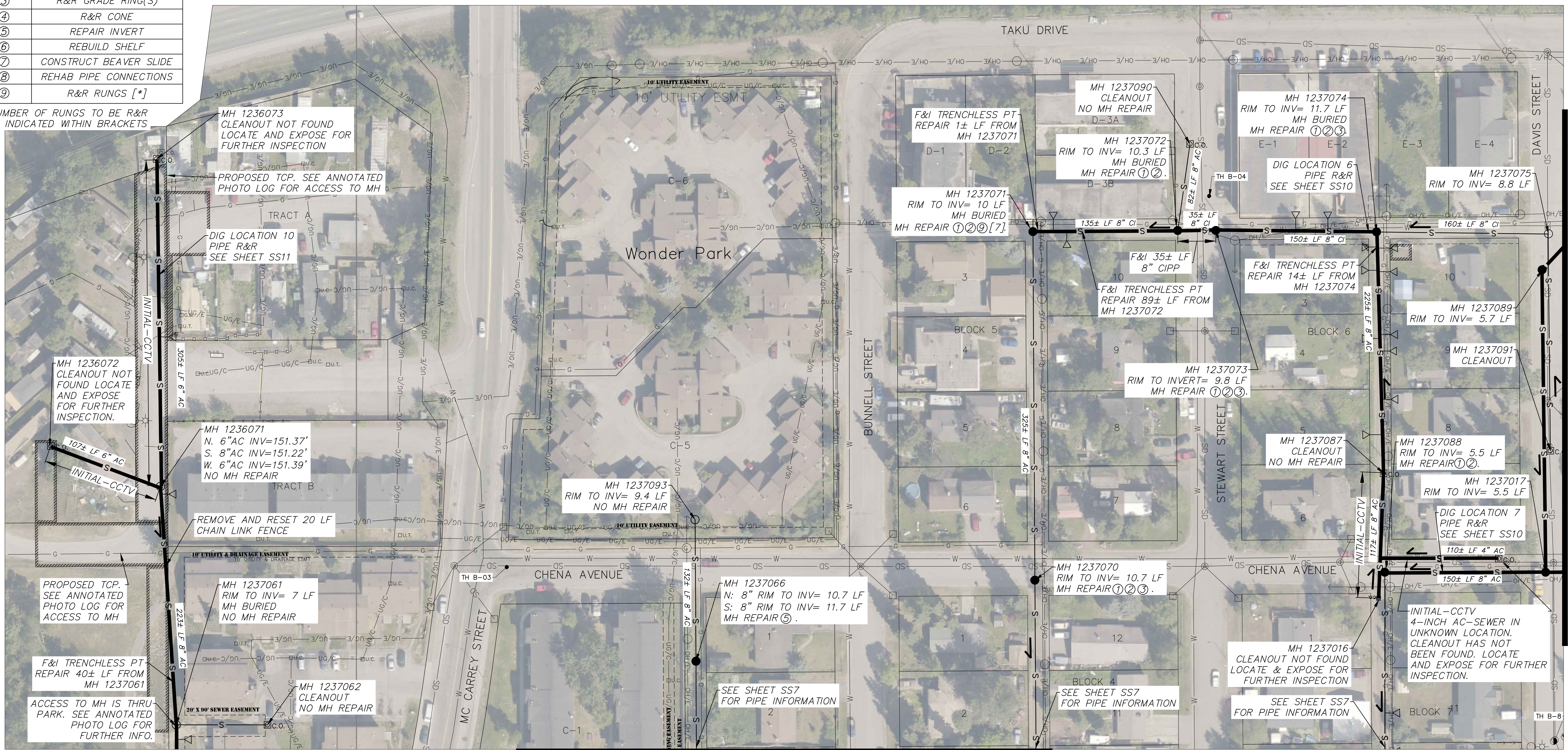
11 of 27

PROJ. ID.: 0000006490 (SWR)

PLOT DATE: 3/31/2014 6:51 AM
 PLOT SCALE:
 ACAD FILE: S:\020 Wonder Park\10 - ACAD\Bases\Sheets\1031302 Base - Steph\Revised 100% 3-25-2014.dwg

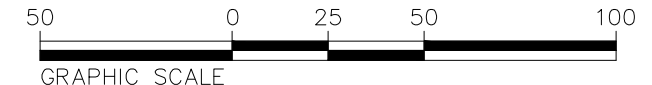
MANHOLE REPAIR KEY	
REPAIR CODE	REPAIR DESCRIPTION
①	R&R COVER
②	R&R FRAME
③	R&R GRADE RING(S)
④	R&R CONE
⑤	REPAIR INVERT
⑥	REBUILD SHELF
⑦	CONSTRUCT BEAVER SLIDE
⑧	REHAB PIPE CONNECTIONS
⑨	R&R RUNGS [*]

* NUMBER OF RUNGS TO BE R&R IS INDICATED WITHIN BRACKETS



NOTES

- ALL PIPES WHERE PIPE INFORMATION SUCH AS LENGTH, DIAMETER AND TYPE OF PIPE ARE SHOWN SHALL BE FINAL CLEANED AND INSPECTED AS PART OF THIS PROJECT.



PLOT DATE: 3/31/2014 6:50 AM
 PLOT SCALE:
 ACAD FILE: S:\020 Wonder Park\10 - ACAD\Bases\Sheets\0313.02 Base - Stephi Revised 100% 3-25-2014.dwg

VERIFY SCALE

THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.

DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						

PLAN CHECK

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

1. DATA PROVIDED BY: _____

This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.

CONTRACTOR: _____

BY: _____ TITLE: _____

DATE: _____

2. DATA TRANSFERRED BY: _____

COMPANY: _____

DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.

DATA TRANSFER CHECKED BY: _____

COMPANY: _____

BY: _____ TITLE: _____

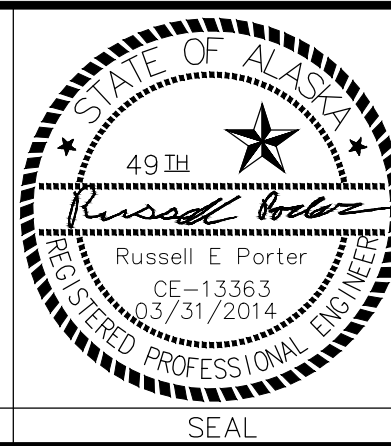
DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.

Stephi ENGINEERING LLC

3900 ARCTIC BLVD, SUITE 204
ANCHORAGE, ALASKA 99503
TEL: (907) 562-1468



MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY

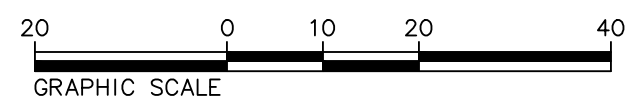
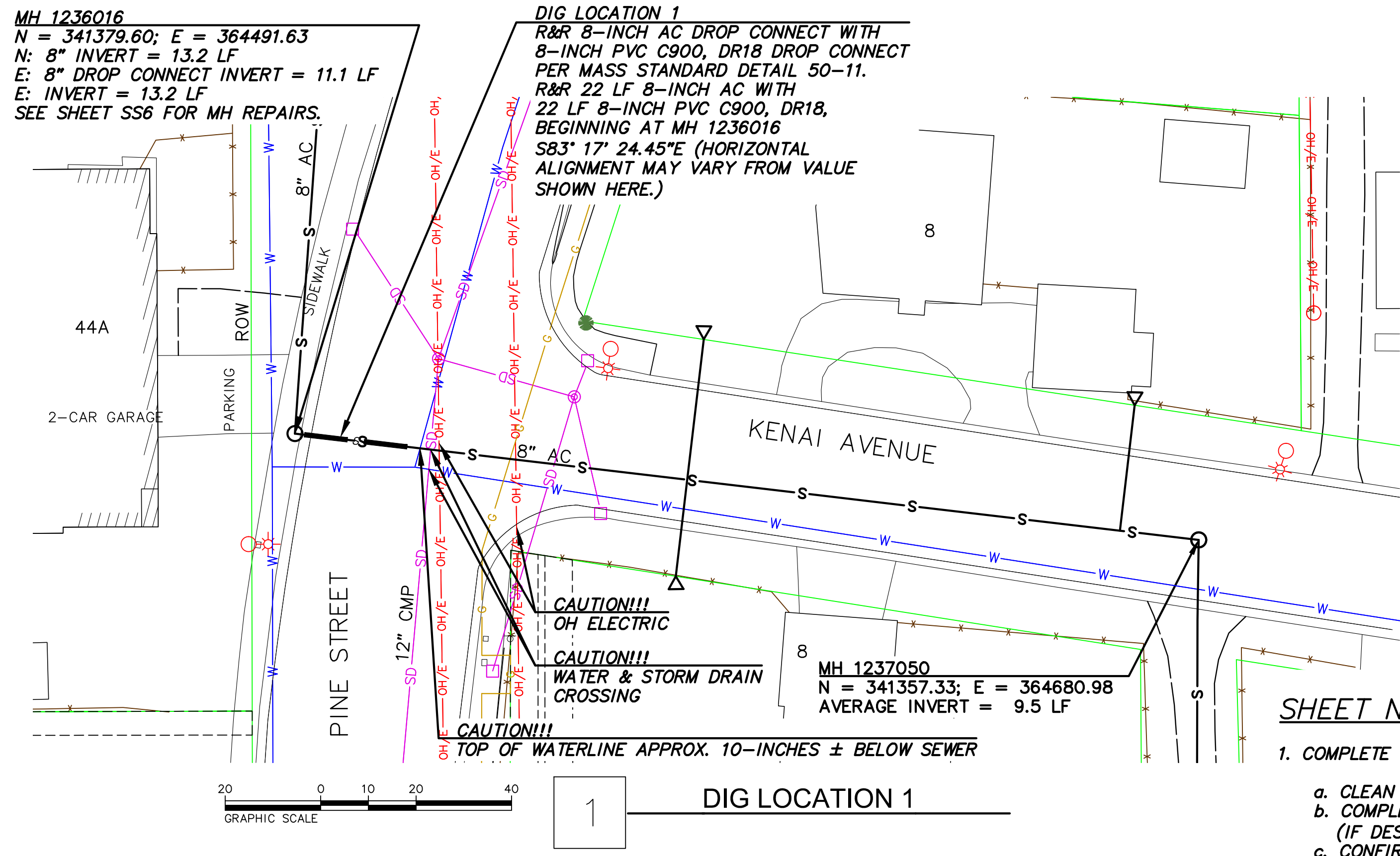
WONDER PARK SEWER UPGRADE PHASE III

**TRENCHLESS SEWER REPAIRS
NORTHWEST WONDER PARK**

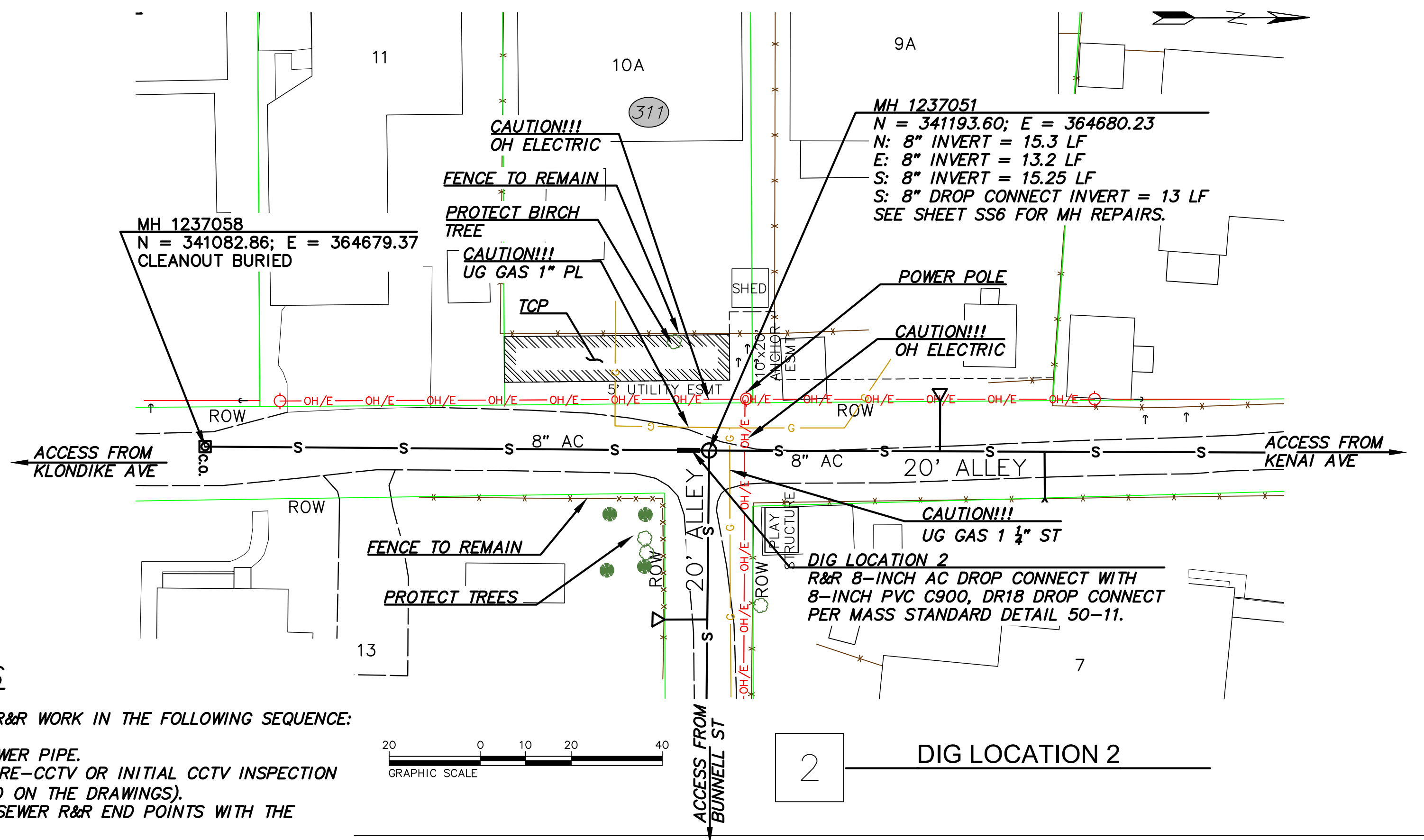
HORIZ SCALE: 1"=50'
VERT SCALE: N/A
DATE: APRIL 2014
GRID: SW1237
SSB of SS16
12 of 27
PROJ. ID.: 000006490 (SWR)

PLOT DATE: 3/31/2014 10:14 AM
PLOT SCALE:

ACAD FILE: J:\subarea\10313.02 Wonder Park Sewer Phase III\10313.02 Sewer Dig Plans.dwg



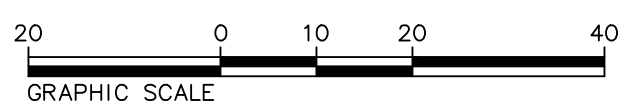
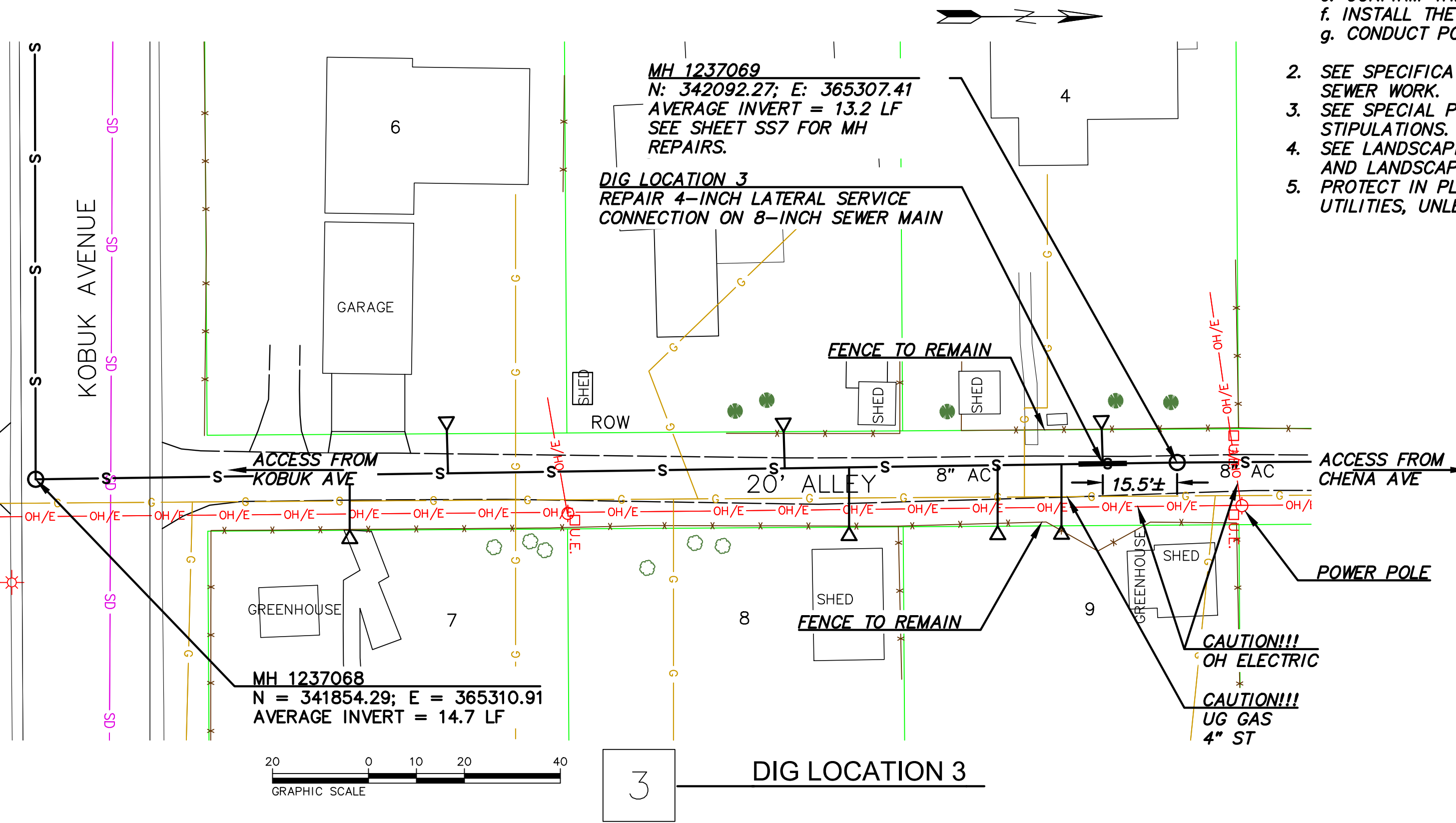
1 DIG LOCATION 1



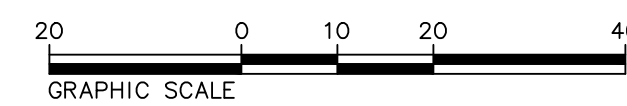
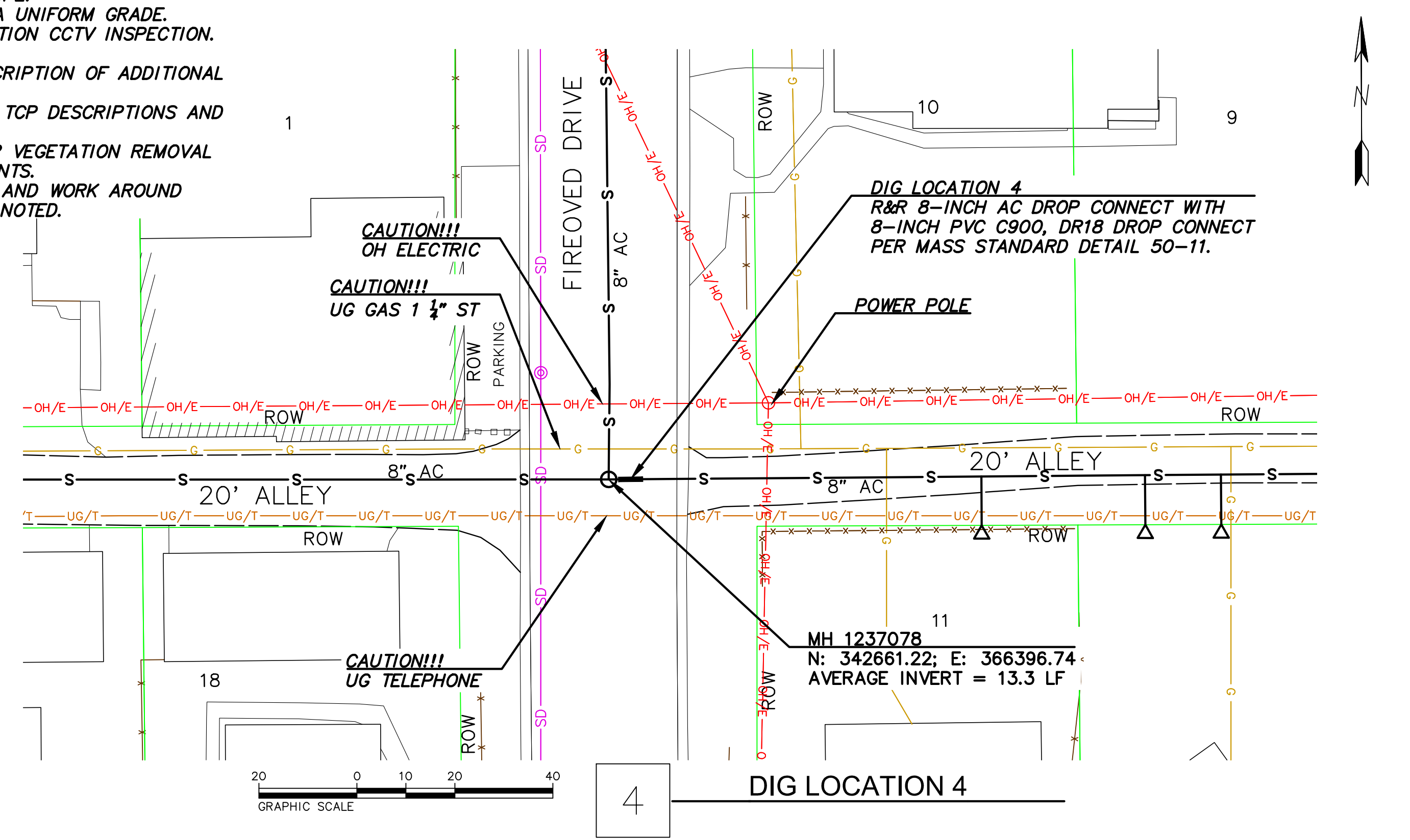
2 DIG LOCATION 2

SHEET NOTES

1. COMPLETE SEWER R&R WORK IN THE FOLLOWING SEQUENCE:
 - a. CLEAN THE SEWER PIPE.
 - b. COMPLETE A PRE-CCTV OR INITIAL CCTV INSPECTION (IF DESIGNATED ON THE DRAWINGS).
 - c. CONFIRM THE SEWER R&R END POINTS WITH THE ENGINEER.
 - d. EXPOSE THE PIPE AT THE ENDS OF THE SEWER R&R SECTION AND MEASURE THE ELEVATIONS.
 - e. CONFIRM THE NEW PIPE SLOPE.
 - f. INSTALL THE NEW PIPE AT A UNIFORM GRADE.
 - g. CONDUCT POST-REHABILITATION CCTV INSPECTION.
2. SEE SPECIFICATIONS FOR DESCRIPTION OF ADDITIONAL SEWER WORK.
3. SEE SPECIAL PROVISIONS FOR TCP DESCRIPTIONS AND STIPULATIONS.
4. SEE LANDSCAPING SHEETS FOR VEGETATION REMOVAL AND LANDSCAPING IMPROVEMENTS.
5. PROTECT IN PLACE, SUPPORT, AND WORK AROUND UTILITIES, UNLESS OTHERWISE NOTED.



3 DIG LOCATION 3



4 DIG LOCATION 4

VERIFY SCALE

THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.



IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.

FULL SIZE SCALE
HORZ SCALE: 1"=20'
VERT SCALE: N/A

RECORD DRAWING

Note: To be filled out on original drawings upon project completion.

1. DATA PROVIDED BY:

This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.

CONTRACTOR: _____ TITLE: _____

DATE: _____
2. DATA TRANSFERRED BY:

DATE: _____
3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.

DATA TRANSFER CHECKED BY: _____

COMPANY: _____

BY: _____ TITLE: _____

DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY

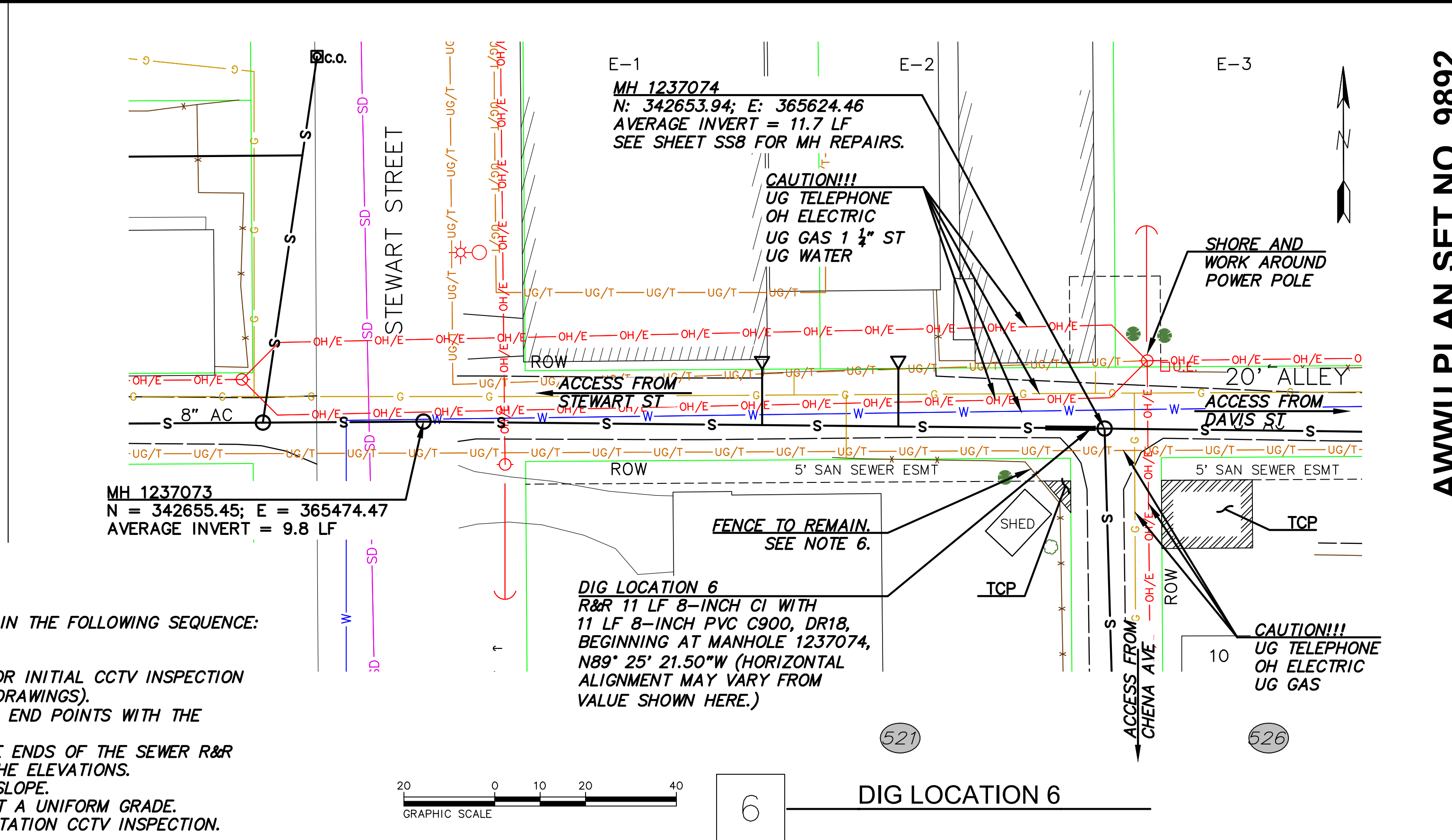
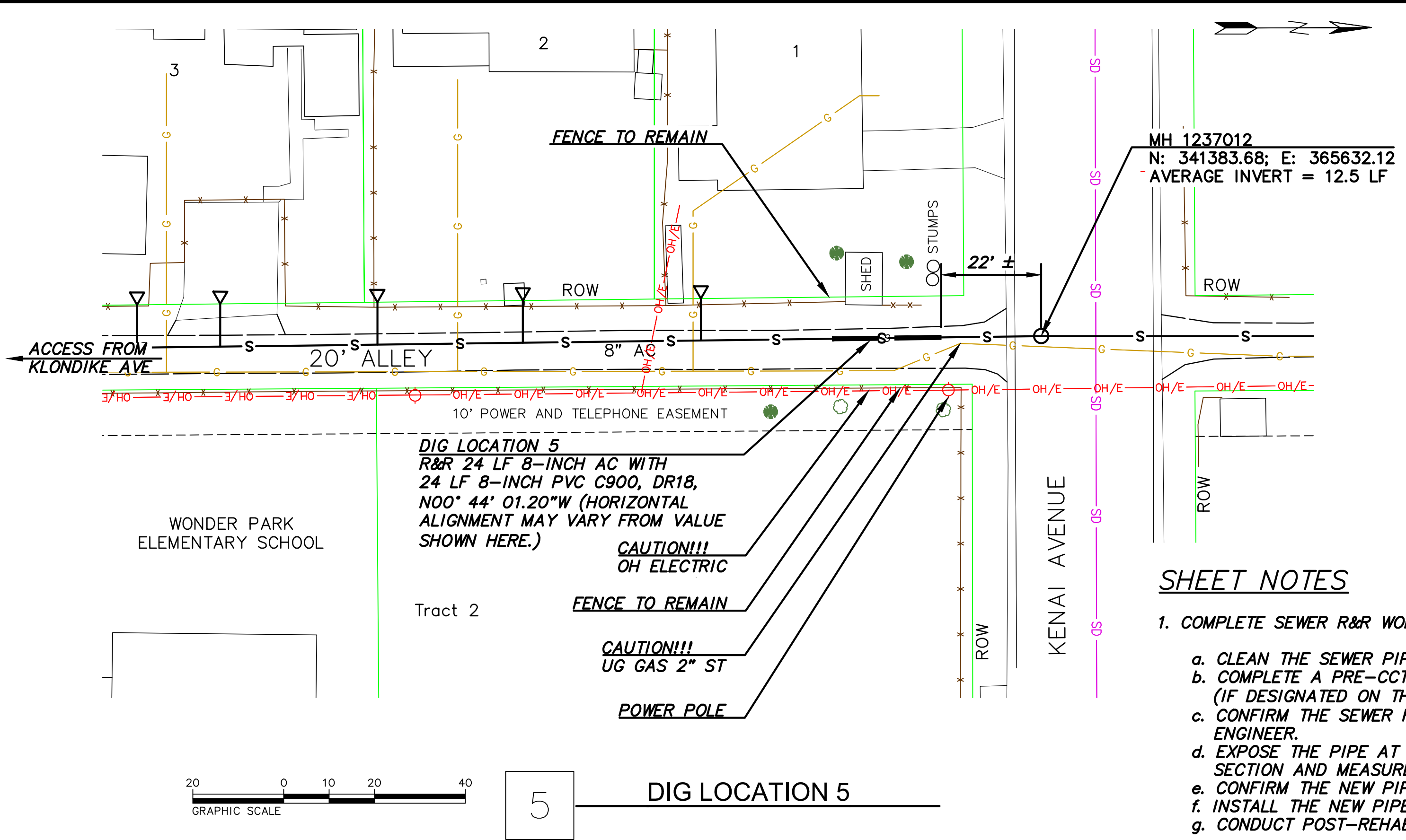
WONDER PARK SEWER UPGRADE PHASE III

SEWER REPAIRS DIG LOCATION No.s 1 - 4

HORZ SCALE: GRAPHIC	DATE: APR 2014	GRID: SW1237	SS9	13
VERT SCALE: N/A			of	of
PROJ. ID.: 000006490 (SWR)			SS16	27

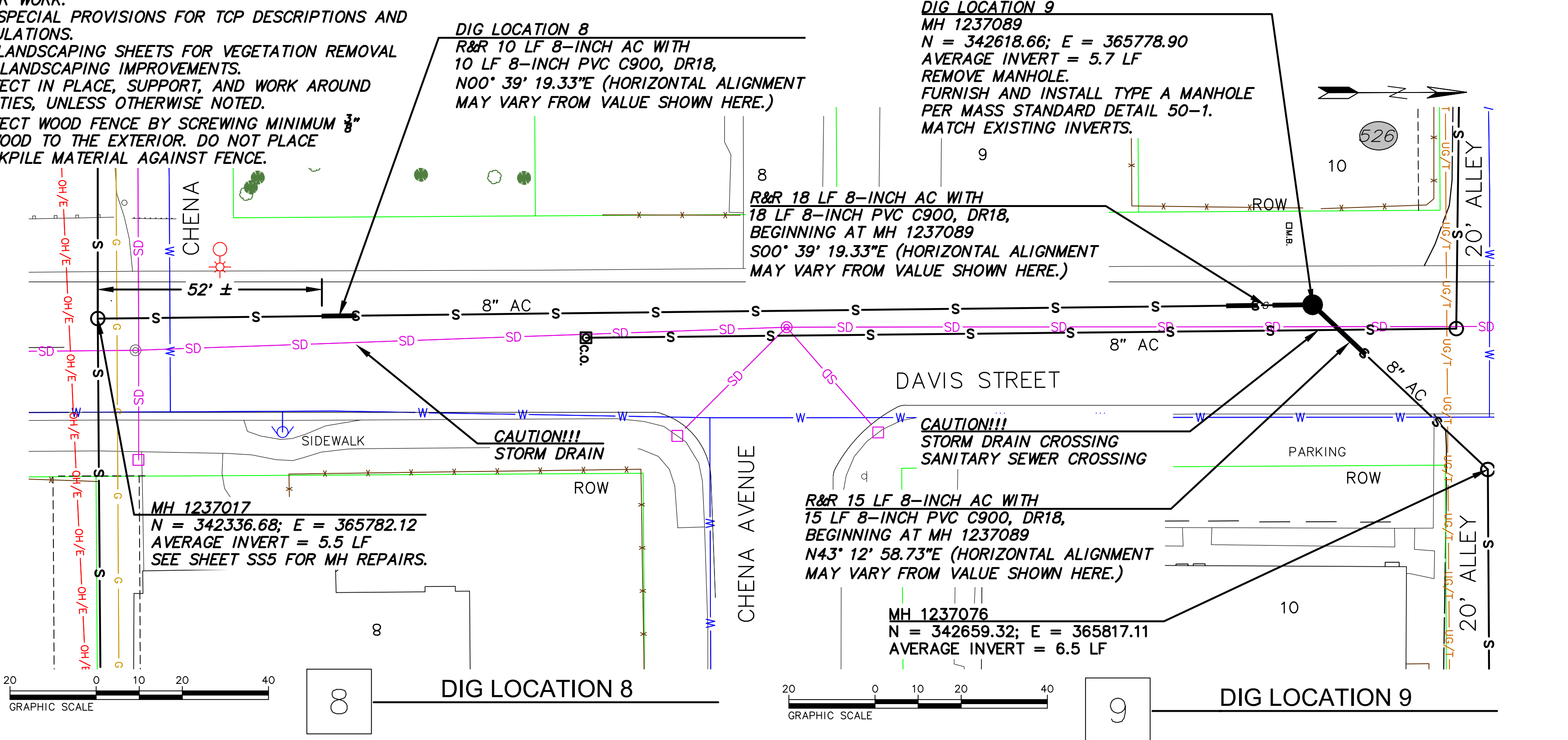
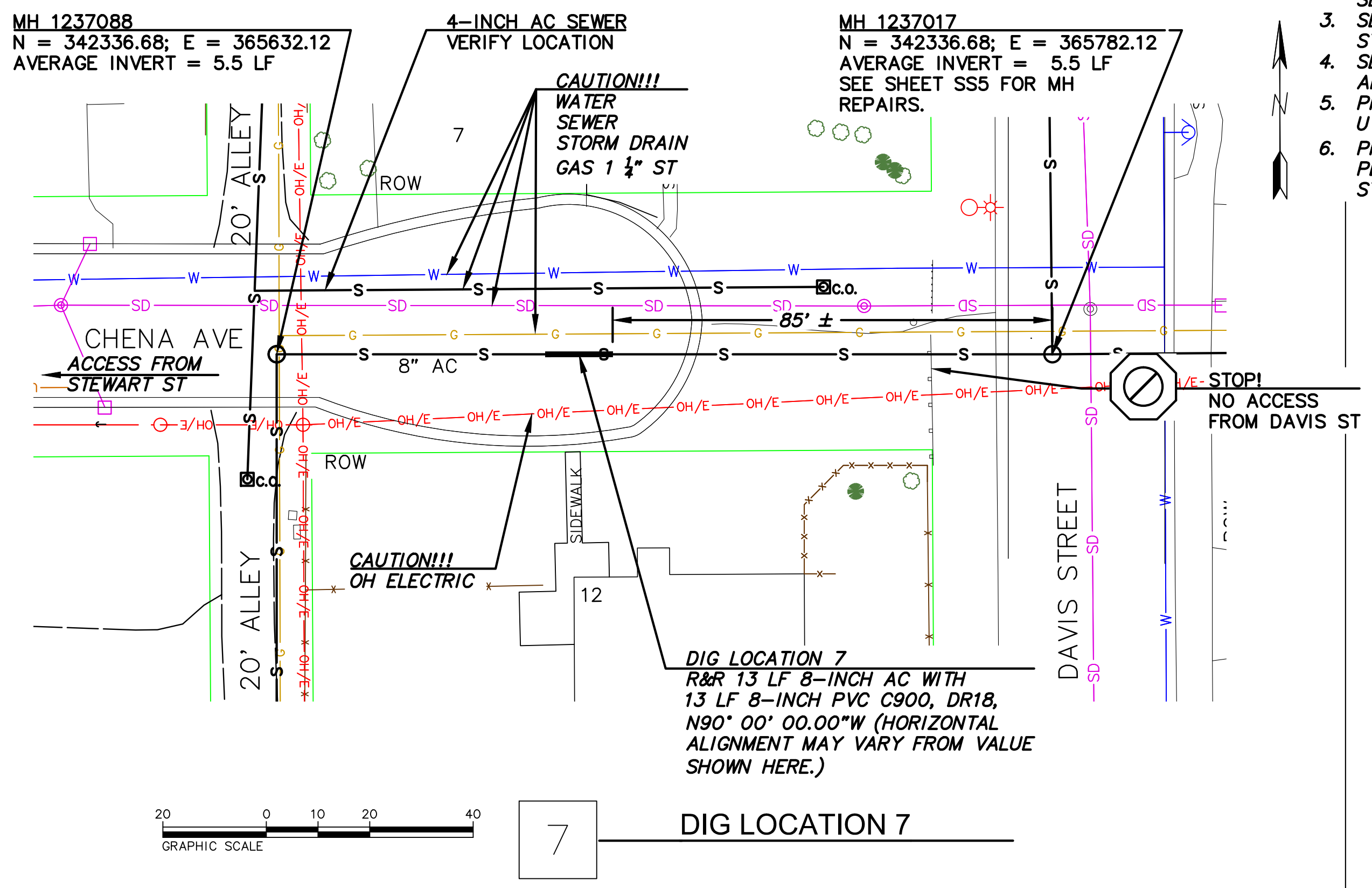
AWWU PLAN SET NO. 9892

PLOT DATE: 3/31/2014 10:14 AM
PLOT SCALE:



SHEET NOTES

- COMPLETE SEWER R&R WORK IN THE FOLLOWING SEQUENCE:
 - CLEAN THE SEWER PIPE.
 - COMPLETE A PRE-CCTV OR INITIAL CCTV INSPECTION (IF DESIGNATED ON THE DRAWINGS).
 - CONFIRM THE SEWER R&R END POINTS WITH THE ENGINEER.
 - EXPOSE THE PIPE AT THE ENDS OF THE SEWER R&R SECTION AND MEASURE THE ELEVATIONS.
 - CONFIRM THE NEW PIPE SLOPE.
 - INSTALL THE NEW PIPE AT A UNIFORM GRADE.
 - CONDUCT POST-REHABILITATION CCTV INSPECTION.
- SEE SPECIFICATIONS FOR DESCRIPTION OF ADDITIONAL SEWER WORK.
- SEE SPECIAL PROVISIONS FOR TCP DESCRIPTIONS AND STIPULATIONS.
- SEE LANDSCAPING SHEETS FOR VEGETATION REMOVAL AND LANDSCAPING IMPROVEMENTS.
- PROTECT IN PLACE, SUPPORT, AND WORK AROUND UTILITIES, UNLESS OTHERWISE NOTED.
- PROTECT WOOD FENCE BY SCREWING MINIMUM 3/8" PLYWOOD TO THE EXTERIOR. DO NOT PLACE STOCKPILE MATERIAL AGAINST FENCE.

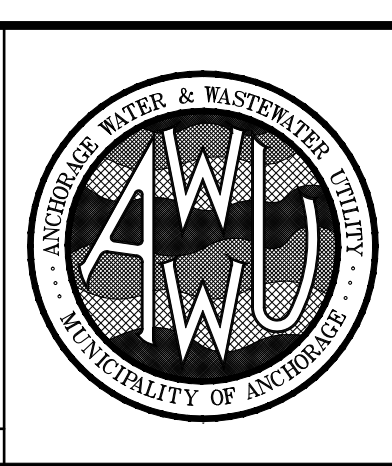
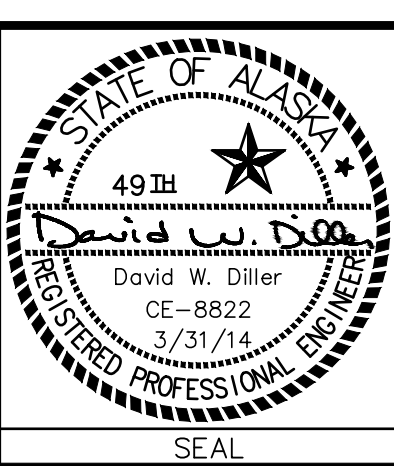


VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE HORZ SCALE: 1"=20' VERT SCALE: N/A	
DATA	DRAWN BY	CHECKED BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY	DATE
BASE									
TOPOGRAPHY									
PROFILE									
SANITARY SEWER									
STORM SEWER									
WATER									
GAS									
PLAN CHECK					REVISIONS				

RECORD DRAWING	Note: To be filled out on original drawings upon project completion.
1. DATA PROVIDED BY:	This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
CONTRACTOR:	BY: _____ TITLE: _____
DATE:	DATE: _____
2. DATA TRANSFERRED BY:	COMPANY: _____
DATE:	DATE: _____

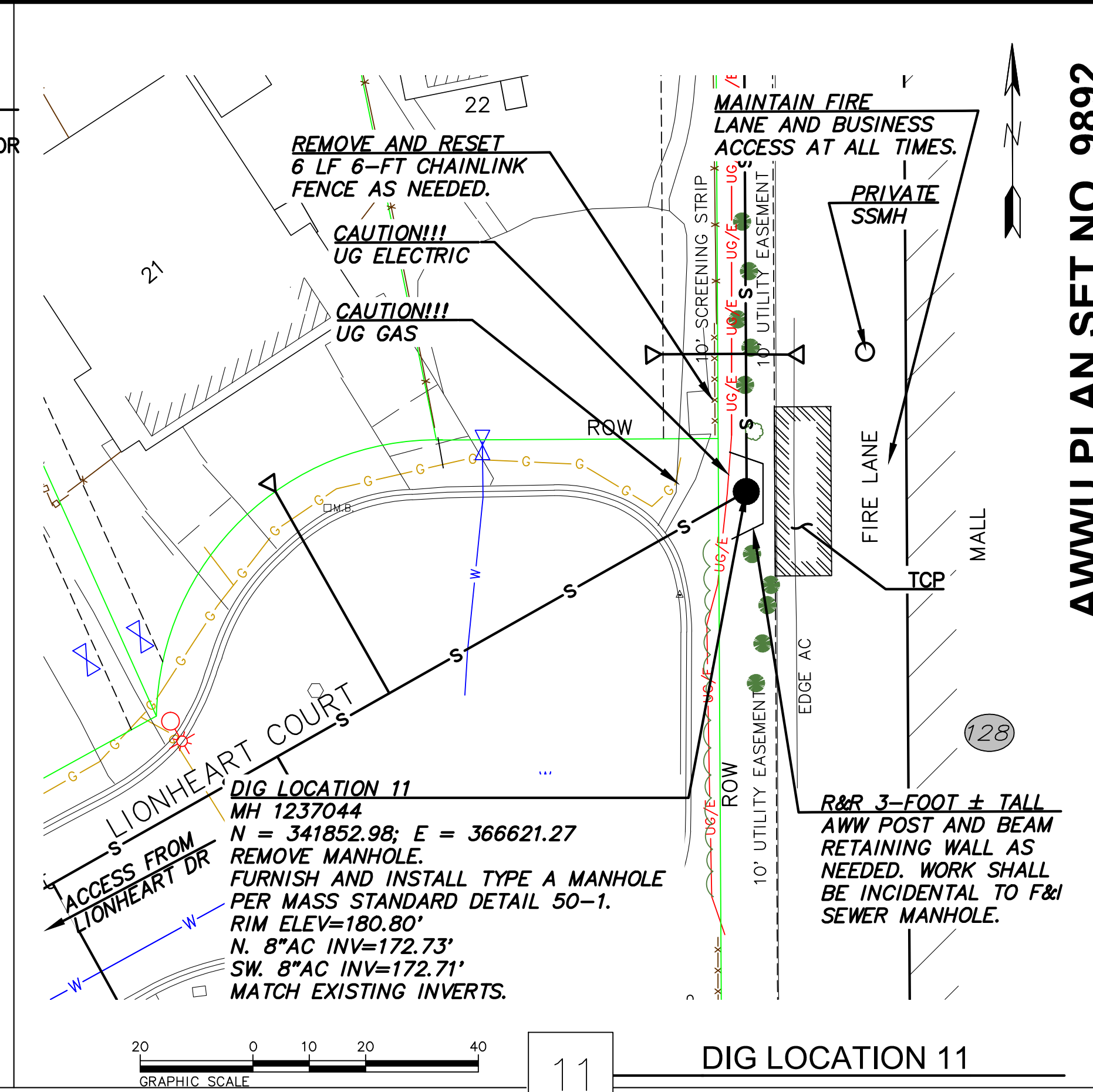
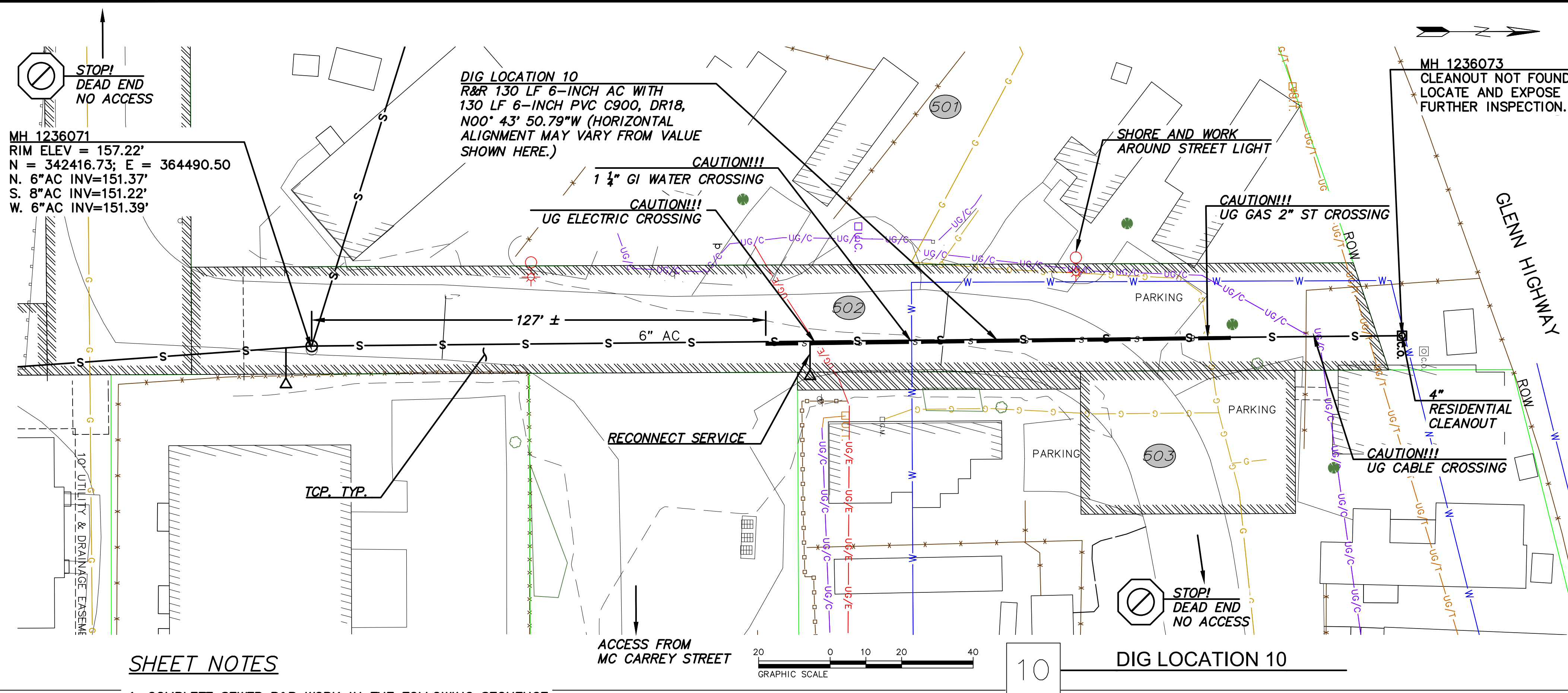
REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY			
WONDER PARK SEWER UPGRADE PHASE III			
SEWER REPAIRS DIG LOCATION NO.s 5 - 9			
HORZ SCALE: GRAPHIC	DATE: APR 2014	GRID: SW1237	SS10 of 14
VERT SCALE: N/A	PROJ. ID.: 000006490 (SWR)		SS16 of 27

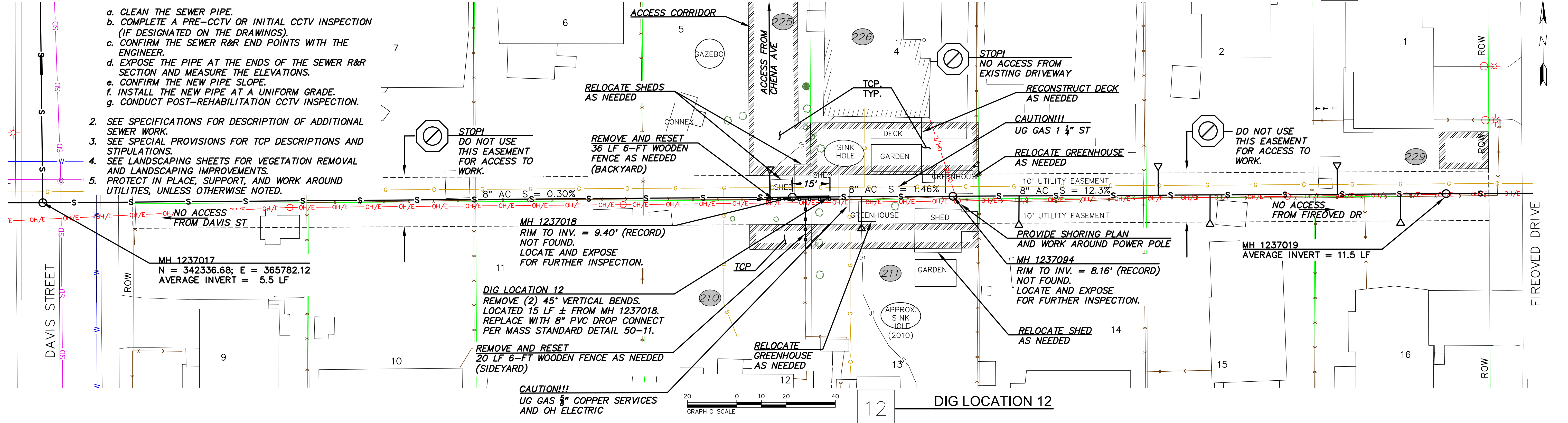
ACAD FILE: j:\vobastota\10313.002 Wonder Park Sewer Phase III\100 CAD\01 Working Set\01 Civil\10313.002 Sewer Dig Plans.dwg



SHEET NOTES

1. COMPLETE SEWER R&R WORK IN THE FOLLOWING SEQUENCE:

- CLEAN THE SEWER PIPE.
 - COMPLETE A PRE-CCTV OR INITIAL CCTV INSPECTION (IF DESIGNATED ON THE DRAWINGS).
 - CONFIRM THE SEWER R&R END POINTS WITH THE ENGINEER.
 - EXPOSE THE PIPE AT THE ENDS OF THE SEWER R&R SECTION AND MEASURE THE ELEVATIONS.
 - CONFIRM THE NEW PIPE SLOPE.
 - INSTALL THE NEW PIPE AT A UNIFORM GRADE.
 - CONDUCT POST-REHABILITATION CCTV INSPECTION.
- SEE SPECIFICATIONS FOR DESCRIPTION OF ADDITIONAL SEWER WORK.
 - SEE SPECIAL PROVISIONS FOR TCP DESCRIPTIONS AND STIPULATIONS.
 - SEE LANDSCAPING SHEETS FOR VEGETATION REMOVAL AND LANDSCAPING IMPROVEMENTS.
 - PROTECT IN PLACE, SUPPORT, AND WORK AROUND UTILITIES, UNLESS OTHERWISE NOTED.



VERIFY SCALE
 THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.

DATA	DRAWN BY	CHECKED BY	DATE	DESCRIPTION	BY
BASE					
TOPOGRAPHY					
PROFILE					
SANITARY SEWER					
STORM SEWER					
WATER					
GAS					

RECORD DRAWING
 Note: To be filled out on original drawings upon project completion.

1. DATA PROVIDED BY:
 This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
 CONTRACTOR: _____
 BY: _____ TITLE: _____
 DATE: _____

2. DATA TRANSFERRED BY:
 COMPANY: _____
 DATE: _____

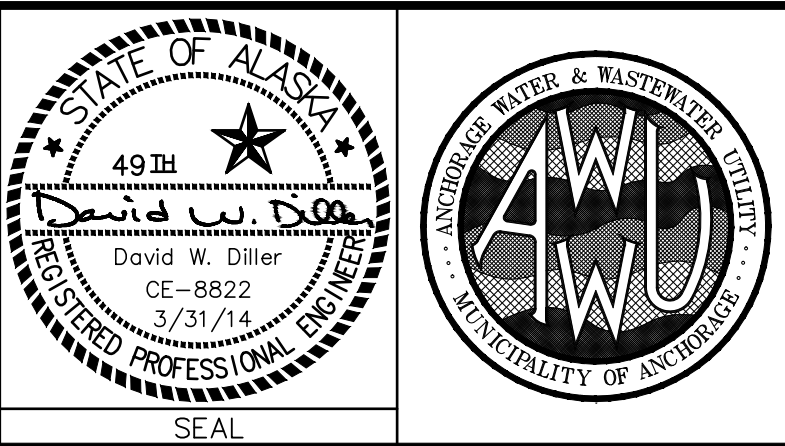
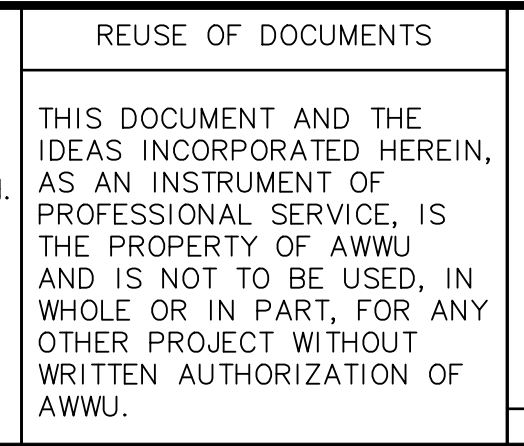
3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
 DATA TRANSFER CHECKED BY: _____
 COMPANY: _____
 BY: _____ TITLE: _____
 DATE: _____

REVISIONS

NO.	DATE	DESCRIPTION

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.

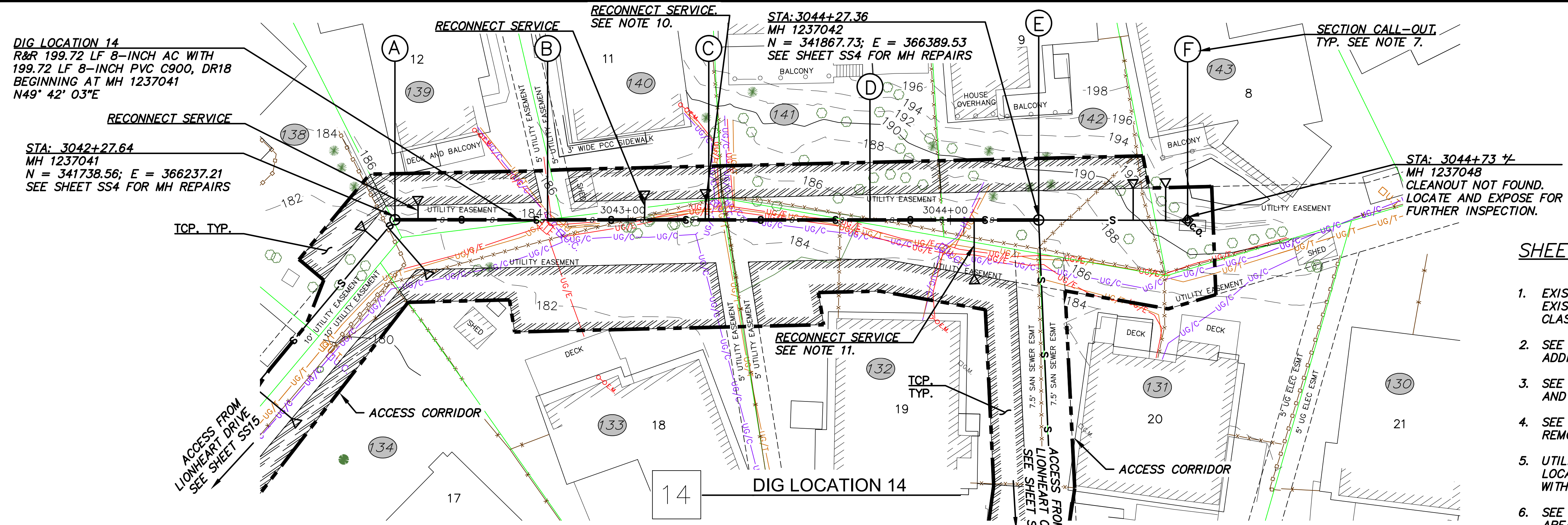


MUNICIPALITY OF ANCHORAGE
 WATER & WASTEWATER UTILITY

WONDER PARK SEWER UPGRADE PHASE III

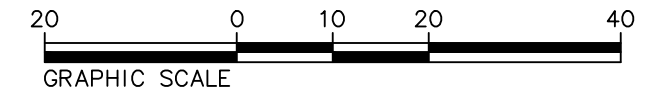
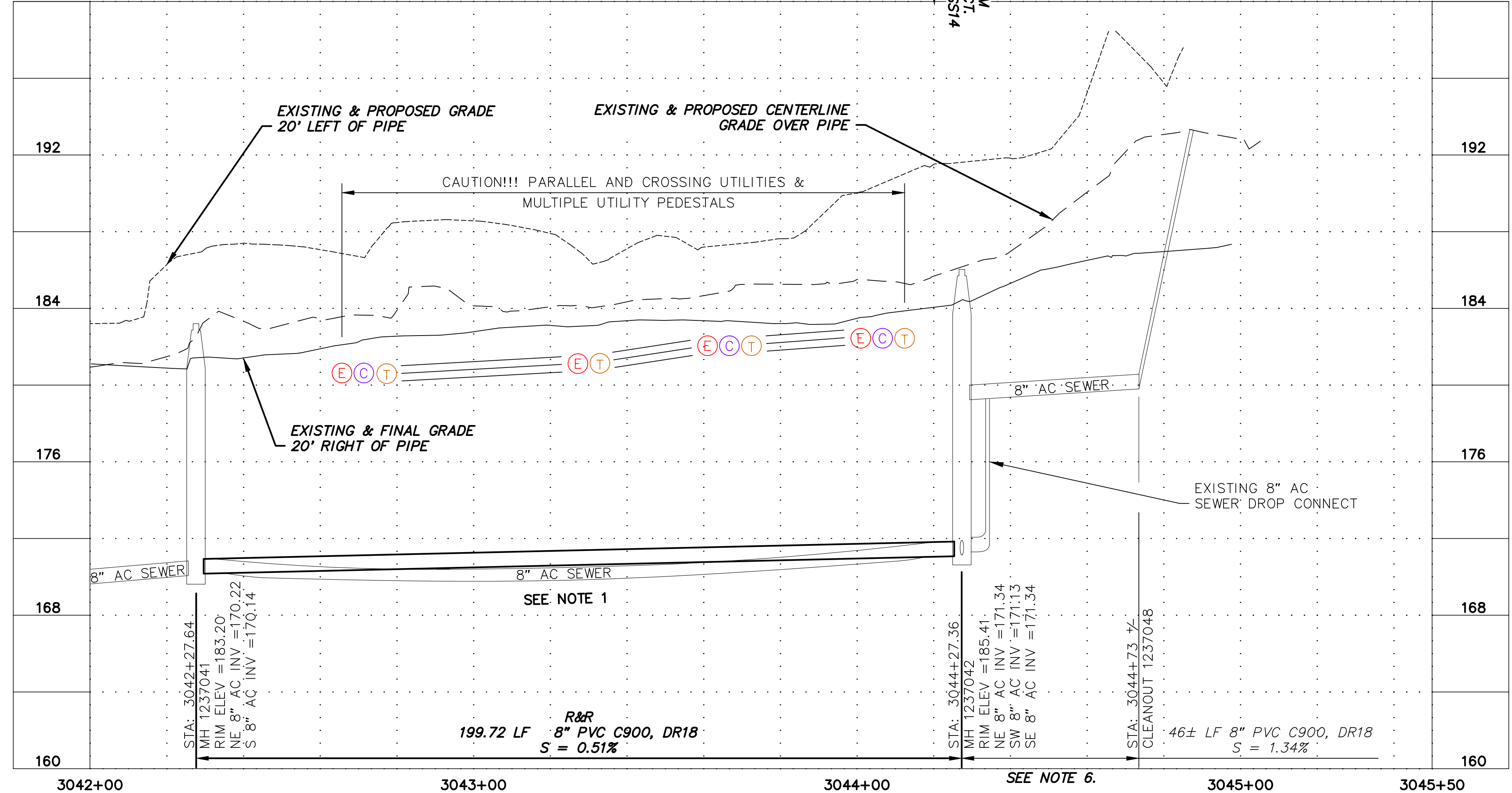
SEWER REPAIRS
DIG LOCATION NO.s 10 - 12

HORIZ SCALE: GRAPHIC VERT SCALE: N/A
 DATE: APR 2014 GRID: SW1237 SS11 of 15
 PROJ. ID.: 000006490 (SWR) SS16 of 27



SHEET NOTES

1. EXISTING 8-INCH AC SEWER HAS SETTLED. REMOVE EXISTING 8-INCH AC PIPE AND INSTALL TYPE II CLASSIFIED FILL BELOW PIPE BEDDING.
2. SEE SPECIFICATIONS FOR DESCRIPTION OF ADDITIONAL SEWER WORK.
3. SEE SPECIAL PROVISIONS FOR TCP DESCRIPTIONS AND STIPULATIONS.
4. SEE LANDSCAPING SHEETS FOR VEGETATION REMOVAL AND LANDSCAPING IMPROVEMENTS.
5. UTILITY DEPTHS ARE APPROXIMATE. CONTRACTOR TO LOCATE AND VERIFY ACTUAL UTILITIES. COORDINATE WITH UTILITY COMPANIES FOR RELOCATION.
6. SEE SHEETS SS14 & SS15 FOR ENLARGEMENT OF AREA AND ACCESS TO LIONHEART DRIVE AND COURT.
7. SEE SHEET SS16 FOR SEWER ALIGNMENT CROSS-SECTIONS.
8. CONTRACTOR TO VERIFY LOCATION OF PARCEL 141 SEWER SERVICE LATERAL PRIOR TO EXCAVATION. PREVIOUS INVESTIGATIONS HAVE PLACED IT ON PARCEL 140. CONTRACTOR TO PROVIDE LOCATION TO ENGINEER AND OWNER, SUCH THAT PROPER RECONNECTION LOCATION IS ESTABLISHED.
9. CONTRACTOR TO VERIFY LOCATION OF ACTIVE SEWER SERVICE LATERAL FOR PARCEL 132, PRIOR TO EXCAVATION. A SECOND SERVICE APPEARS TO BE LOCATED NEAR THE FRONT OF THE PROPERTY. SEE SHEET SS14. CONTRACTOR TO PROVIDE INFORMATION TO ENGINEER AND OWNER, SUCH THAT CORRECT SERVICE IS RECONNECTED.



PLOT DATE: 3/31/2014 2:57 PM
PLOT SCALE:
ACAD FILE: J:\subarea\10313.02 Wonder Park Sewer Phase III\100 CAD\101 Working Set\01 Civil\10313.02 Sewer Dig Plans.dwg

VERIFY SCALE

THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.

0" = 1"

IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.

DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						
PLAN CHECK									

RECORD DRAWING

Note: To be filled out on original drawings upon project completion.

1. DATA PROVIDED BY: _____

This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.

CONTRACTOR: _____

BY: _____ TITLE: _____

DATE: _____

2. DATA TRANSFERRED BY: _____

COMPANY: _____

DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.

DATA TRANSFER CHECKED BY: _____

COMPANY: _____

BY: _____ TITLE: _____

DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.

3940 ARCTIC BLDG, SUITE 300
ANCHORAGE, ALASKA 99503
PHONE: (907) 562-3252
FAX: (907) 561-2273

CONSULTANT

STATE OF ALASKA

49th

David W. Diller

CE-8822

3/31/14

REGISTERED PROFESSIONAL ENGINEER

SEAL

ANCHORAGE WATER & WASTEWATER UTILITY

AWWU

MUNICIPALITY OF ANCHORAGE

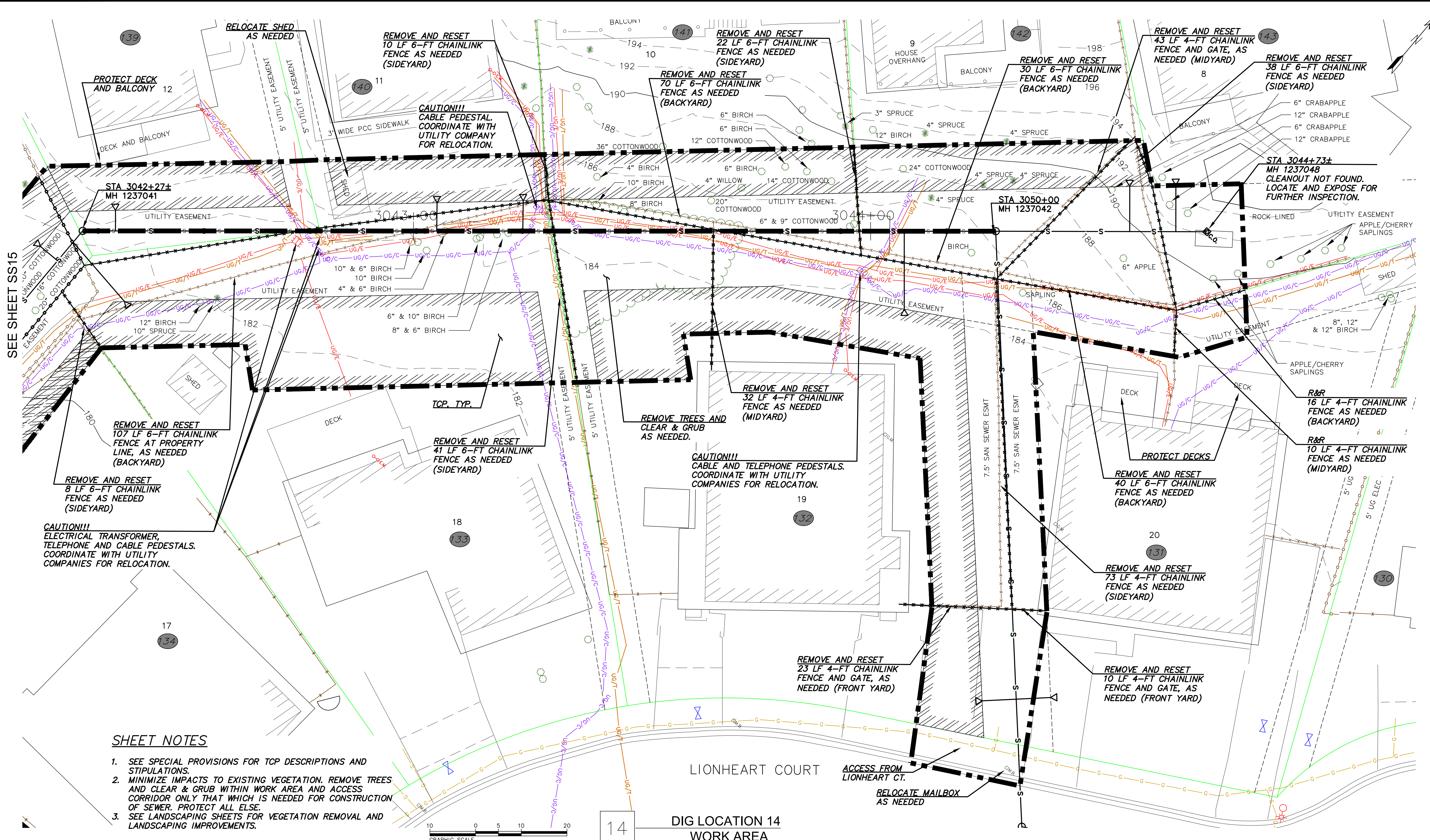
MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY

WONDER PARK SEWER UPGRADE PHASE III

SEWER REPAIRS
DIG LOCATION NO. 14 PLAN-PROFILE

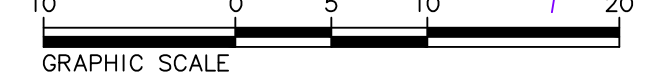
HORIZ SCALE: GRAPHIC	DATE: APR 2014	GRID: SW1237	SS13	17
VERT SCALE: 1"=4'			of	of
PROJ. ID.: 000006490 (SWR)			SS16	27

ACAD FILE: J:\substation\10313.02 Wonder Park Sewer Phase III\10313.02 Sewer Dig Plan-LionheartCt.dwg
 PLOT DATE: 3/31/2014 2:48 PM
 PLOT SCALE:



SHEET NOTES

- SEE SPECIAL PROVISIONS FOR TCP DESCRIPTIONS AND STIPULATIONS.
- MINIMIZE IMPACTS TO EXISTING VEGETATION. REMOVE TREES AND CLEAR & GRUB WITHIN WORK AREA AND ACCESS CORRIDOR ONLY THAT WHICH IS NEEDED FOR CONSTRUCTION OF SEWER. PROTECT ALL ELSE.
- SEE LANDSCAPING SHEETS FOR VEGETATION REMOVAL AND LANDSCAPING IMPROVEMENTS.



14 DIG LOCATION 14 WORK AREA

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	DRAWN BY	CHECKED BY	DATE	DESCRIPTION	REV	DATE	BY
BASE							
TOPOGRAPHY				TELEPHONE			
PROFILE				ELECTRIC			
SANITARY SEWER				CABLE TV			
STORM SEWER				TRAFFIC SIGNAL			
WATER				DESIGN			
GAS				QUANTITIES			
				MUN. FINAL CHECK			
PLAN CHECK				REVISIONS			

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

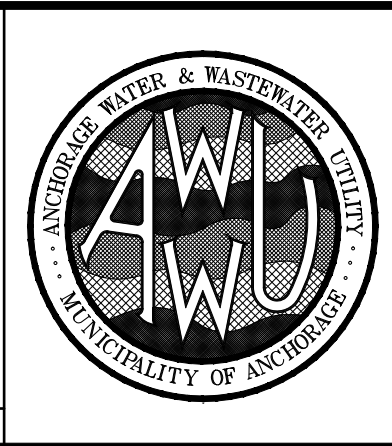
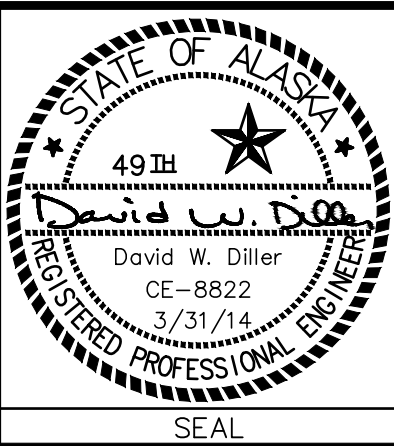
1. DATA PROVIDED BY: _____
 This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
 CONTRACTOR: _____ TITLE: _____
 BY: _____ DATE: _____

2. DATA TRANSFERRED BY: _____
 COMPANY: _____ DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
 DATA TRANSFER CHECKED BY: _____
 COMPANY: _____ TITLE: _____
 BY: _____ DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE
 WATER & WASTEWATER UTILITY
 WONDER PARK SEWER UPGRADE PHASE III

SEWER REPAIRS
DIG LOCATION NO. 14 WORK AREA

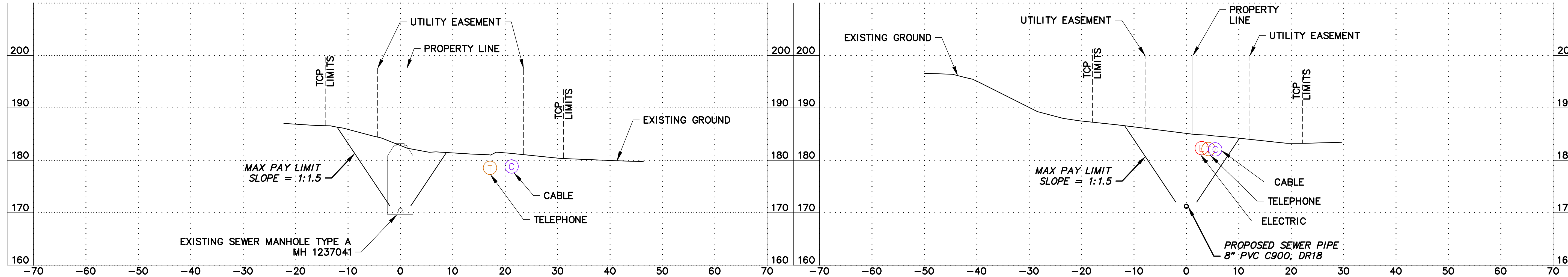
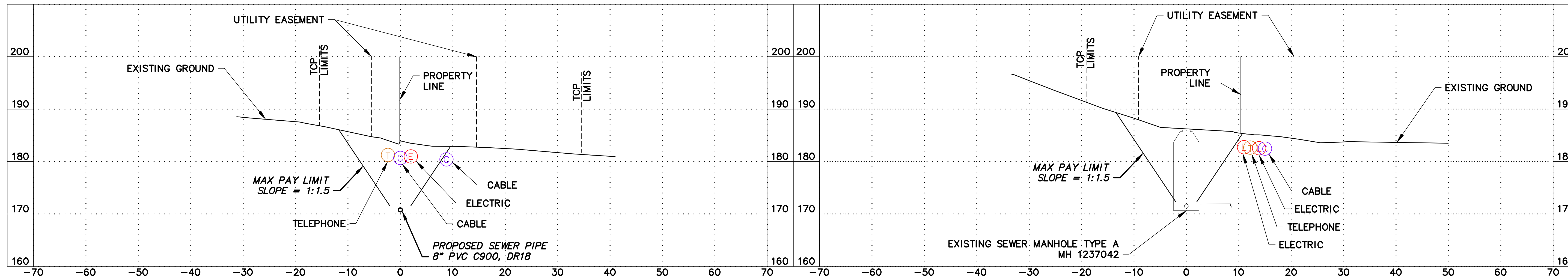
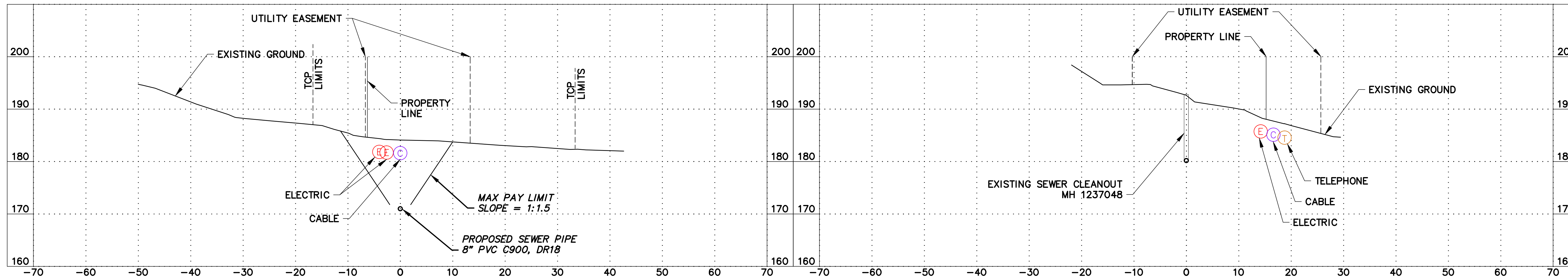
HORIZ SCALE: GRAPHIC VERT SCALE: N/A
 DATE: APR 2014 GRID: SW1237 SS14 of 18
 PROJ. ID.: 000006490 (SWR) SS16 of 27

PLOT DATE: 3/31/2014 10:16 AM

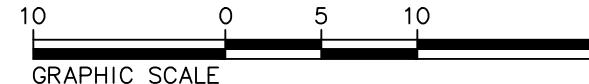
PLOT SCALE:

ACAD FILE: J:\vobasota\10313.02 Wonder Park Sewer Phase III\100 CAD\01 Working Set\01 Civil\10313.02 Sewer Dig Plans Cross Sections.dwg

AWWU PLAN SET NO. 9892



NOTE: CROSS SECTIONS PROVIDED FOR REFERENCE ONLY. UTILITY LOCATIONS, HORIZONTALLY AND VERTICALLY ARE APPROXIMATE. ABOVE GROUND STRUCTURES ARE NOT SHOWN. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.



VERIFY SCALE

THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.

DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						

RECORD DRAWING

1. DATA PROVIDED BY: _____

This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.

CONTRACTOR: _____ TITLE: _____

DATE: _____

2. DATA TRANSFERRED BY: _____

COMPANY: _____

DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.

DATA TRANSFER CHECKED BY: _____

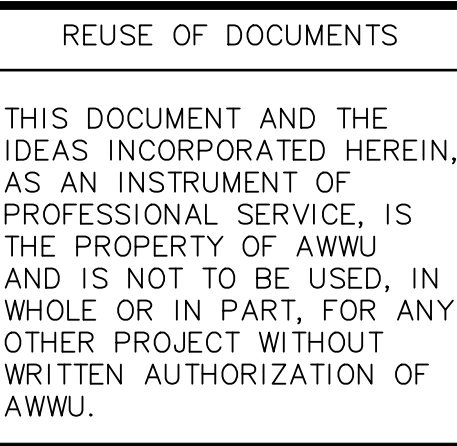
COMPANY: _____

BY: _____ TITLE: _____

DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.

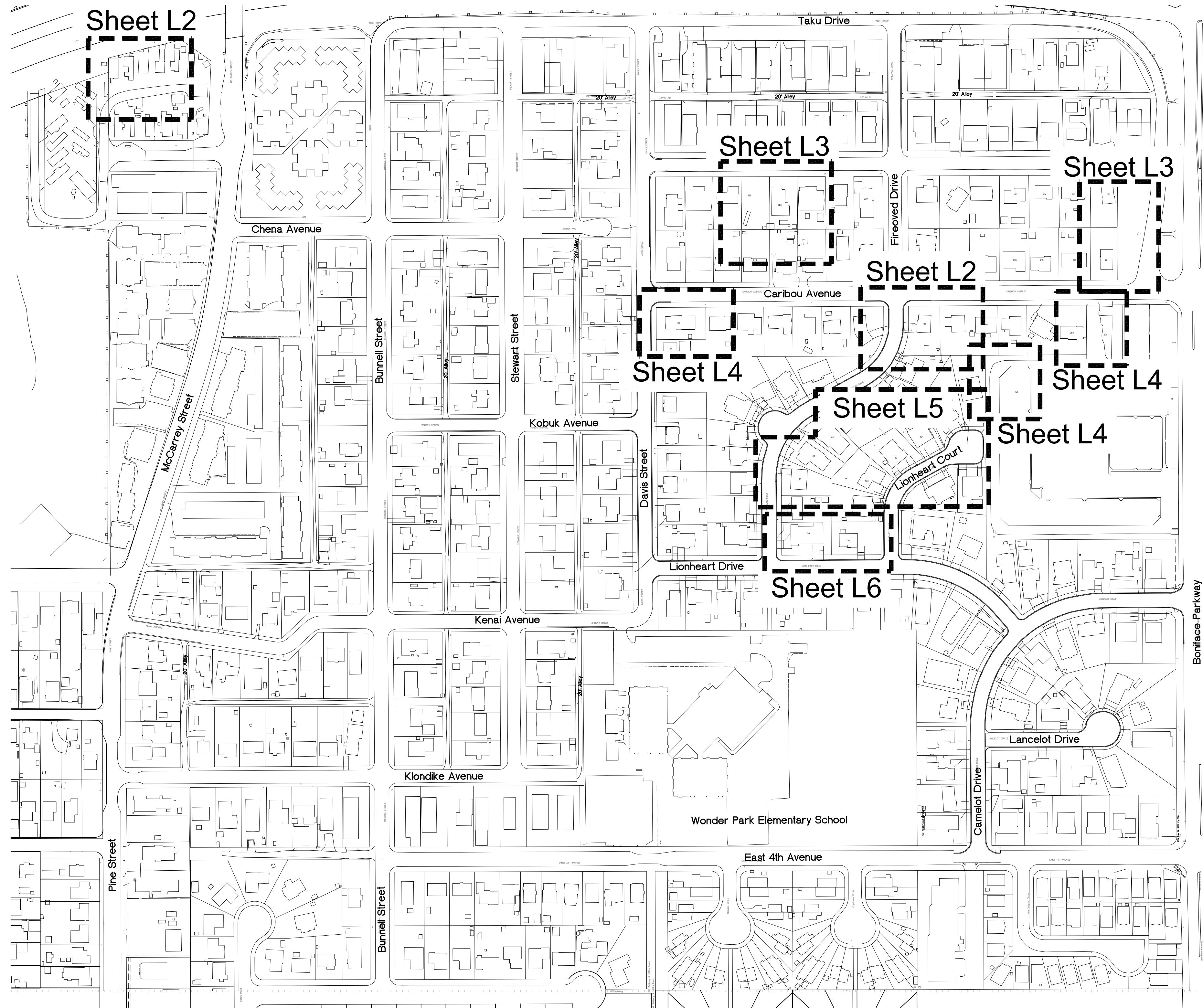


MUNICIPALITY OF ANCHORAGE
 WATER & WASTEWATER UTILITY
 WONDER PARK SEWER UPGRADE PHASE III

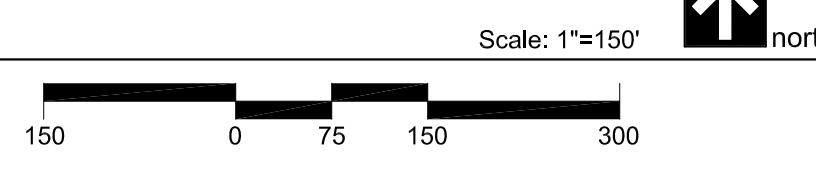
SEWER REPAIRS
DIG LOCATION NO. 14 CROSS SECTIONS

HORIZ SCALE: GRAPHIC VERT SCALE: GRAPHIC DATE: APR 2014 GRID: SW1237 SS16 of 20 of SS16 27

PROJ. ID.: 000006490 (SWR)



Location Key Map



Plant Schedule

Common Name	Botanical Name	Quantity (see note 8)		Spacing (minimum)	Size
		As shown	Additional		
Trees					
Apple	Malus domestica 'Antanovka'	0	2	as shown	1" cal.
Birch (See note 3)	Betula papyifera	28	5	10' o.c.	20' tall
Cherry	Prunus cerasus 'Evans'	0	1	as shown	1" cal.
Crabapple	Malus x 'Spring Snow'	1	1	10' o.c.	2" cal.
Japanese Tree Lilac	Syringa reticulata	2	2	10' o.c.	2.5" cal.
Spruce, Green	Picea pungens	11	1	10' O.C.	8' tall
Shrubs					
Alder	Alnus incana	0	1	5' o.c.	48" tall
Arborvitae	Thuja occidentalis	2	0	5' o.c.	5' tall
Lilac	Syringa vulgaris	6	2	5' o.c.	48" tall
Willow, Feltleaf	Salix alaxensis	1	0	5' o.c.	48" tall

Notes

- All plants shall meet American Standard for Nursery Stock (ANSI Z60.1-2004), American Nursery and Landscape Association (ANLA), www.anla.org
- Height to spread ratio of all evergreen trees equal 5 (height):3 (spread). Trees shall be fully branched to the ground.
- Birch to be 50% clump Birch with minimum 2 trunks, 3"-4" caliper each, and 50% single stem, minimum 4" caliper. Birch to be full with canopy no less than 1/2 of overall tree height.
- All plants to be field staked by contractor for owner approval prior to excavating for plants.
- Mulch shall be 3" deep shredded bark mulch.
- Topsoil and seed all disturbed areas. DO NOT SEED PLANTING BEDS.
- See sheet L7 for planting details.
- Unless otherwise directed, do not replant within 10' of sewer line.
- Quantities will vary depending on impacts to existing vegetation during construction. The Engineer shall make the final determination as to replacing damaged plants. Replace only those trees and shrubs that can not be adequately protected. "As shown" indicates existing plants that are to be removed and replaced. "Additional" includes plants that may be required as a result of damage to root zones.
- All disturbed areas shall receive 4-inches of topsoil, transition to adjacent areas to create smooth even surface that does not trap water. Seed with MASS Schedule A seed mix, unless otherwise noted.
- Intent of project is to minimize impacts to existing vegetation as much as possible. Remove trees and clear and grub within work zones only that which is needed for construction of the sewer. Protect all else.
- Trees identified as being removed on the drawings shall be paid for depending on their size. Only trees greater or equal to 9.5" diameter as defined in the specials will be paid per each. Smaller trees will be incidental to "clearing and grubbing".
- Not all trees are shown. Additional trees may need to be removed. Their size will determine how they are paid.

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						
PLAN					CHECK				
REVISIONS									

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

1. DATA PROVIDED BY: _____
 This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
 CONTRACTOR: _____ TITLE: _____
 DATE: _____

2. DATA TRANSFERRED BY: _____
 COMPANY: _____
 DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
 DATA TRANSFER CHECKED BY: _____
 COMPANY: _____
 BY: _____ TITLE: _____
 DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.

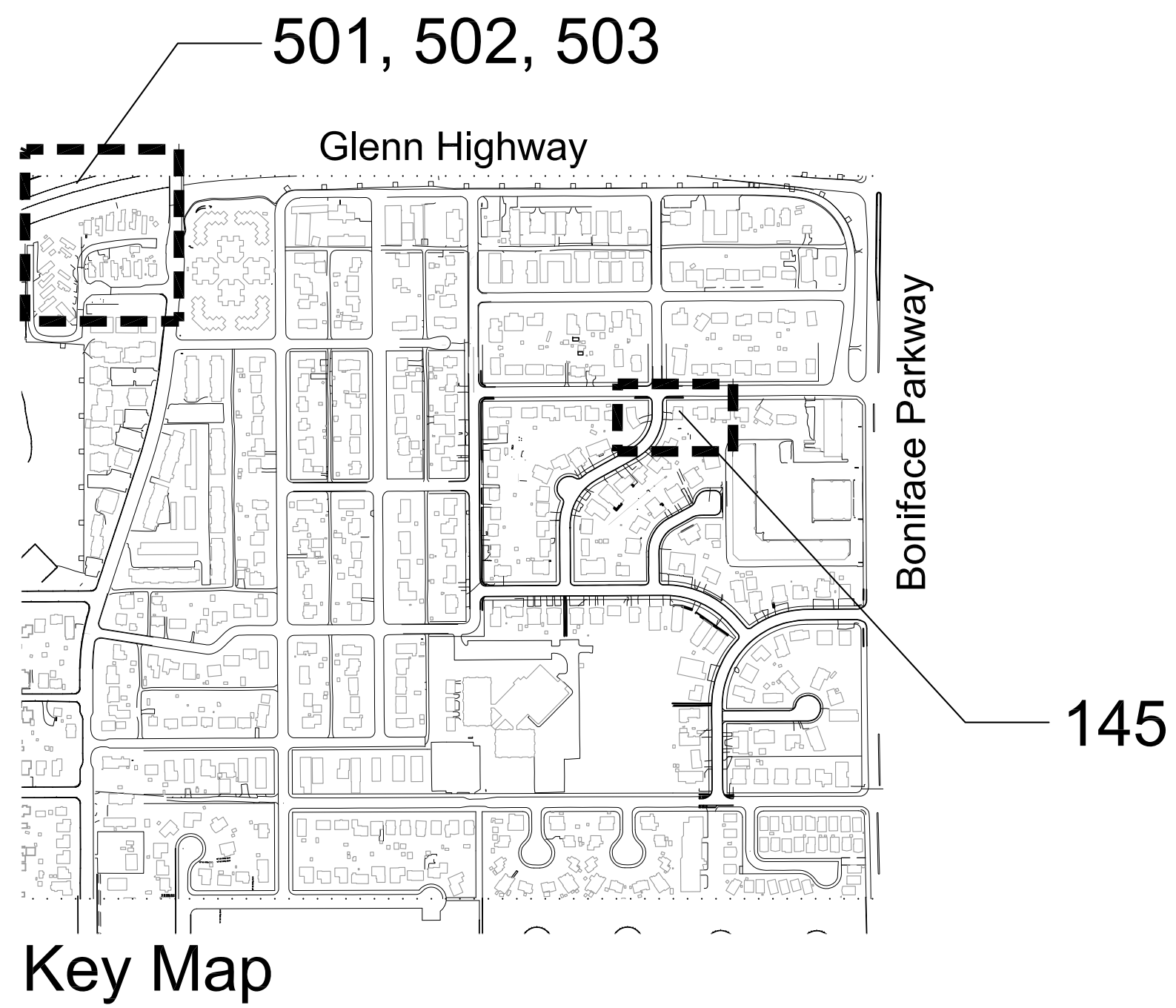
			MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY	
			WONDER PARK SEWER UPGRADE PHASE III	
LANDSCAPE PLAN			HORZ SCALE: N/A VERT SCALE: N/A	DATE: APR 2014 PROJ. ID.: 0000006490 (SWR)
CONSULTANT			GRID: SW1237	L1 of L7 21 of 27

PLOT DATE: 3/31/2014 3:52 PM

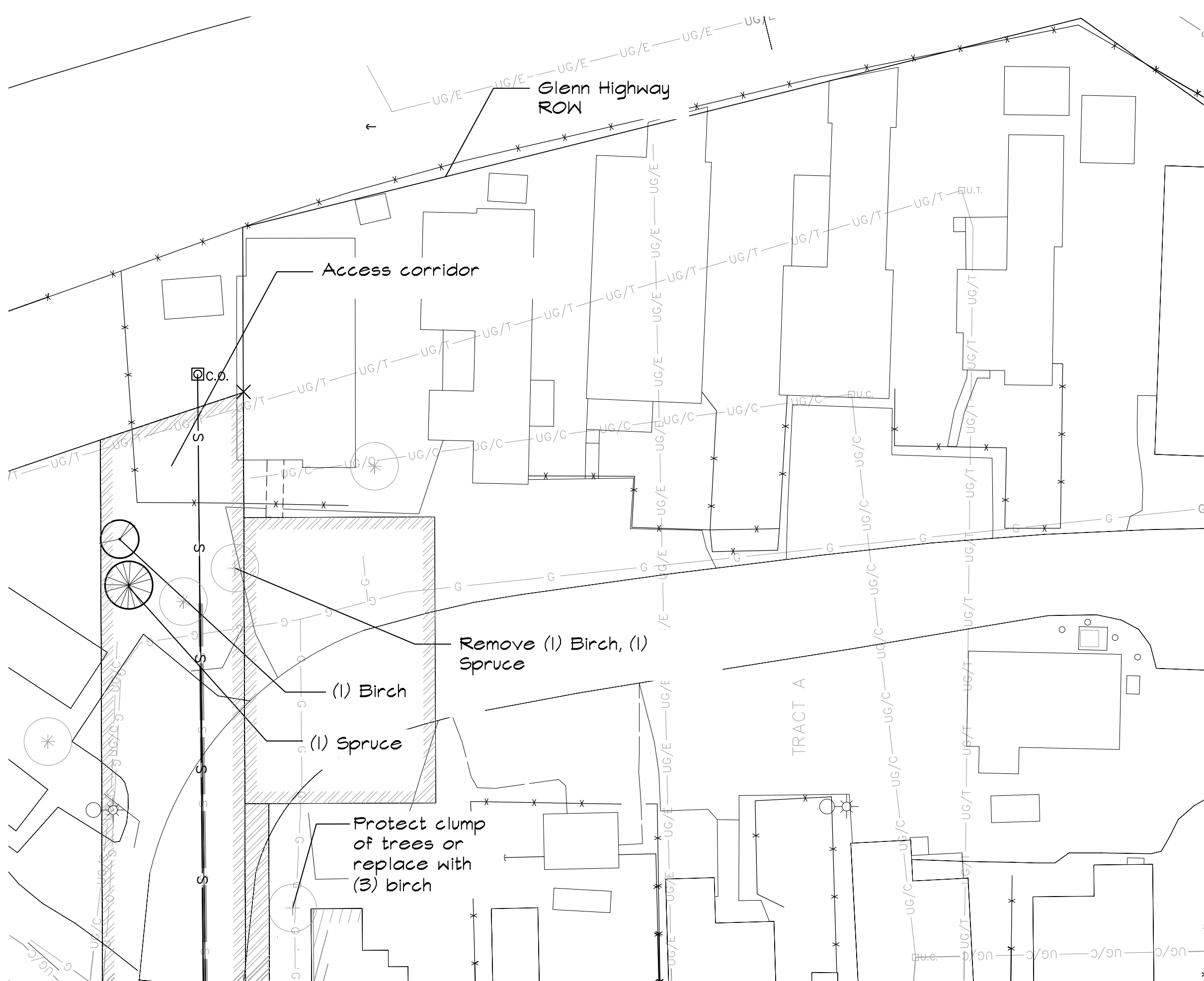
PLOT SCALE:

ACAD FILE: H:\Projects\WonderPark\195% WonderPark\195% Wonder Park\95.3% Ph 2 Wonder Park-L1.dwg

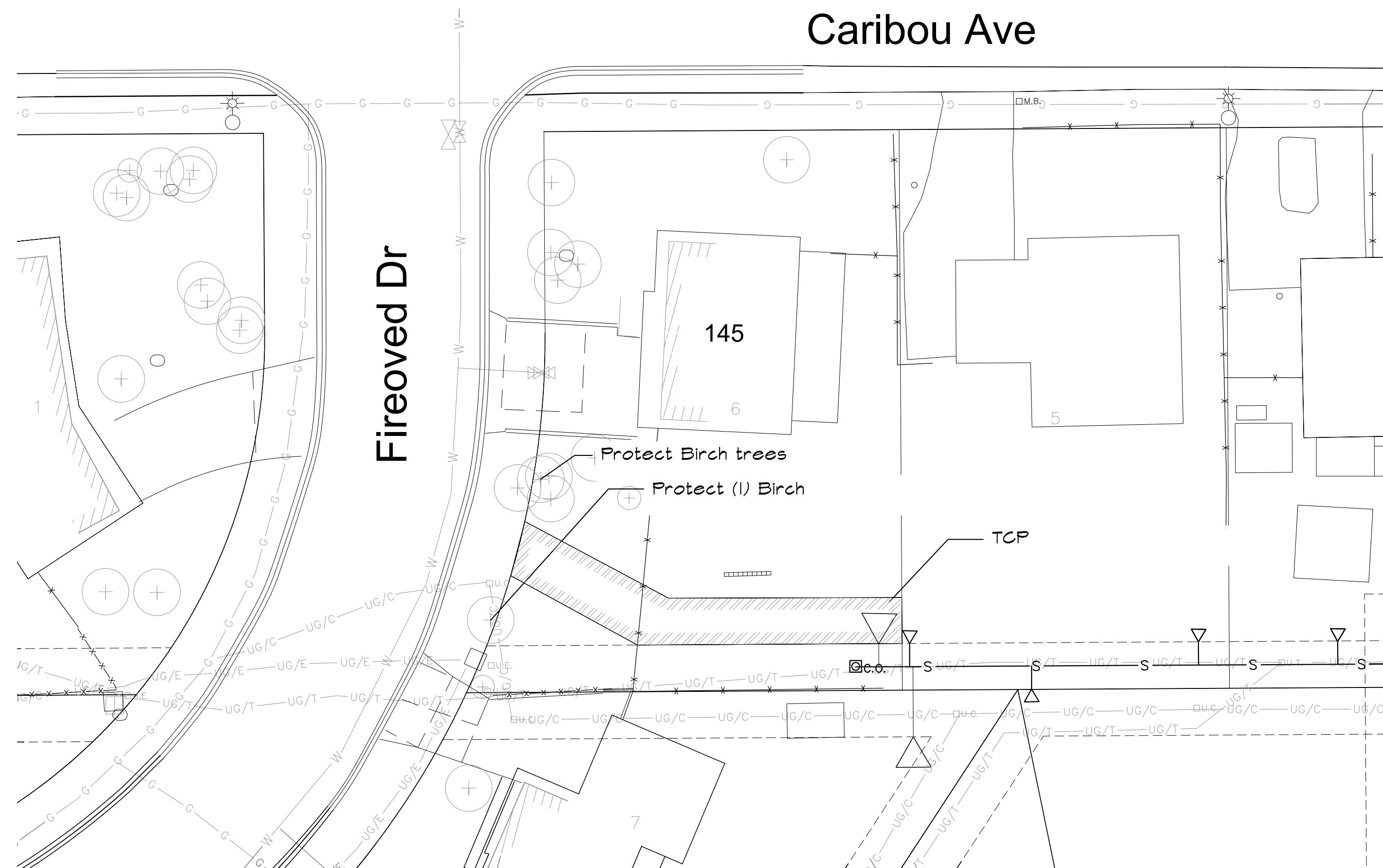
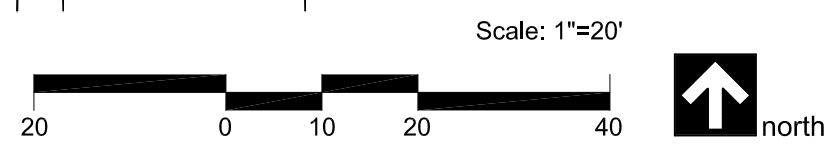
AWWU PLAN SET NO. 9892



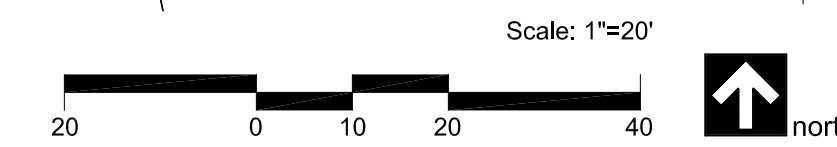
Key Map



Parcels 501, 502, 503



Parcel 145



VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						
PLAN CHECK					REVISIONS				

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

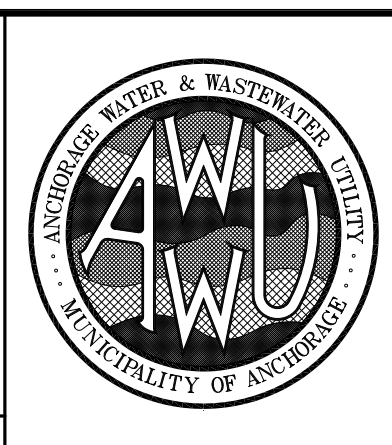
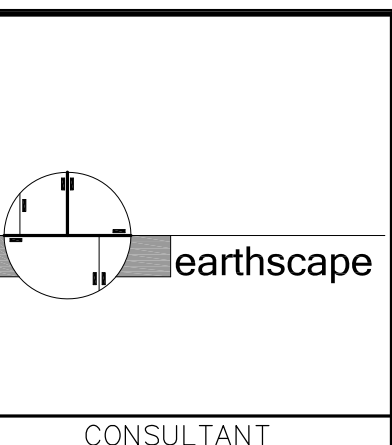
1. DATA PROVIDED BY: _____
 This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
 CONTRACTOR: _____
 BY: _____ TITLE: _____
 DATE: _____

2. DATA TRANSFERRED BY: _____
 COMPANY: _____
 DATE: _____

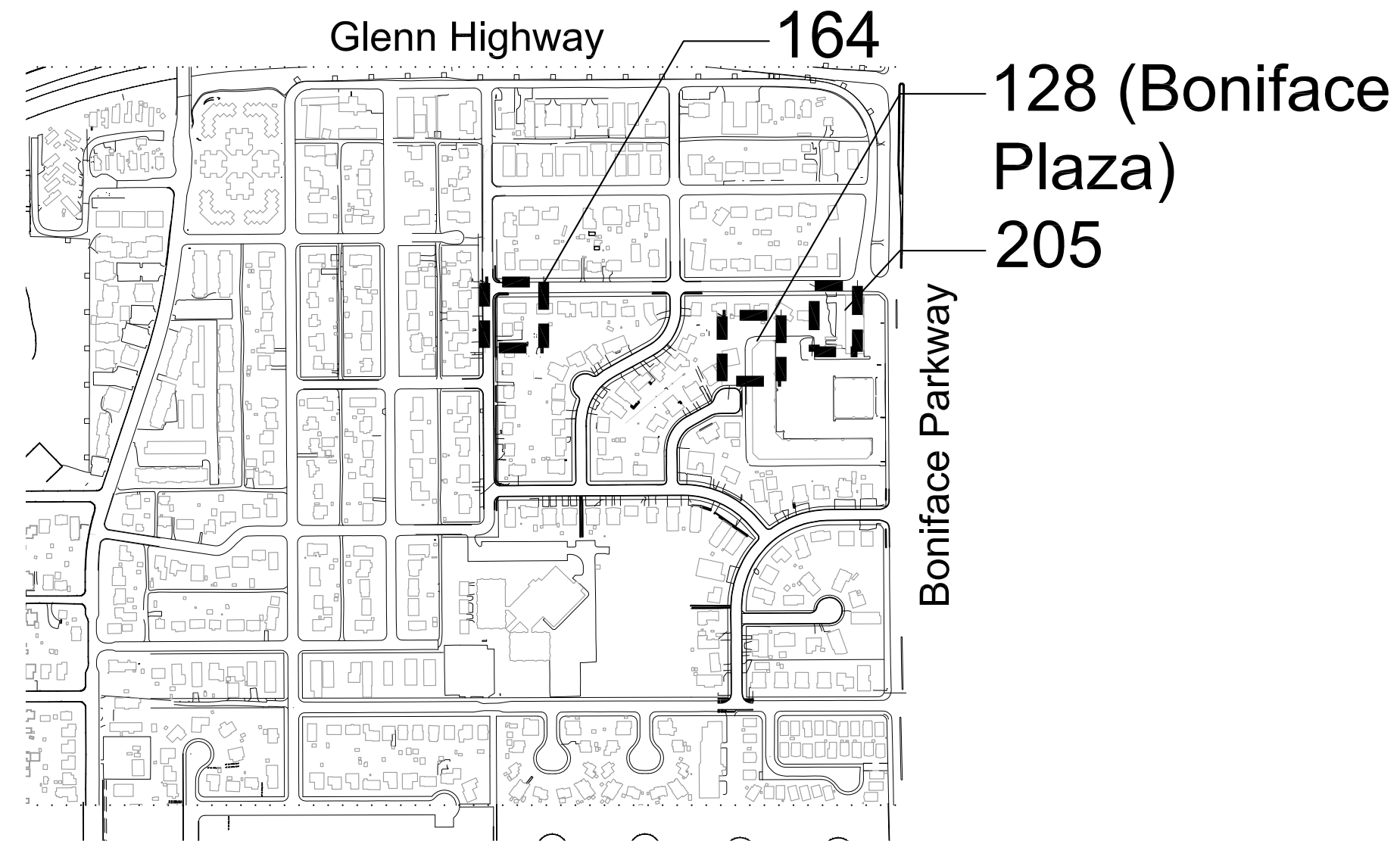
3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
 DATA TRANSFER CHECKED BY: _____
 COMPANY: _____
 BY: _____ TITLE: _____
 DATE: _____

REUSE OF DOCUMENTS

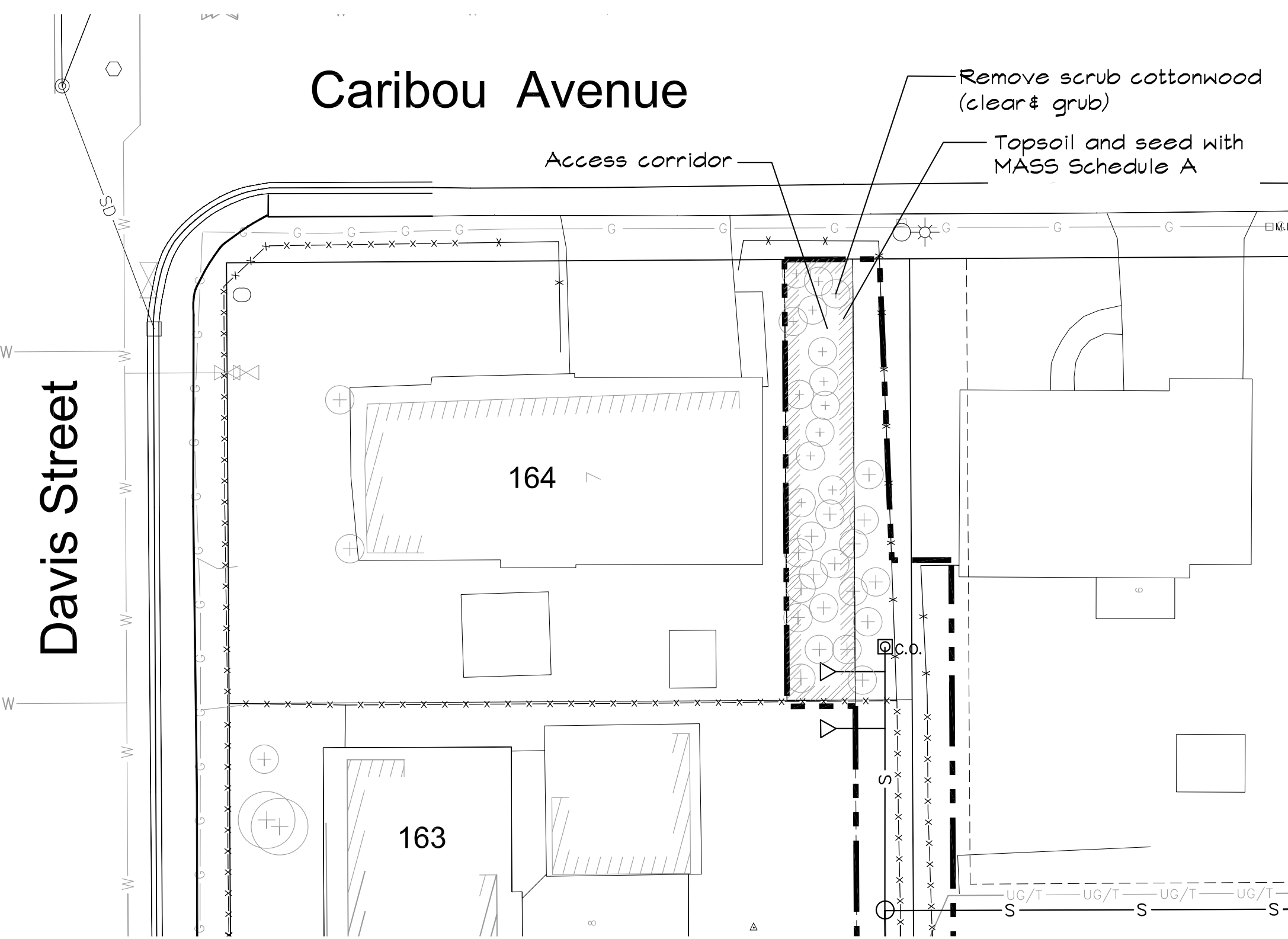
THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



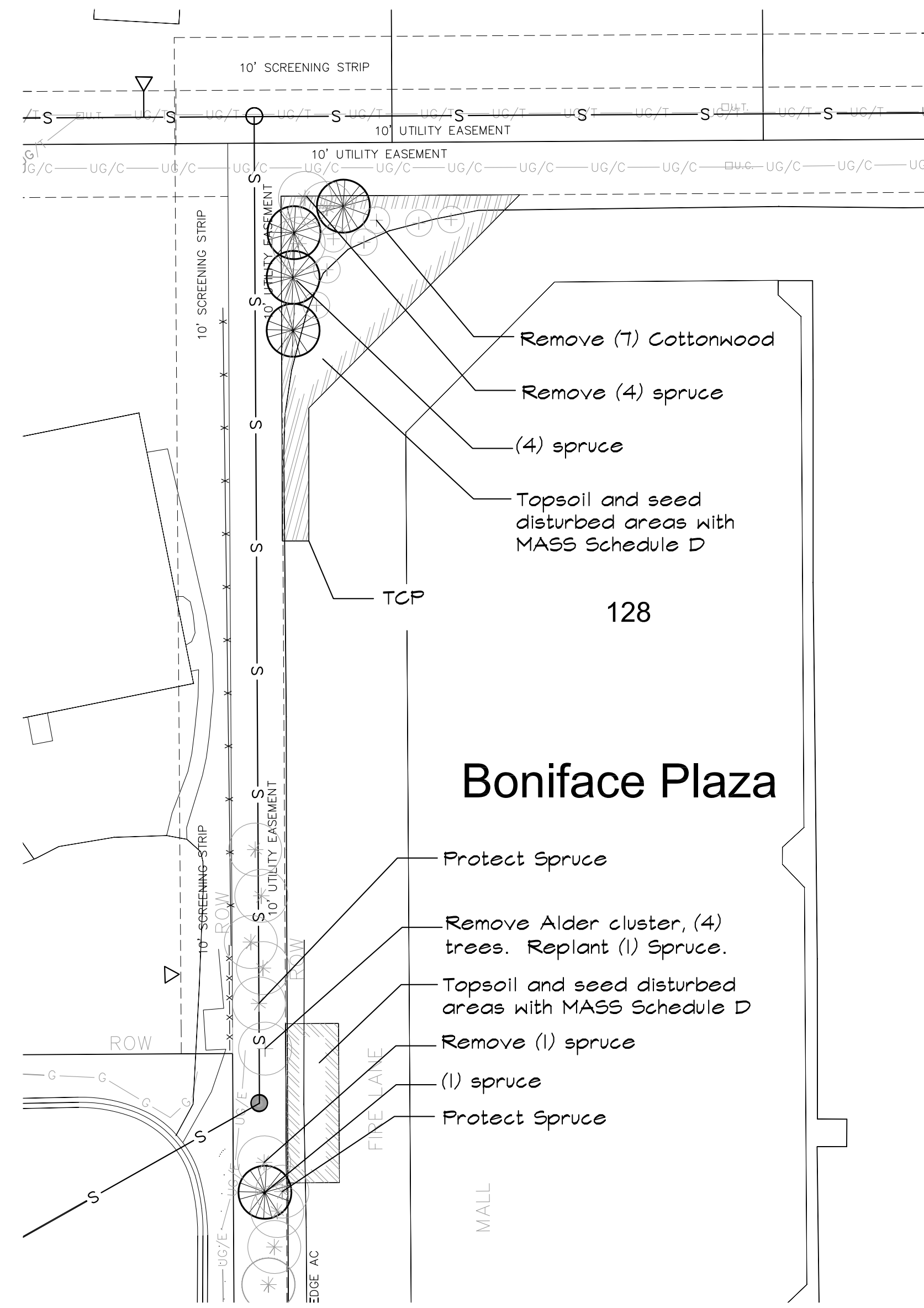
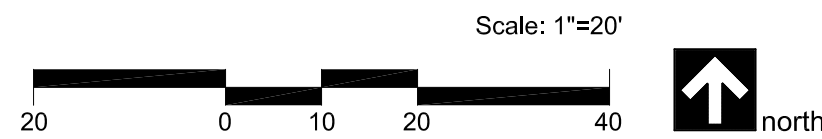
MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY			
WONDER PARK SEWER UPGRADE PHASE III			
LANDSCAPE PLAN			
HORIZ SCALE: N/A	DATE: APR 2014	GRID: SW1237	L2 of L7
VERT SCALE: N/A			22 of 27
PROJ. ID.: 0000006490 (SWR)			



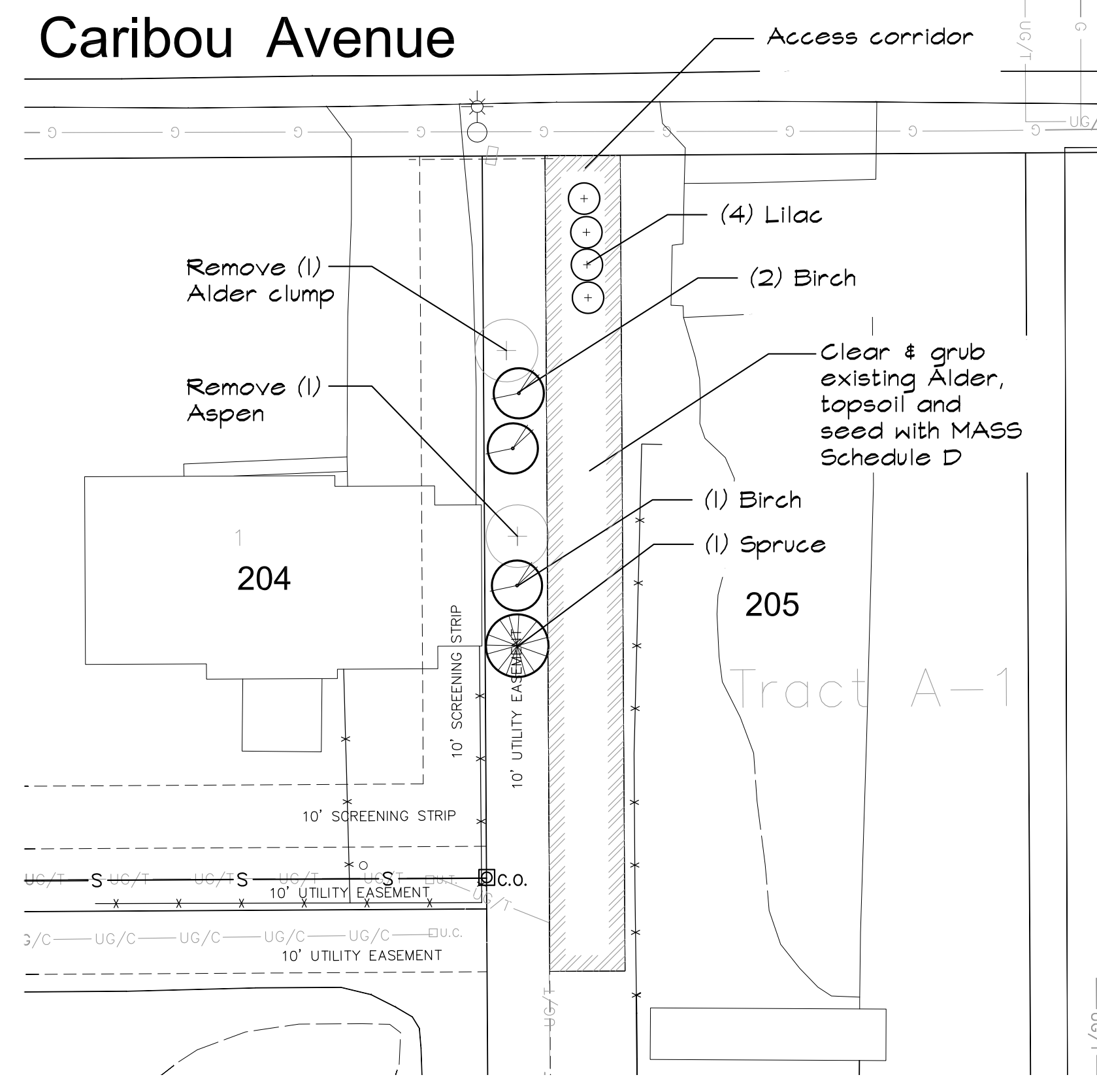
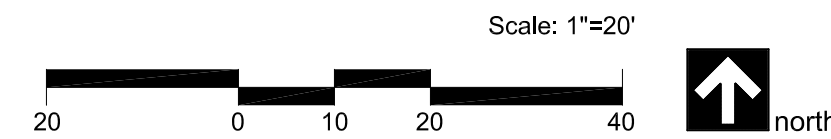
Key Map



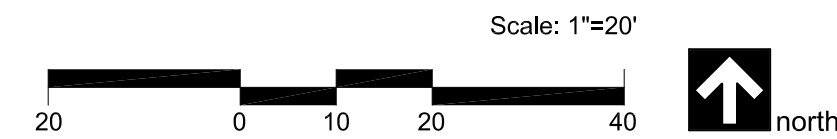
Parcel 164



Parcel 128



Parcel 205



VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						
PLAN CHECK					REVISIONS				

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

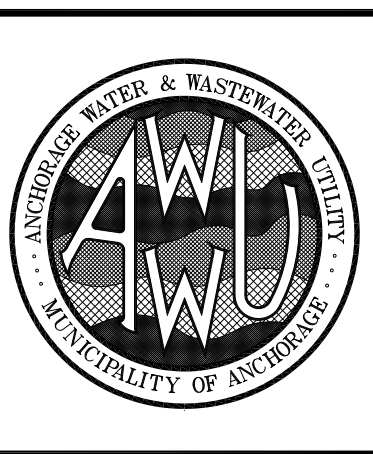
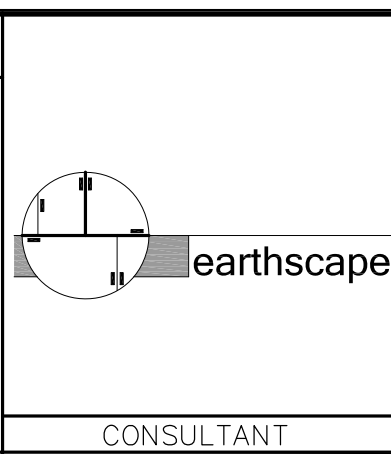
1. DATA PROVIDED BY: _____
 This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
 CONTRACTOR: _____
 BY: _____ TITLE: _____
 DATE: _____

2. DATA TRANSFERRED BY: _____
 COMPANY: _____
 DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
 DATA TRANSFER CHECKED BY: _____
 COMPANY: _____
 BY: _____ TITLE: _____
 DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY			
WONDER PARK SEWER UPGRADE PHASE III			
LANDSCAPE PLAN			
HORIZ SCALE: N/A	DATE: APR 2014	GRID: SW1237	L4 of L7
VERT SCALE: N/A			24 of 27
PROJ. ID.: 0000006490 (SWR)			

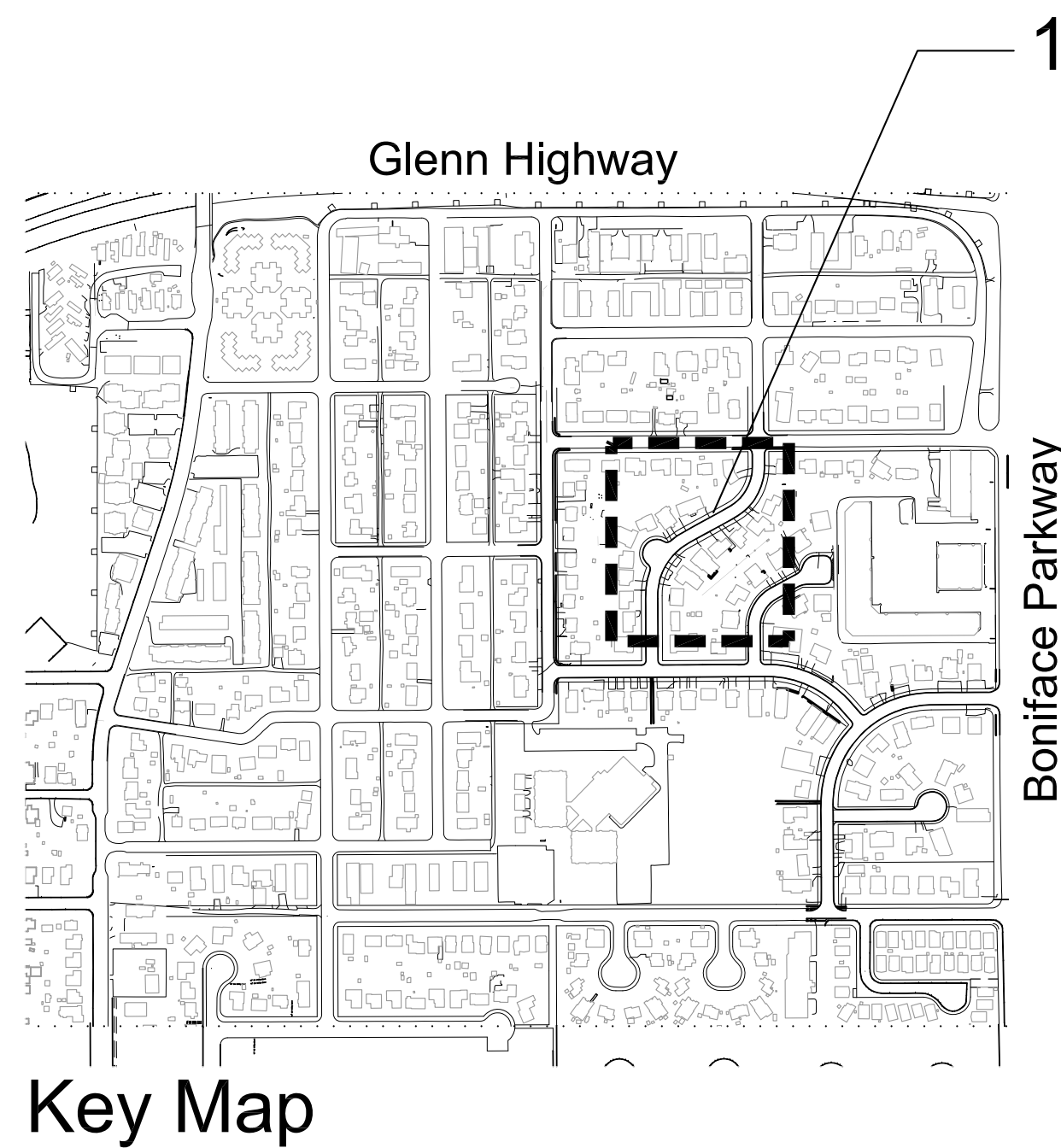
ACAD FILE: H:\Projects\WonderPark\Ph2 WonderPark\95% Wonder Park\95.3% Ph 2 Wonder Park-L1.dwg PLOT DATE: 3/31/2014 3:53 PM PLOT SCALE:

PLOT DATE: 3/31/2014 3:54 PM

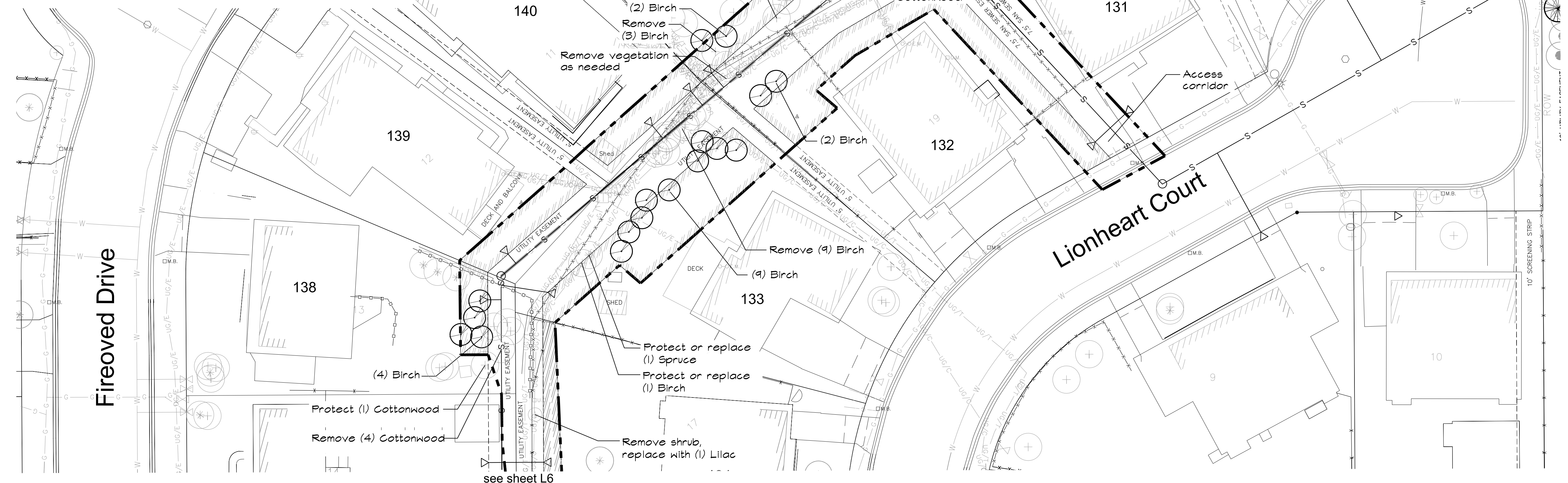
PLOT SCALE:

ACAD FILE: H:\Projects\WonderPark\95% WonderPark\95% Ph 2 Wonder Park-L1.dwg

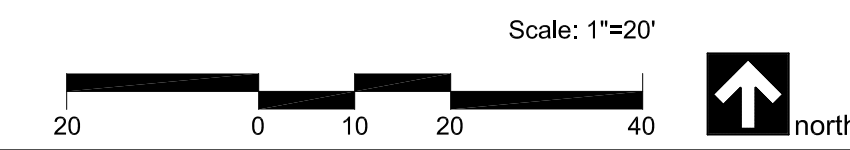
AWWU PLAN SET NO. 9892



Key Map



Parcels 131 through 143



VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						
PLAN CHECK					REVISIONS				

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

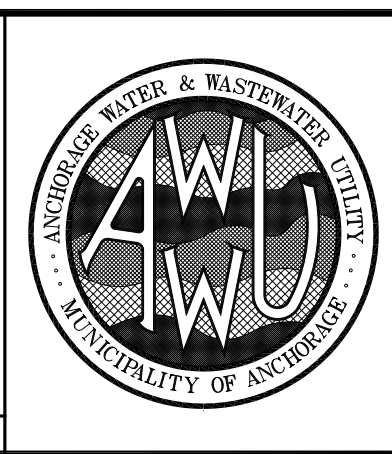
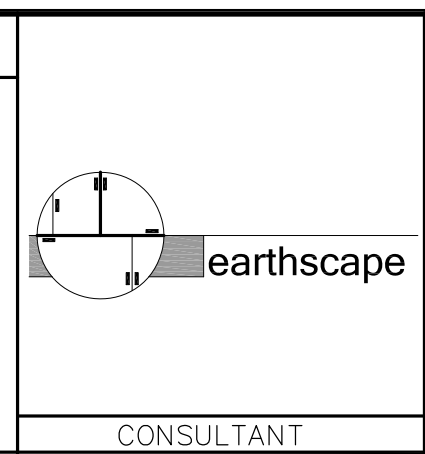
1. DATA PROVIDED BY: _____
 This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
 CONTRACTOR: _____ TITLE: _____
 DATE: _____

2. DATA TRANSFERRED BY: _____
 COMPANY: _____
 DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
 DATA TRANSFER CHECKED BY: _____
 COMPANY: _____
 BY: _____ TITLE: _____
 DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE
 WATER & WASTEWATER UTILITY
 WONDER PARK SEWER UPGRADE PHASE III

LANDSCAPE PLAN

HORIZ SCALE: N/A
 VERT SCALE: N/A
 DATE: APR 2014
 GRID: SW1237
 PROJ. ID.: 0000006490 (SWR)

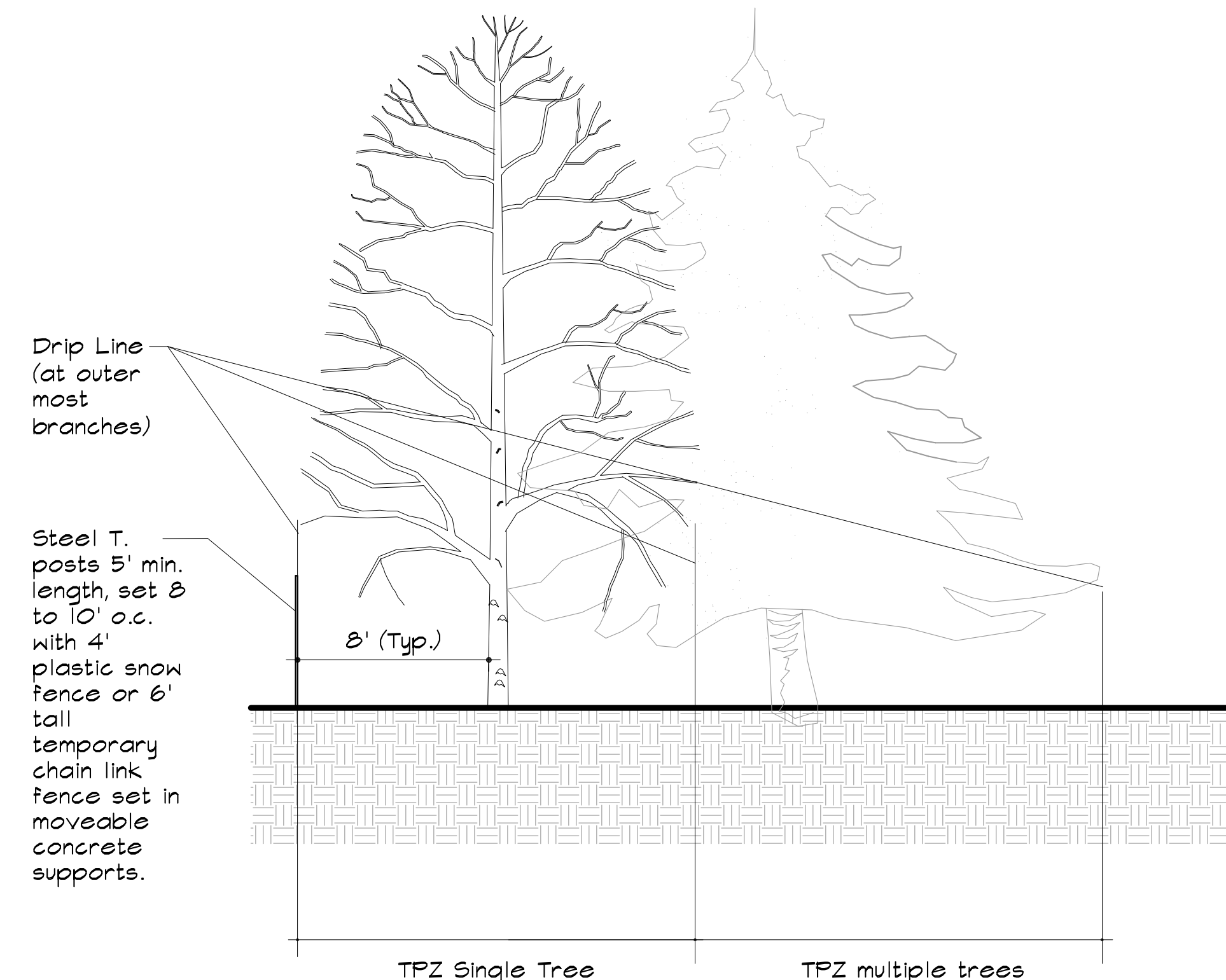
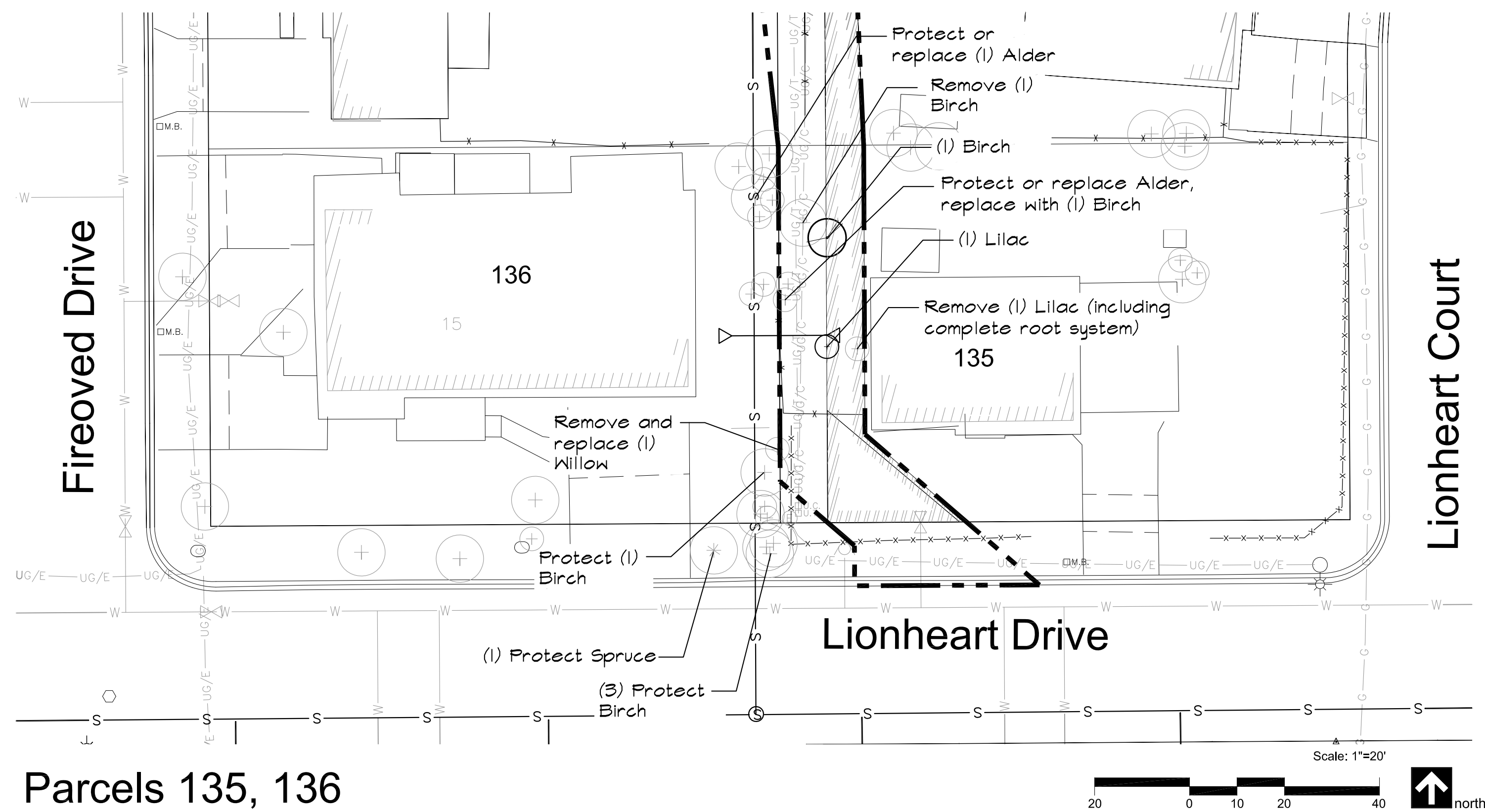
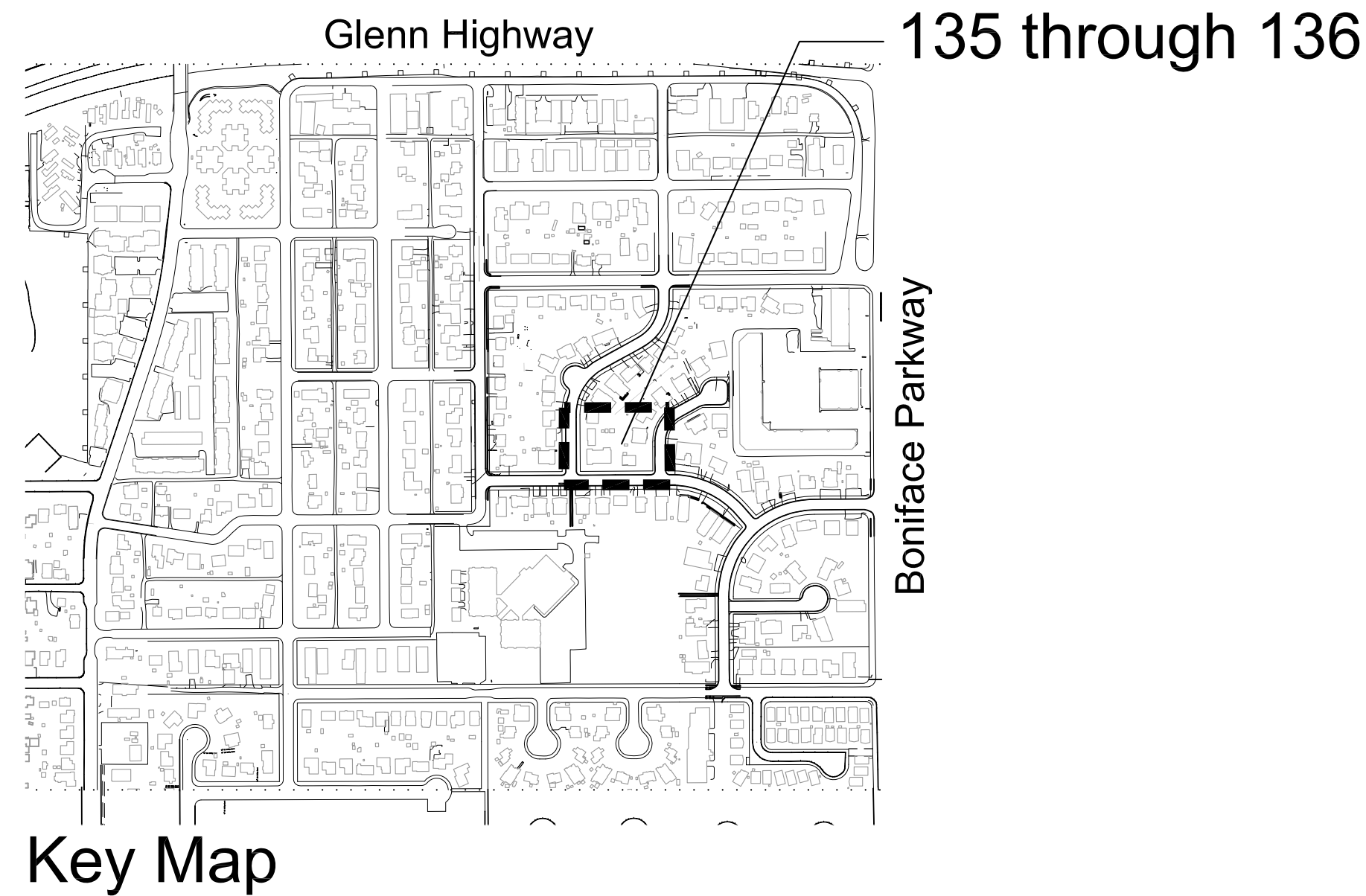
L5 of L7
 25 of 27

PLOT DATE: 3/31/2014 4:24 PM

PLOT SCALE:

ACAD FILE: H:\Projects\WonderPark\195% WonderPark\195% Wonder Park-L1.dwg

AWWU PLAN SET NO. 9892



- Notes:
1. Prior to tree removal or work within proximity to trees, Contractor shall notify Engineer for joint field visit to stake trees to be protected, trees to be replaced and trees to be removed.
 2. Flag trees accordingly.
 3. Do not excavate, store materials, or compact soils within TPZ.
 4. Excavation outside of TPZ shall take care in not damaging roots of protected trees. Use sharp tools to cleanly cut roots, do not loosen tree roots. Engineer may increase TPZ as required.
 5. Install protection fencing as shown, install protection fence before work begins.
 6. Contractor to maintain fence in vertical position and good repair throughout duration of work.
 7. Fence may be removed at time of hydroseeding with Engineer's approval.

Tree Protection Zone (TPZ) varies depending on size and quantity of trees. Follow tree drip line.

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE HORZ SCALE: N/A VERT SCALE: N/A	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						
PLAN CHECK					REVISIONS				

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

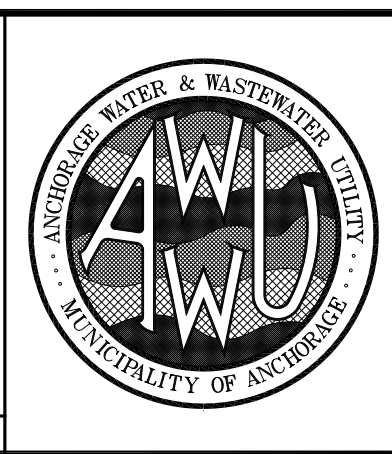
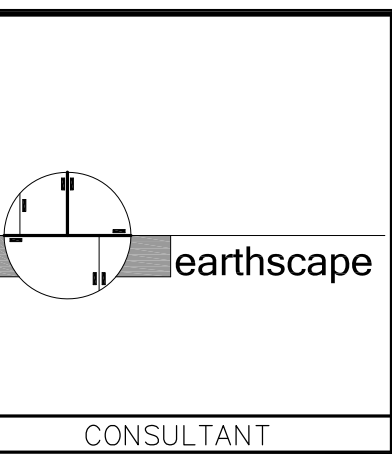
1. DATA PROVIDED BY: _____
This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
CONTRACTOR: _____
BY: _____ TITLE: _____
DATE: _____

2. DATA TRANSFERRED BY: _____
COMPANY: _____
DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
DATA TRANSFER CHECKED BY: _____
COMPANY: _____
BY: _____ TITLE: _____
DATE: _____

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



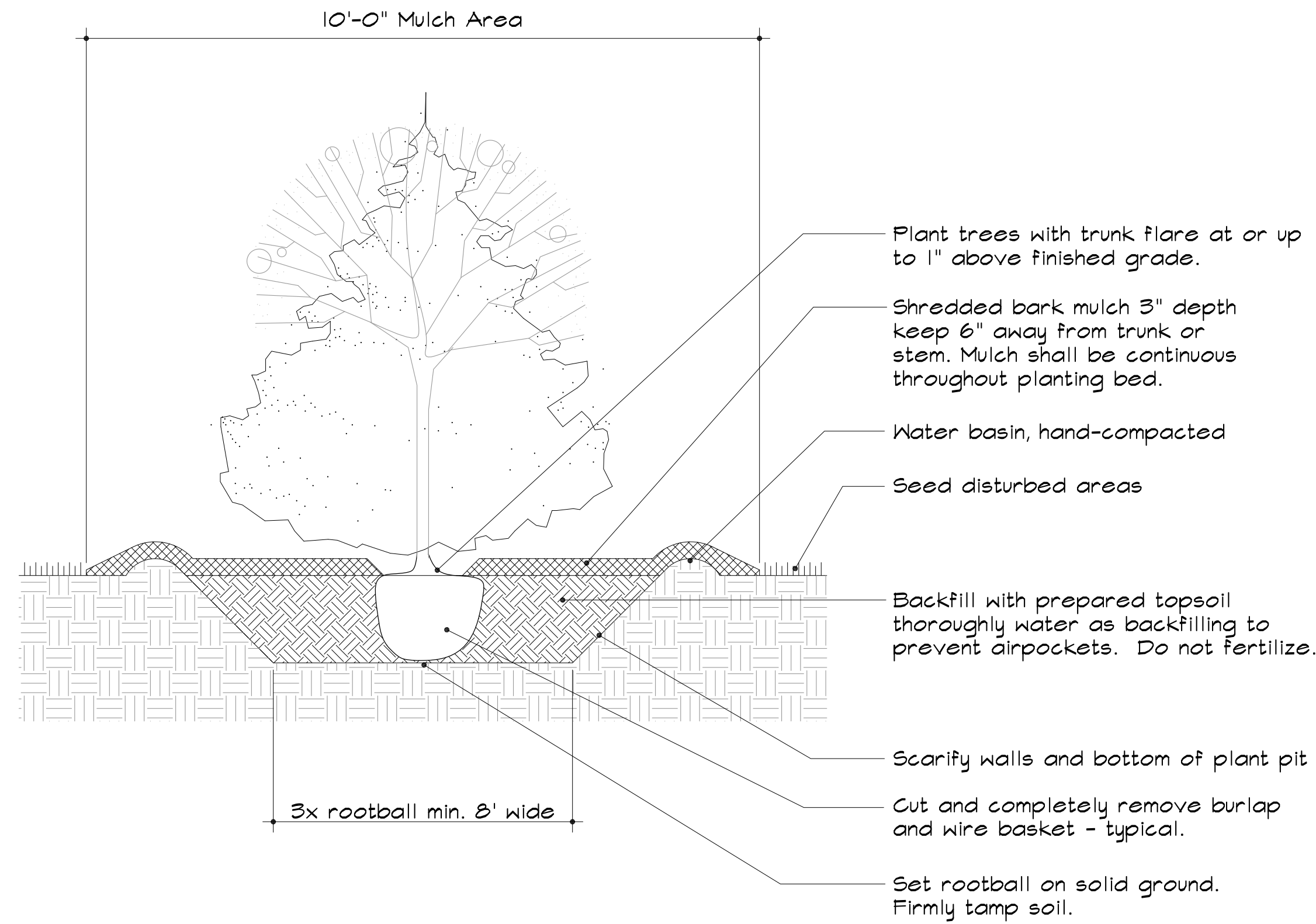
MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY			
WONDER PARK SEWER UPGRADE PHASE III			
LANDSCAPE PLAN			
HORZ SCALE: N/A VERT SCALE: N/A	DATE: APR 2014	GRID: SW1237	L6 of 26 of 27
PROJ. ID.: 0000006490 (SWR)			

PLOT DATE: 3/31/2014 3:55 PM

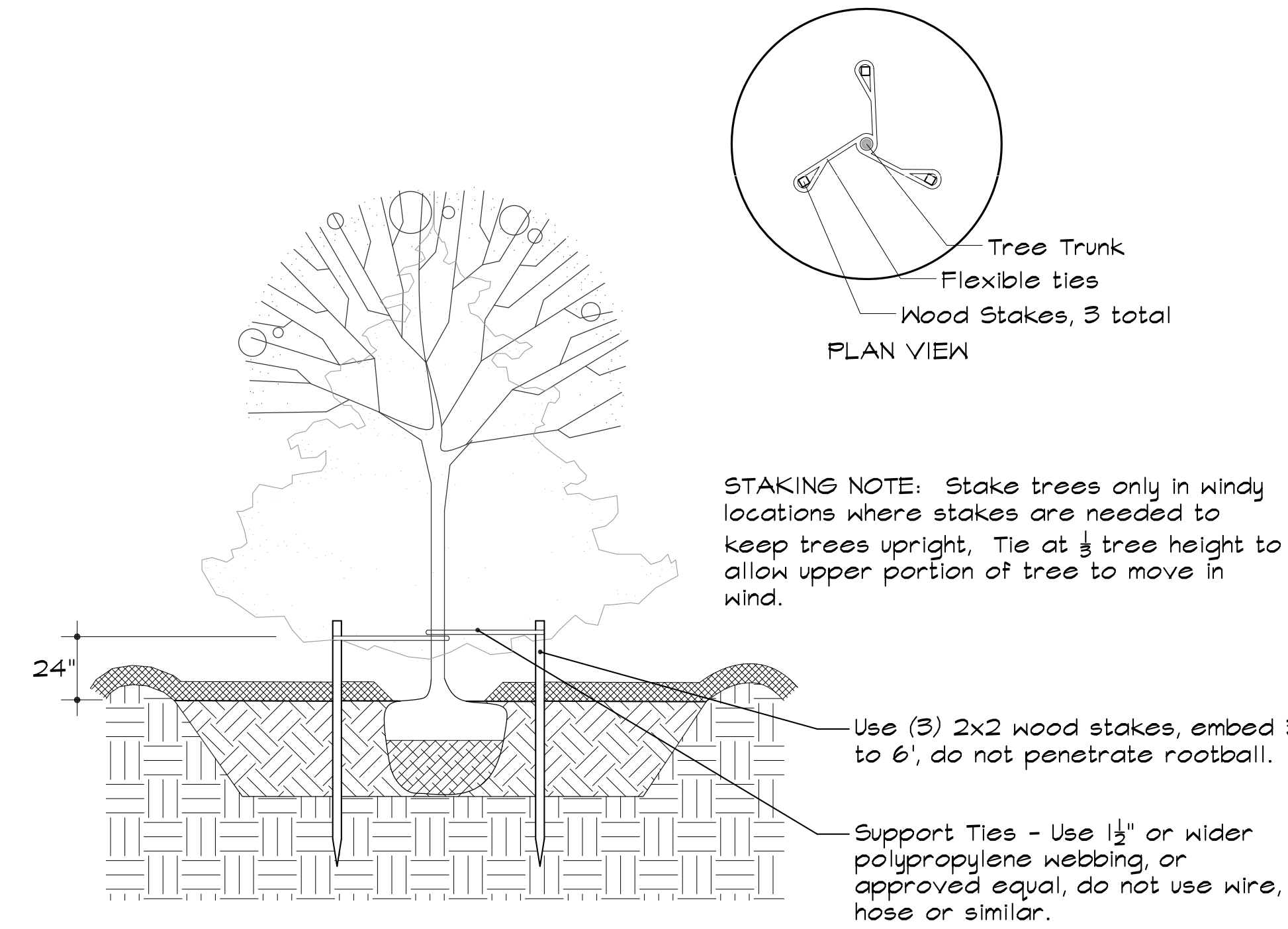
PLOT SCALE:

ACAD FILE: H:\Projects\WonderPark\Ph2 WonderPark\95% Wonder Park\95.3% Ph 2 Wonder Park-L1.dwg

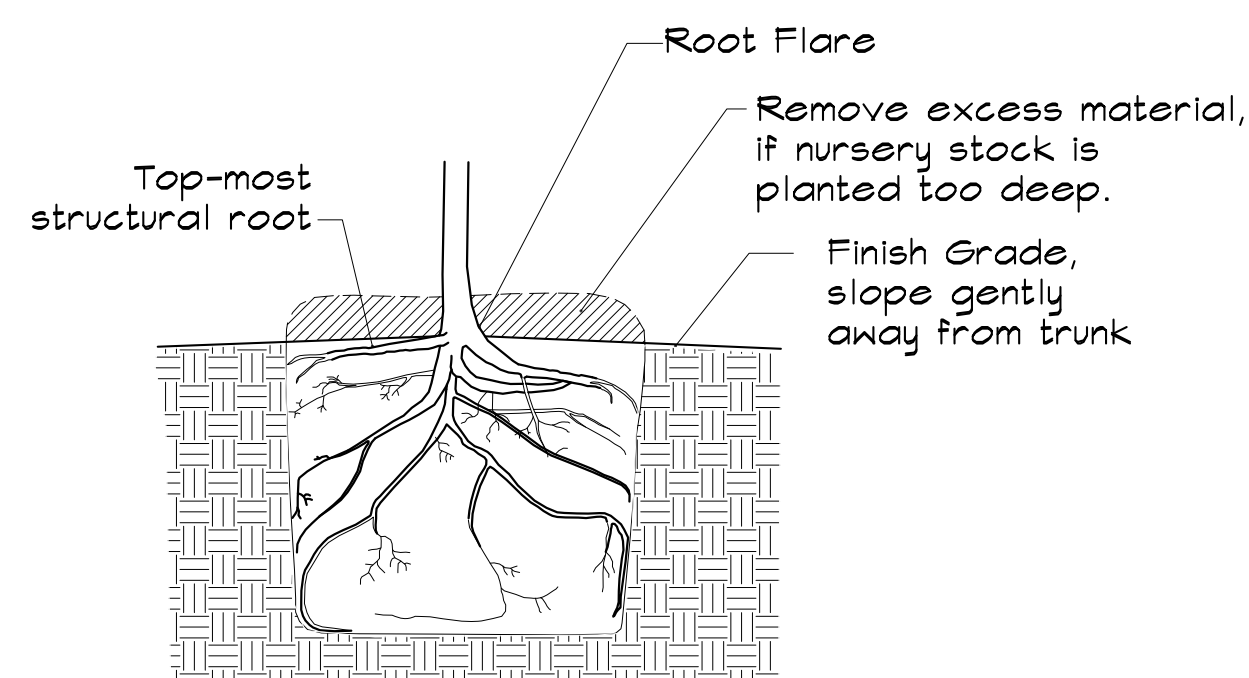
AWWU PLAN SET NO. 9892



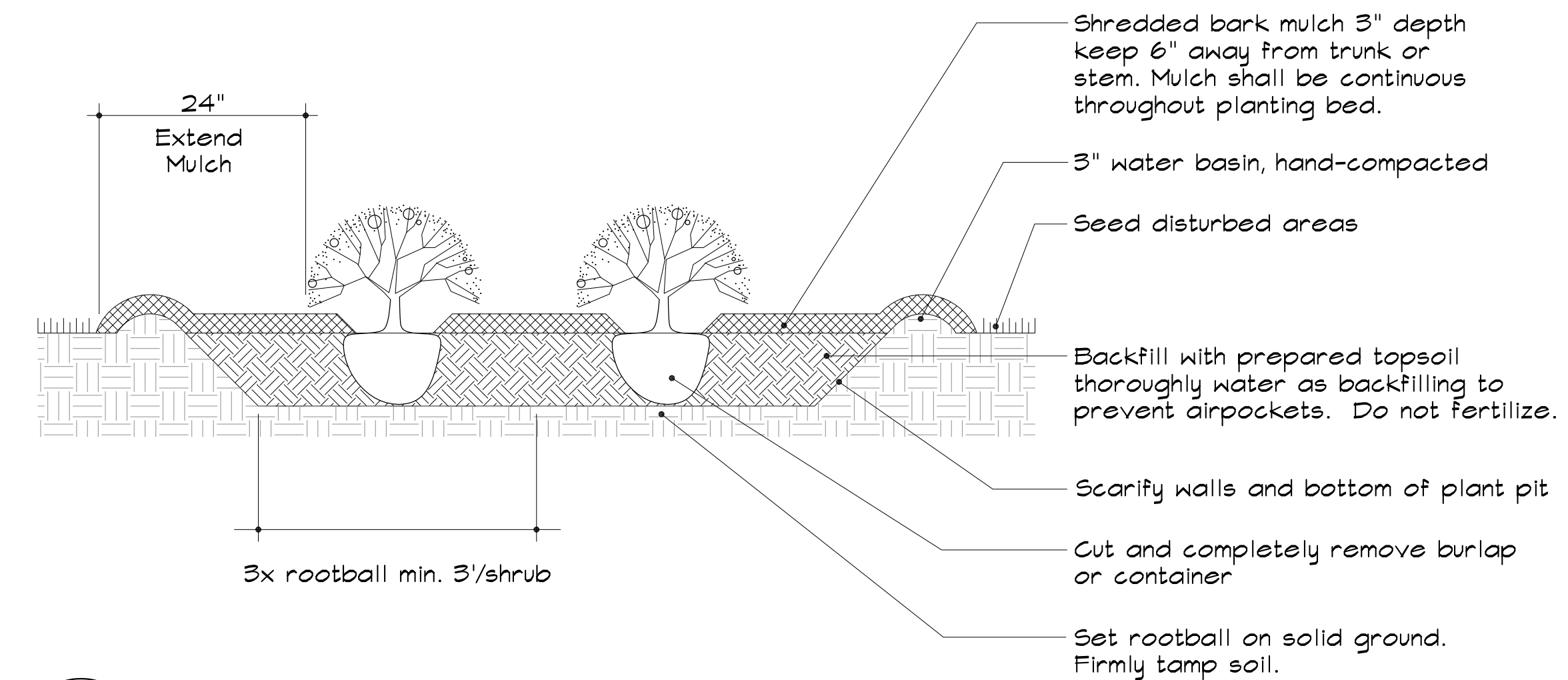
1 Tree Planting Detail
L7



2 Tree Staking Detail
L7



3 Tree Planting Depth Detail
L7



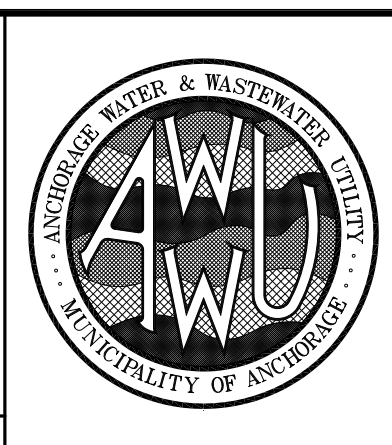
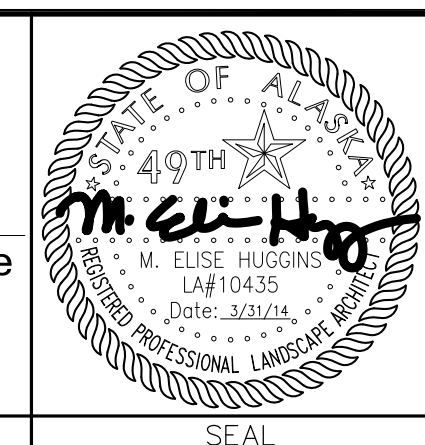
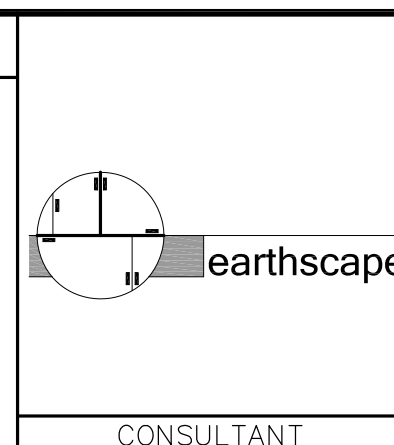
4 Shrub Planting Detail
L7

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE			TELEPHONE						
TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						
PLAN CHECK					REVISIONS				

RECORD DRAWING		Note: To be filled out on original drawings upon project completion.	
1. DATA PROVIDED BY:	_____	3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.	CONTRACTOR: _____
This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.		DATA TRANSFER CHECKED BY: _____	DATE: _____
BY: _____ TITLE: _____		COMPANY: _____	BY: _____ TITLE: _____
DATE: _____		DATE: _____	
2. DATA TRANSFERRED BY: _____			
COMPANY: _____			
DATE: _____			

REUSE OF DOCUMENTS

THIS DOCUMENT AND THE IDEAS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF AWWU AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF AWWU.



MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY			
WONDER PARK SEWER UPGRADE PHASE III			
LANDSCAPE DETAILS			
HORIZ SCALE: N/A	DATE: APR 2014	GRID: SW1237	L7 of 27
VERT SCALE: N/A	PROJ. ID.: 0000006490 (SWR)		27 of 27