

CIP NO.
590105-100097

TITLE SHEET

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST.
TO CHAPEL STONE RD.

PROJECT DESCRIPTION

PROVIDES FOR 0.91 MI. OF PEDESTRIAN SAFETY IMPROVEMENTS ALONG WAGGONER ROAD. INCLUDES WAGGONER ROAD WIDENING FROM CRAWFORD FARMS DRIVE TO WAGGONER WOODS DRIVE, MILLING AND OVERLAY OF WAGGONER ROAD, EXTENSION OF DYSART DITCH CULVERT, SHARED-USE PATH ALONG THE EAST SIDE OF WAGGONER ROAD, SIDEWALK ON THE WEST SIDE OF WAGGONER ROAD, MARKED CROSSWALKS, CURB RAMPS, SIGNAGE AND PAVEMENT MARKINGS.

EARTH DISTRURBED AREA

PROJECT EARTH DISTURBED AREA: 5.19 ACRES
PRE-CONSTRUCTION IMPERVIOUS AREA: 3.22 ACRES
POST-CONSTRUCTION IMPERVIOUS AREA: 3.39 ACRES

2012 SPECIFICATIONS

THE CITY OF COLUMBUS CONSTRUCTION AND MATERIALS SPECIFICATIONS (CMSC), 2012 EDITION INCLUDING ALL REVISIONS AND SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN UNLESS NOTED OTHERWISE.

CITY OF COLUMBUS APPROVALS

CITY OF COLUMBUS SIGNATURES ON THIS PLAN SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSES AND GENERAL LOCATION OF THE PROJECT. ALL TECHNICAL DETAILS REMAIN WITH THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLANS.

DESIGN SECTION ENGINEER, DIVISION OF DESIGN AND CONSTRUCTION DATE

ADMINISTRATOR, DIVISION OF POWER DATE

ADMINISTRATOR, DIVISION OF OF SEWERAGE AND DRAINAGE DATE

ADMINISTRATOR, DIVISION OF WATER DATE

DIRECTOR, DEPARTMENT OF PUBLIC UTILITIES DATE

FIRE PREVENTION BUREAU, DIVISION OF FIRE DATE

ENGINEERING SUPERVISOR, DEPARTMENT OF TECHNOLOGY DATE

DIRECTOR, DEPARTMENT OF RECREATION AND PARKS DATE

CITY ENGINEER/ADMINISTRATOR, DIVISION OF DESIGN AND CONSTRUCTION DATE

DIRECTOR, DEPARTMENT OF PUBLIC SERVICE DATE

FRANKLIN COUNTY ENGINEERS APPROVALS

SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSE AND GENERAL LOCATION OF THE PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLANS.

FRANKLIN COUNTY ENGINEER DATE

FRANKLIN COUNTY CHIEF DEPUTY ENGINEER DATE

REV NUM	REVISION DESCRIPTION	SHEET(S)	INITIAL	DATE



CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

PEDESTRIAN SAFETY IMPROVEMENTS
WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST. TO CHAPEL STONE RD.

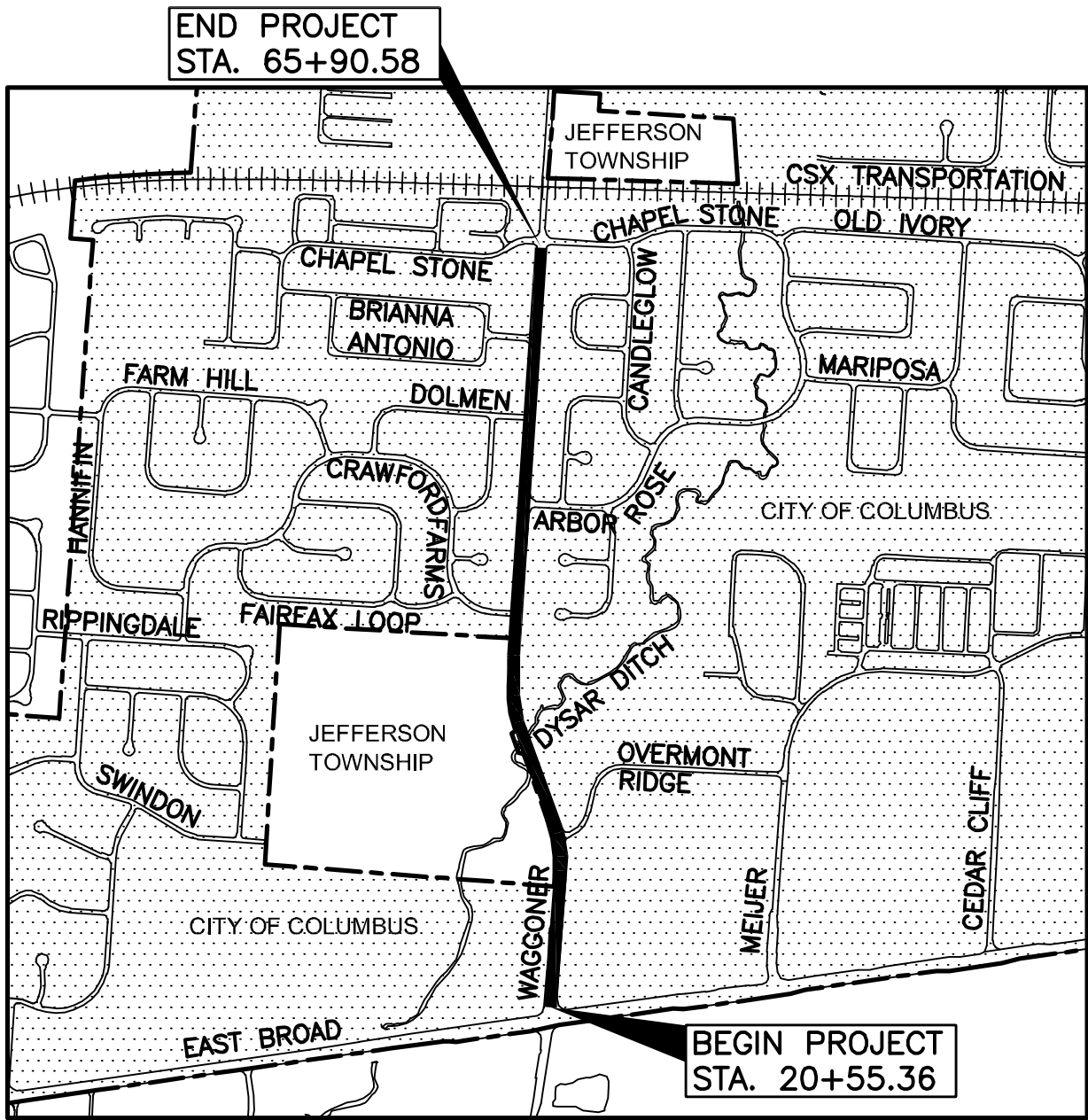
INDEX OF SHEETS

TITLE SHEET	1
SCHEMATIC PLAN/BENCHMARKS/REFERENCE POINTS	2-4
TYPICAL SECTIONS	5-7
GENERAL NOTES	8-9
MAINTENANCE OF TRAFFIC	10-11
GENERAL SUMMARY	
STORM WATER POLLUTION PREVENTION PLAN	12-15
PLAN - WAGGONER ROAD	16-22
CROSS SECTIONS - WAGGONER ROAD	23-51
PLAN & PROFILE - OVERMONT RIDGE RD.	52
CROSS SECTIONS - OVERMONT RIDGE RD.	53
PLAN & PROFILE - DOLMEN DR.	54
CROSS SECTIONS - DOLMEN DR.	55
INTERSECTION DETAILS	56-62
STORM SEWER PROFILES	63-67
SIGNING & MARKING PLAN	68-73
TRAFFIC SIGNAL	74-75
LIGHTING PLAN	76-77
STRUCTURES	78-82

STAGE 2 SUBMITTAL

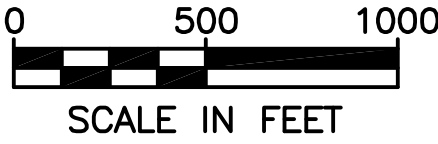
NOT FOR
CONSTRUCTION

CITY OF COLUMBUS STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
4300	5-1-14	XXXX	X-X-X	XXXX	X-X-X



LOCATION MAP

LATITUDE: N39°59'30" LONGITUDE: E82°47'30"

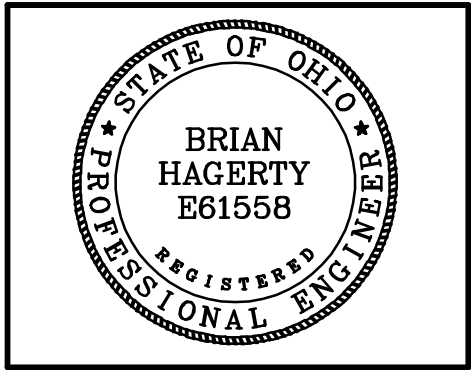


PORTIONS TO BE IMPROVED

DESIGN DESIGNATION

WAGGONER ROAD
CURRENT ADT (2014) 17,038 (2009, MORPC)
DESIGN SPEED 45 MPH
LEGAL SPEED 45 MPH
FUNCTIONAL CLASSIFICATION URBAN COLLECTOR

DESIGN EXCEPTIONS: NONE REQUIRED



REGISTERED ENGINEER (ROADWAY) DATE



REGISTERED ENGINEER (SIGNALS) DATE

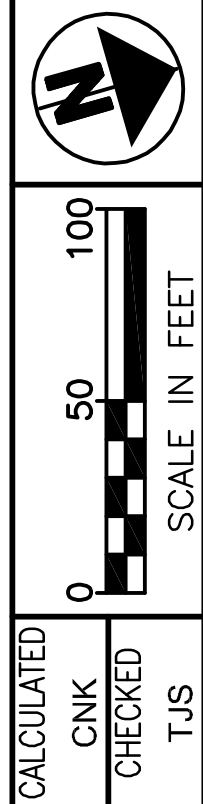
REGISTERED ENGINEER (STRUCTURES) DATE



THE BEARINGS SHOWN HEREIN ARE BASED ON THE CENTERLINE OF WAGGONER ROAD AS BEING NORTH 04°17'51" EAST FROM AN ADJUSTED FIELD SURVEY USING GPS METHODS FROM FCGS 5011 TO FCGS 1276, BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM 1983 (NSRS 2007).

WAGGONER ROAD: CENTERLINE STATIONING AS ESTABLISHED ON 1796-E

CURVE DATA
CURVE NO. 1
P.I. STA. 30+32.91
 $\Delta = 23^{\circ}53'08''$ LT.
 $D_c = 07^{\circ}00'00''$
 $R = 818.51'$
 $T = 173.13'$
 $L = 341.22'$
 $E = 18.11'$
P.C. STA. 28+59.78
P.T. STA. 32+01.00

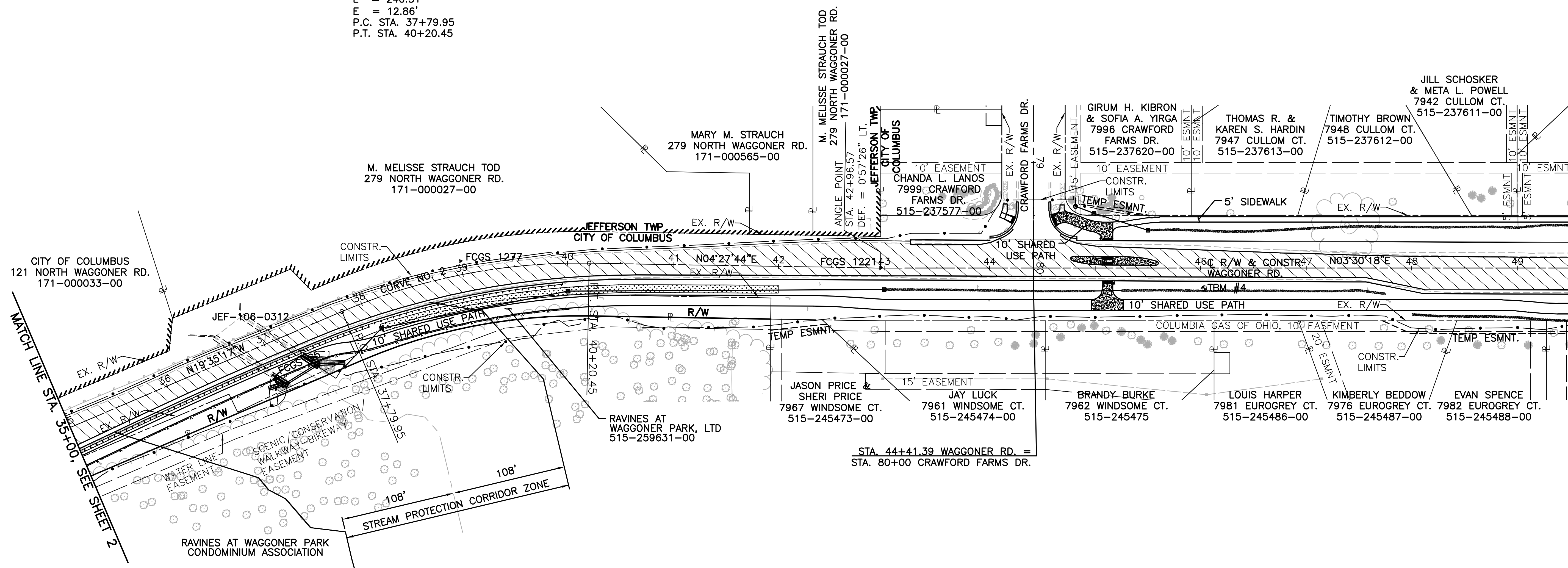


VERTICAL CONTROL					
VERTICAL CONTROL IS SET USING THE FRANKLIN COUNTY SOURCE MONUMENT (BELOW), BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).					
BENCHMARK	DESCRIPTION	NORTHING	EASTING	ELEVATION	
SOURCE BENCHMARK	ALUMINUM CAP IN CONCRETE MONUMENT, AT AN ANGLE POINT IN THE CENTERLINE OF WAGGONER ROAD, 776 FEET SOUTH OF EAST BROAD STREET, ON A P/L EAST ACCESS THROUGH F.C. ROAD MONUMENT BOX. MONUMENT REPLACED A FOUND RAILROAD SPIKE 5 INCHES DEEP	722429.64	1886789.44	983.18	
TBM #1	"+" SET ON THE EAST SIDE OF THE TOP FLANGE TO THE FIRE HYDRANT LOCATED 50'± EAST OF THE CENTERLINE OF WAGGONER RD. AND 200'± NORTH OF THE CENTERLINE OF EAST BROAD ST. WAGGONER RD. STA. 22+04.33, 40.27' RT.	723410.56	1886979.92	991.54	
TBM #2	"+" SET ON THE WEST SIDE OF THE TOP FLANGE TO THE FIRE HYDRANT LOCATED 50'± EAST OF THE CENTERLINE OF WAGGONER RD. AND 400'± NORTH OF THE CENTERLINE OF EAST BROAD ST. WAGGONER RD. STA. 25+76.50, 40.19' RT.	723781.69	1887007.72	992.06	
TBM #3	"+" SET ON THE WEST SIDE OF THE TOP FLANGE TO THE FIRE HYDRANT LOCATED 25'± EAST OF THE CENTERLINE OF WAGGONER RD. AND 300'± NORTH OF THE CENTERLINE OF OVERMONT RIDGE RD. (RAVINES AT WAGGONER PARK), WAGGONER RD. STA. 33+83.78, 25.9' RT.	724583.81	1886906.93	968.81	

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

MCDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\planset\173608763-Sch01.dwg SCHEMATIC PLAN Last Saved: Apr 27, 2015 9:57 AM Plotted: May 01, 2015 11:37 AM

CURVE DATA
CURVE NO. 2
P.I. STA. 39+02.00
 $\Delta = 24^{\circ}03'02''$ RT.
 $D_c = 10^{\circ}00'00''$
 $R = 572.96'$
 $T = 122.05'$
 $L = 240.51'$
 $E = 12.86'$
P.C. STA. 37+79.95
P.T. STA. 40+20.45



BASIS OF STATIONING:
WAGGONER ROAD: CENTERLINE STATIONING AS ESTABLISHED ON 1796-E

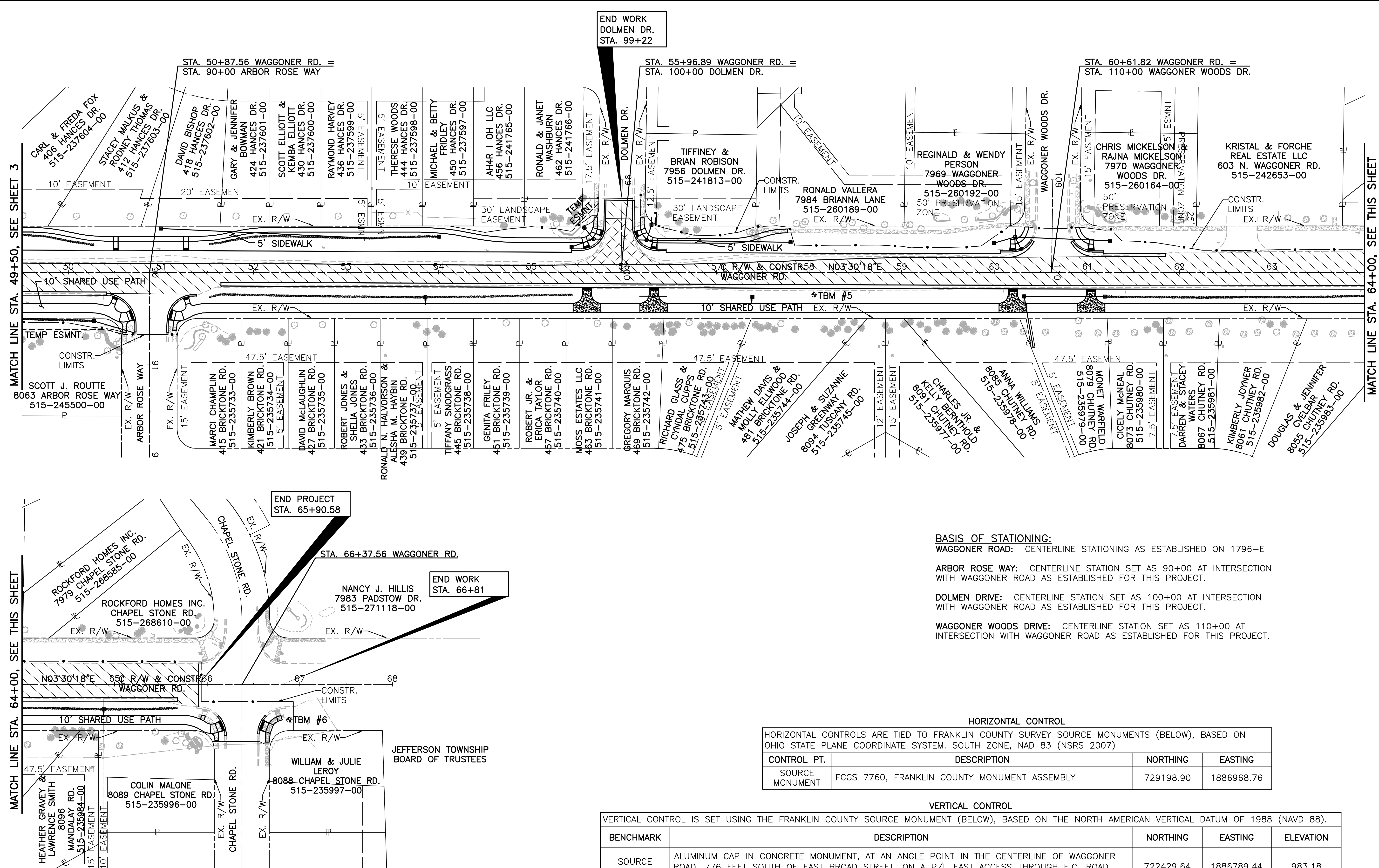
CRAWFORD FARMS DRIVE: CENTERLINE STATION SET AS 80+00 AT INTERSECTION WITH WAGGONER ROAD AS ESTABLISHED FOR THIS PROJECT.

VERTICAL CONTROL

VERTICAL CONTROL IS SET USING THE FRANKLIN COUNTY SOURCE MONUMENT (BELOW), BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

HORIZONTAL CONTROL			
HORIZONTAL CONTROLS ARE TIED TO FRANKLIN COUNTY SURVEY SOURCE MONUMENTS (BELOW), BASED ON OHIO STATE PLANE COORDINATE SYSTEM. SOUTH ZONE, NAD 83 (NSRS 2007)			
CONTROL PT.	DESCRIPTION	NORTHING	EASTING
SOURCE MONUMENT	FCGS 1277, FRANKLIN COUNTY MONUMENT ASSEMBLY	725063.36	1886708.79
SOURCE MONUMENT	FCGS 1221, FRANKLIN COUNTY MONUMENT ASSEMBLY	725460.32	1886739.77

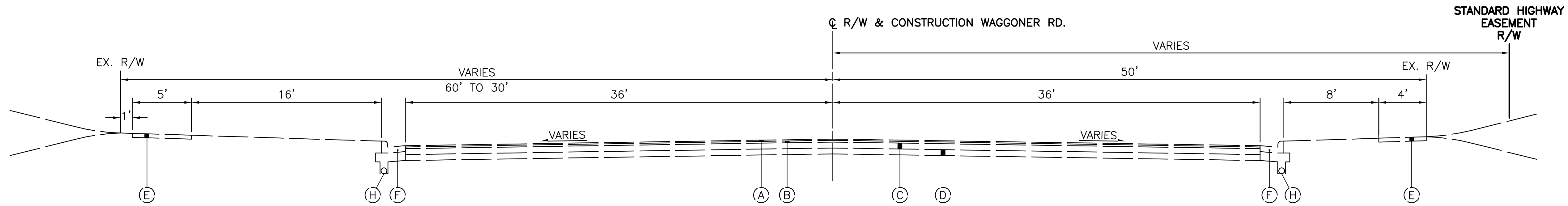
BENCHMARK	DESCRIPTION	NORTHING	EASTING	ELEVATION
SOURCE BENCHMARK	ALUMINUM CAP IN CONCRETE MONUMENT, AT AN ANGLE POINT IN THE CENTERLINE OF WAGGONER ROAD, 776 FEET SOUTH OF EAST BROAD STREET, ON A P/L EAST ACCESS THROUGH F.C. ROAD MONUMENT BOX. MONUMENT REPLACED A FOUND RAILROAD SPIKE 5 INCHES DEEP	722429.64	1886789.44	983.18
TBM #4	"+" SET ON THE WEST SIDE OF THE TOP FLANGE TO THE FIRE HYDRANT LOCATED 30'± EAST OF THE CENTERLINE OF WAGGONER RD. AND 450'± SOUTH OF THE CENTERLINE OF ARBOR ROSE WAY. WAGGONER RD. STA. 46+03.32, 19.03' RT.	725765.33	1886777.51	999.70



HORIZONTAL CONTROL			
HORIZONTAL CONTROLS ARE TIED TO FRANKLIN COUNTY SURVEY SOURCE MONUMENTS (BELOW), BASED ON OHIO STATE PLANE COORDINATE SYSTEM. SOUTH ZONE, NAD 83 (NSRS 2007)			
CONTROL PT.	DESCRIPTION	NORTHING	EASTING
SOURCE MONUMENT	FCGS 7760, FRANKLIN COUNTY MONUMENT ASSEMBLY	729198.90	1886968.76

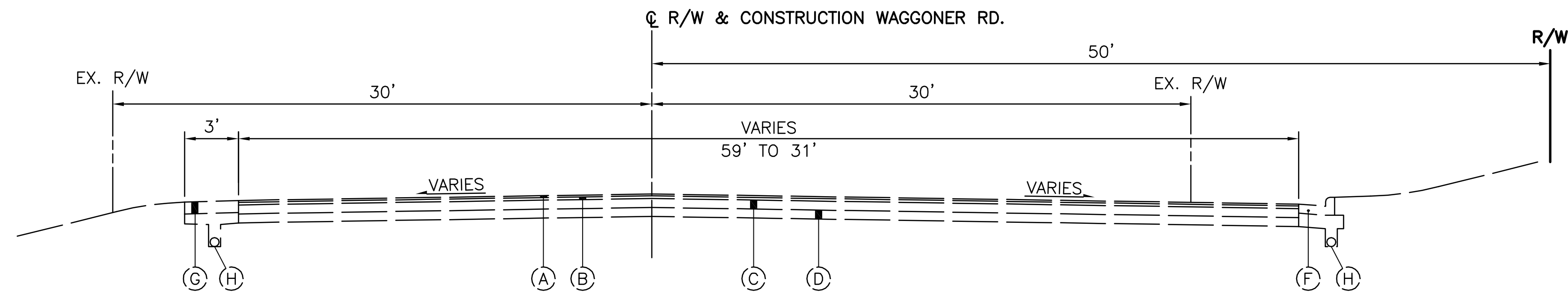
VERTICAL CONTROL IS SET USING THE FRANKLIN COUNTY SOURCE MONUMENT (BELOW), BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).				
BENCHMARK	DESCRIPTION	NORTHING	EASTING	ELEVATION
SOURCE BENCHMARK	ALUMINUM CAP IN CONCRETE MONUMENT, AT AN ANGLE POINT IN THE CENTERLINE OF WAGGONER ROAD, 776 FEET SOUTH OF EAST BROAD STREET, ON A P/L EAST ACCESS THROUGH F.C. ROAD MONUMENT BOX. MONUMENT REPLACED A FOUND RAILROAD SPIKE 5 INCHES DEEP	722429.64	1886789.44	983.18
TBM #5	"  SET ON THE WEST SIDE OF THE TOP FLANGE TO THE FIRE HYDRANT LOCATED 30'± EAST OF THE CENTERLINE OF WAGGONER RD. AND 250'± SOUTH OF THE CENTERLINE OF WAGGONER WOODS DR. WAGGONER RD. STA. 58+05.25, 24.08' RT.	726964.70	1886856.03	999.81
TBM #6	" " CHISLED SQUARE ON SOUTHEAST CORNER TRAFFIC CONTROL BOX #M419 LOCATED 50'± EAST OF WAGGONER RD. AND 50'± NORTH OF THE CENTERLINE OF CHAPEL STONE RD. WAGGONER RD. STA. 66+88.12, 38.34' RT.	727845.05	1886924.24	1001.78

\\CDANIEL-ARCON_U\173608763\Task 2 - Waggoner Road\design\plan\as\173608763ts.dwg TYPICAL SECTIONS Last Saved: Apr 30, 2015 10:34 AM Plotted: May 01, 2015 11:37 AM



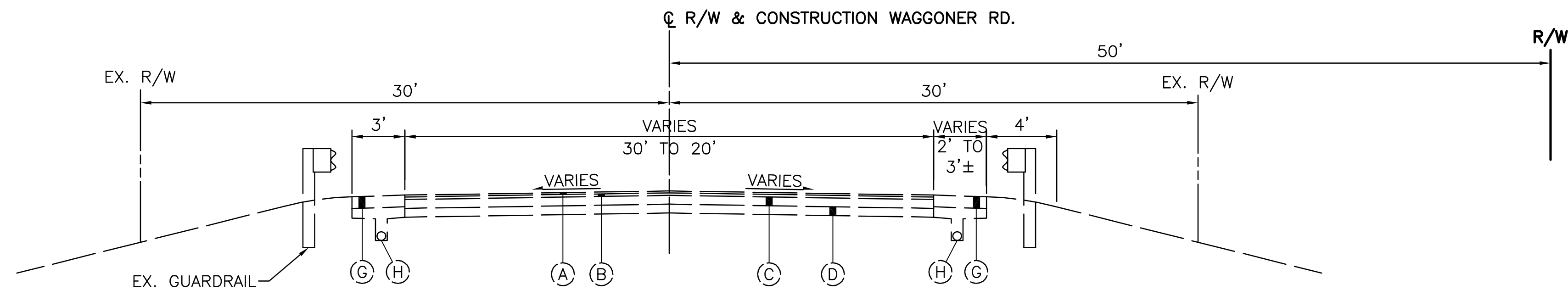
EXISTING WAGGONER ROAD

STA. 20+55.36 TO 29+24.85 = 869.49 FT.



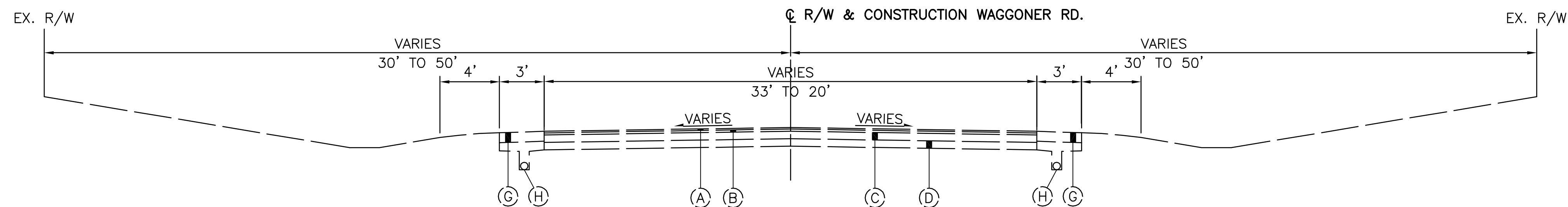
EXISTING WAGGONER ROAD

STA. 29+24.85 TO 34+01.47 = 476.62 FT.



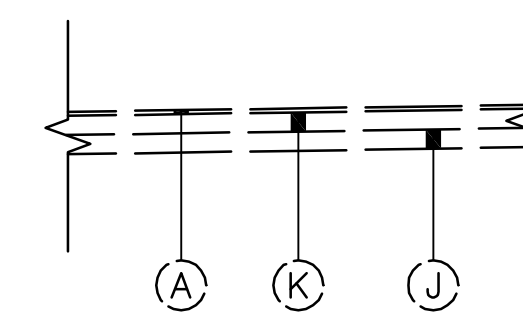
EXISTING WAGGONER ROAD

STA. 34+01.47 TO 40+00 = 598.53 FT.

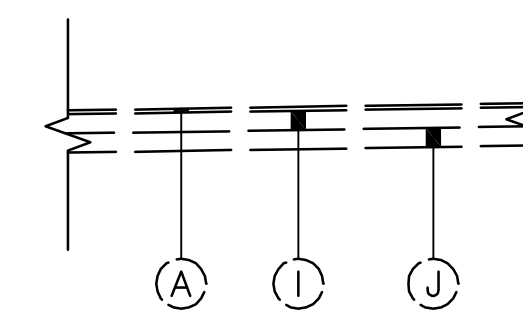


EXISTING WAGGONER ROAD

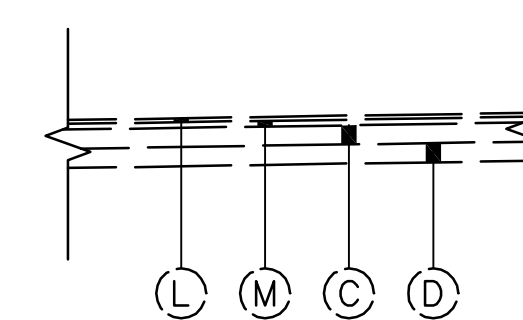
STA. 40+00 TO STA. 65+90.58 = 2,590.58 FT.



ARBOR ROSE WAY



CRAWFORD FARMS DRIVE/DOLMEN DRIVE



WAGGONER WOODS DRIVE

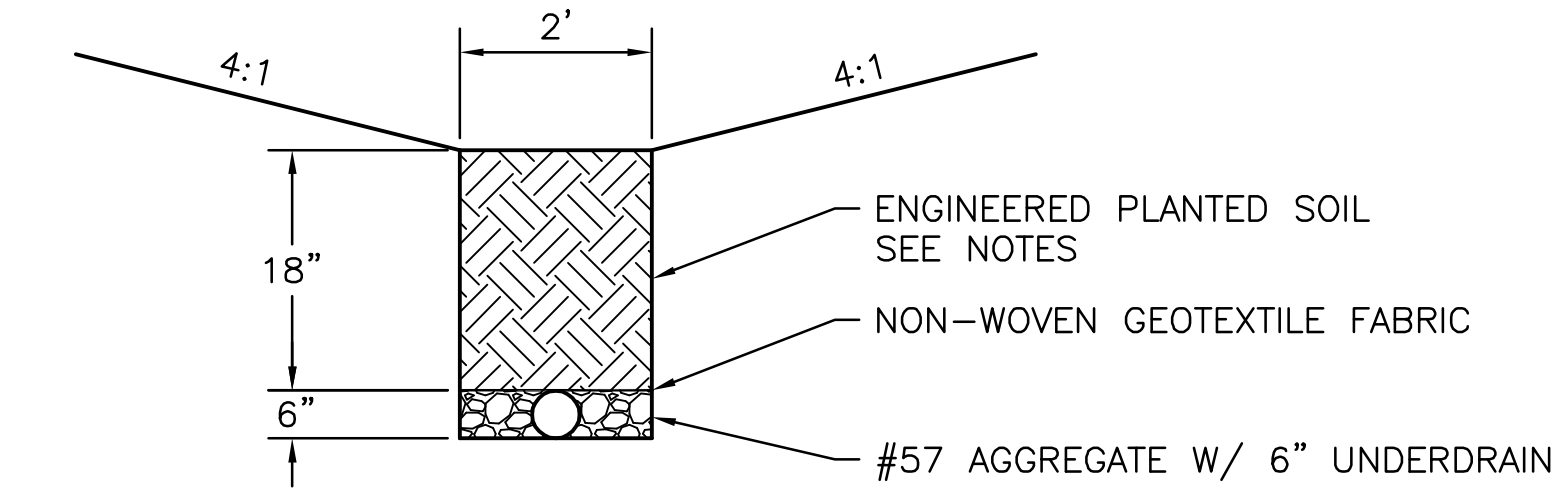
LEGEND

- (A) EXISTING 1 1/4" SURFACE COURSE
- (B) EXISTING 1 3/4" INTERMEDIATE COURSE
- (C) EXISTING 6" ASPHALT BASE
- (D) EXISTING 6" AGGREGATE BASE
- (E) EXISTING 4" CONCRETE WALK
- (F) EXISTING CURB & GUTTER, TYPE 2 (ODOT)
- (G) EXISTING 8" AGGREGATE SHOULDER
- (H) EXISTING 6" UNDERDRAIN
- (I) EXISTING 1 1/2" INTERMEDIATE COURSE
- (J) EXISTING 7" CONCRETE BASE
- (K) EXISTING 1 1/4" INTERMEDIATE COURSE
- (L) EXISTING 1 1/2" SURFACE COURSE
- (M) EXISTING 1 1/2" INTERMEDIATE COURSE

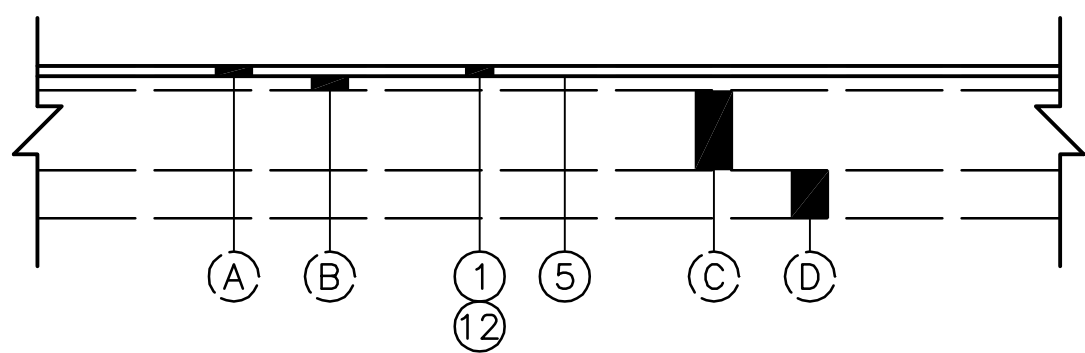
TYPICAL SECTIONS

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

- NOTES:
- ENGINEERED PLANTING SOIL SHALL CONSIST OF A MIXTURE OF SAND, TOPSOIL AND COMPOST WITH A PH RANGE OF 5.2 TO 7. THE SOIL SHALL HAVE AN INFILTRATION RATE NO LESS THAN 0.5 INCHES PER HOUR. THE SOIL IS COMPRISED OF 4 PARTS SAND PER ITEM 703.06, 2 PARTS TOP SOIL PER ITEM 653.02, AND 2 PARTS COMPOST PER ODOT CMS 659.06.
 - UNDERDRAIN SHALL CONFORM TO CMS 720.07
 - NON-WOVEN GEOTEXTILE FABRIC SHALL CONFORM TO CMS 712.09, TYPE A.
 - PAYMENT FOR THE BIOSWALE SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE WORK, AT THE LOCATIONS SHOWN IN THE PLANS, AT THE UNIT BID PRICE FOR ITEM SPEC. - BIOSWALE PER FOOT.

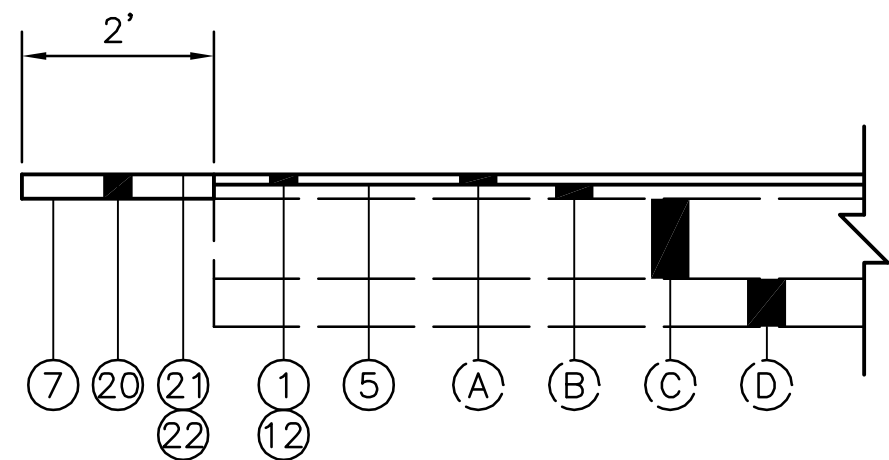


BIOSWALE DETAIL



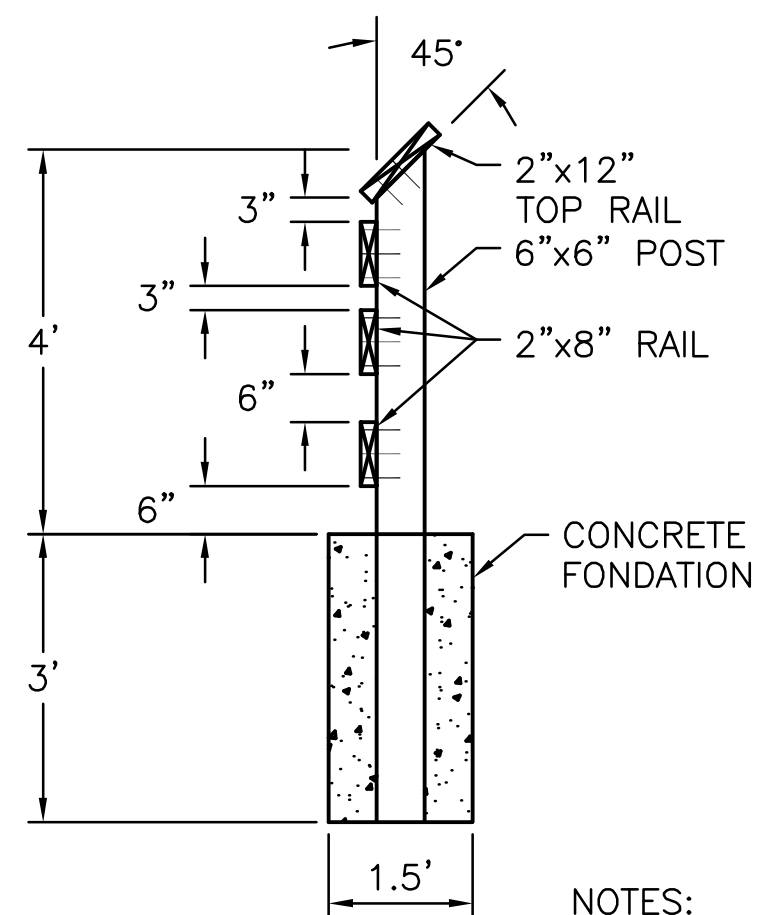
MILL & OVERLAY DETAIL

STA. 20+55.36 TO STA. 60+90.58 = 4035.22 FT.



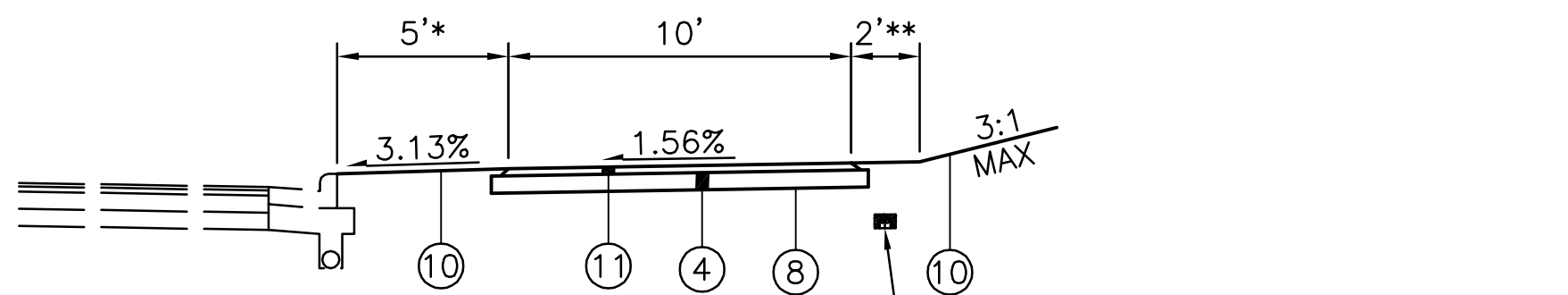
AGGREGATE SHOULDER DETAIL

STA. 29+24.85 TO STA. 43+25 = 1400.15 FT.



- NOTES:
- CCA TREAT ALL WOOD MEMBERS AS SPECIFIED IN CMS 712.06.
 - PROVIDE GALVANIZED 1/2"x5" LAG BOLTS AND WASHERS PER CMS 711.02 & 711.10.
 - PROVIDE A WOOD RAILING THAT IS SMOOTH AND SPLINTER FREE.
 - STAGGER BUTT ENDS OF THE TOP RAIL AND THE LOWER FACE RAILS ON ALTERNATE POSTS.
 - CENTER ALL BUTT END JOINTS ON THE POSTS.

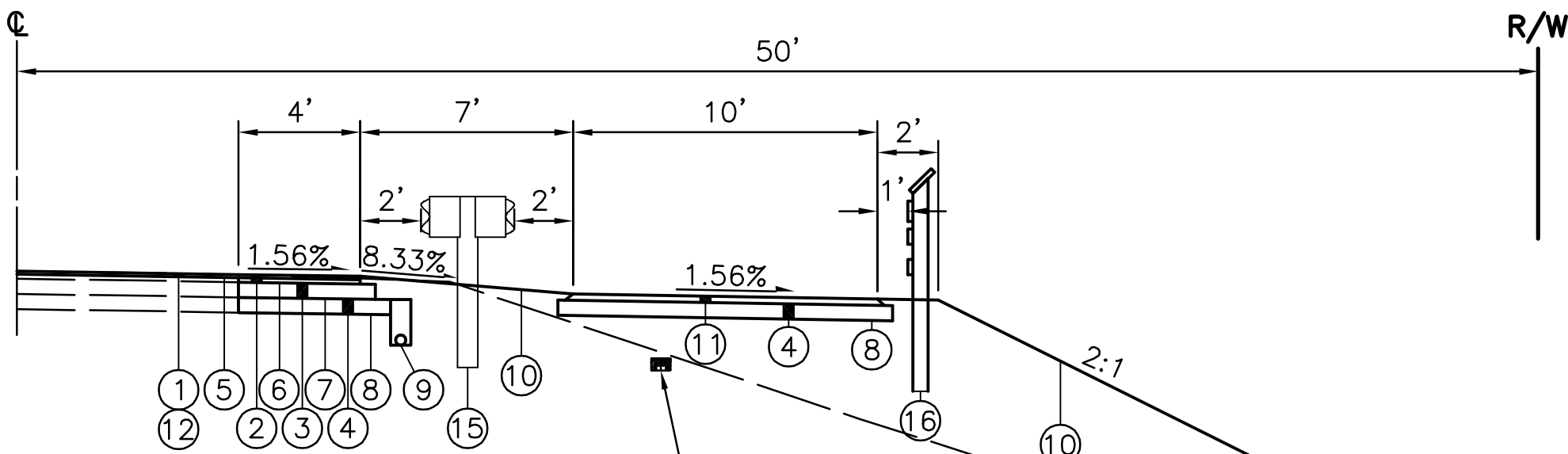
ITEM SPEC. - 4' WOOD RAILING DETAIL



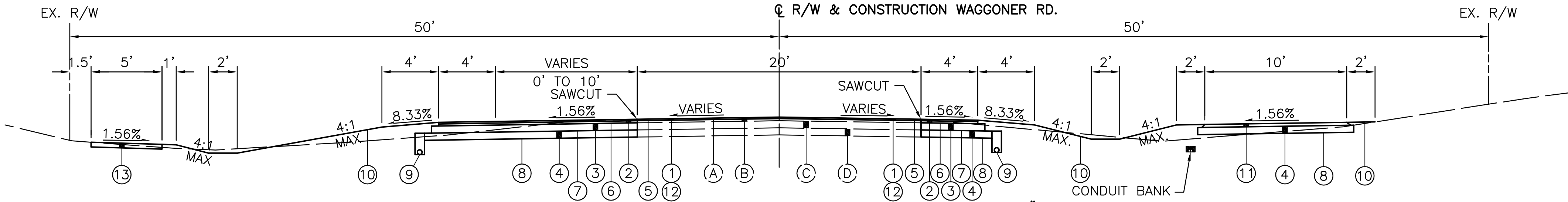
**SHARED USE PATH
BEHIND CURB & GUTTER**

* 5' IS THE MINIMUM OFFSET FROM THE BACK OF CURB. SEE PLAN SHEETS & CROSS SECTIONS SHEETS FOR OFFSETS.

** FROM STA. 31+00 TO STA. 34+00 GRADED SHOULDER SHALL BE 1'.



**SHARED USE PATH
AT CULVERT**



WAGGONER ROAD WIDENING

STA. 44+82.60 TO STA. 59+00 = 1417.40 FT.

LEGEND

- ① ITEM 448 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE (MEDIUM TRAFFIC), PG64-22
- ② ITEM 448 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE (MEDIUM TRAFFIC), PG64-22
- ③ ITEM 301 - 6" ASPHALT CONCRETE BASE
- ④ ITEM 304 - 6" AGGREGATE BASE
- ⑤ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (0.04 GAL./S.Y.)
- ⑥ ITEM 407 - TACK COAT (0.075 GAL./S.Y.)
- ⑦ ITEM 408 - PRIME COAT (0.4 GAL./S.Y.)
- ⑧ ITEM 204 - SUBGRADE COMPACTION
- ⑨ ITEM 605 - 4" PIPE UNDERDRAINS
- ⑩ ITEM 659 - SEEDING AND MULCHING
- ⑪ ITEM 448 - 2 1/2" ASPHALT CONCRETE SURFACE COURSE (MEDIUM TRAFFIC), PG64-22
- ⑫ ITEM 254 - 1 1/4" PAVEMENT PLANING, ASPHALT CONCRETE

- ⑬ ITEM 608 - CONCRETE WALK (4")
- ⑭ ITEM 606 - GUARDRAIL, TYPE MGS
- ⑮ ITEM 606 - GUARDRAIL, BARRIER DESIGN, TYPE MGS
- ⑯ ITEM SPECIAL - 4' WOOD RAILING
- ⑰ ITEM 609 - CONCRETE MEDIAN, AS PER PLAN
- ⑱ ITEM 609 - COMBINATION CURB & GUTTER
- ⑲ ITEM 609 - CURB, STRAIGHT 18"
- ⑳ ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE
- ㉑ ITEM 412 - SEAL COAT BITUMINOUS MATERIAL (2 APPLICATIONS @ 0.15 GAL./S.Y.)
- ㉒ ITEM 412 - SEAL COAT COVER AGGREGATE (2 APPLICATIONS @ 10 LBS./S.Y.)
- (A) EXISTING 1 1/4" SURFACE COURSE
- (B) EXISTING 1 3/4" INTERMEDIATE COURSE
- (C) EXISTING 6" ASPHALT BASE

CONCRETE MEDIAN DETAIL

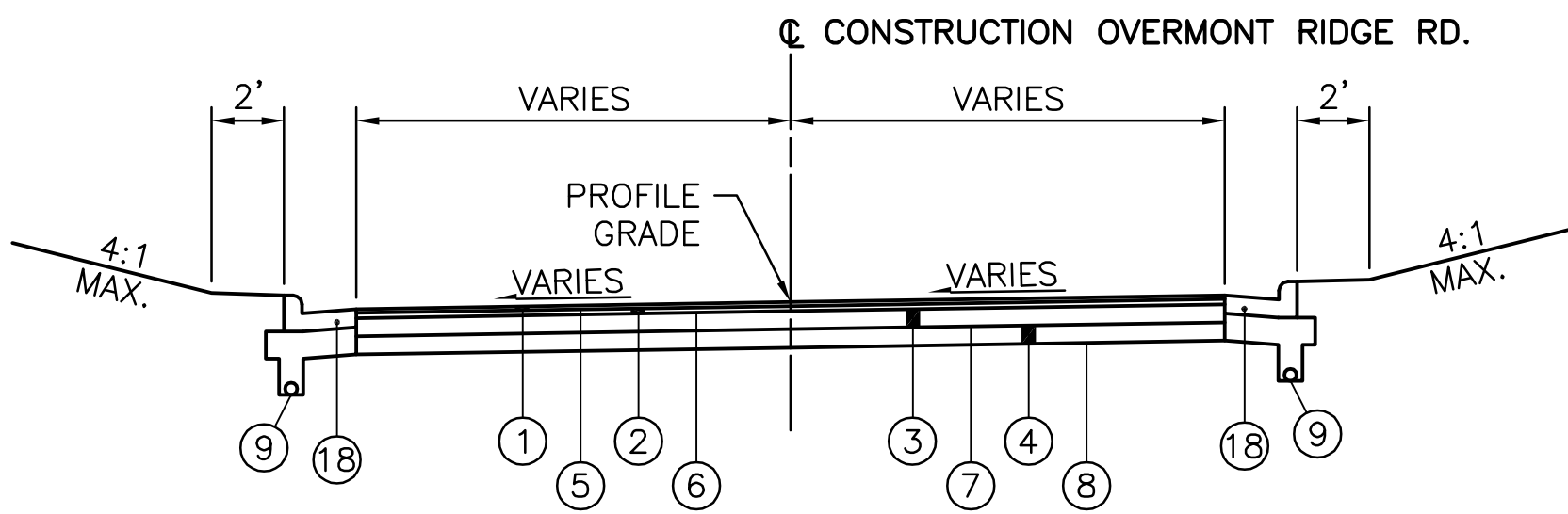
STA. 44+76.75 TO STA. 45+65.43 = 88.68 FT.

- (D) EXISTING 6" AGGREGATE BASE
- (E) EXISTING 4" CONCRETE WALK
- (F) EXISTING CURB & GUTTER, TYPE 2 (ODOT)
- (G) EXISTING 8" AGGREGATE SHOULDER
- (H) EXISTING 4" UNDERDRAIN
- (I) EXISTING 1 1/2" INTERMEDIATE COURSE
- (J) EXISTING 7" CONCRETE BASE
- (K) EXISTING 1 1/4" INTERMEDIATE COURSE
- (L) EXISTING 1 1/2" SURFACE COURSE
- (M) EXISTING 1 1/2" INTERMEDIATE COURSE

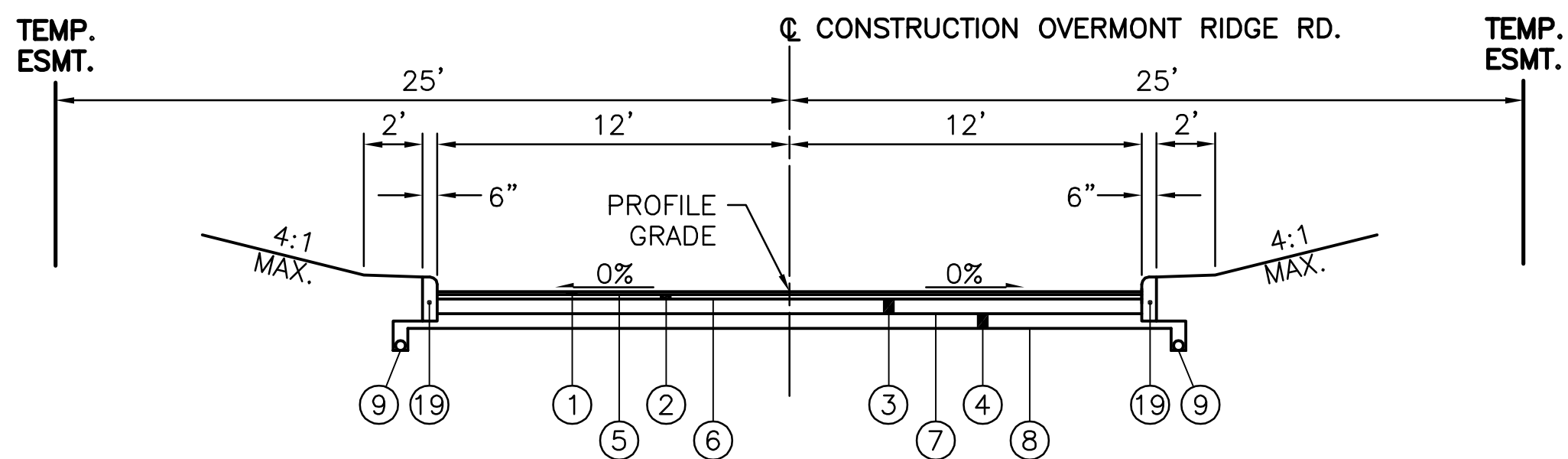
TYPICAL SECTIONS

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

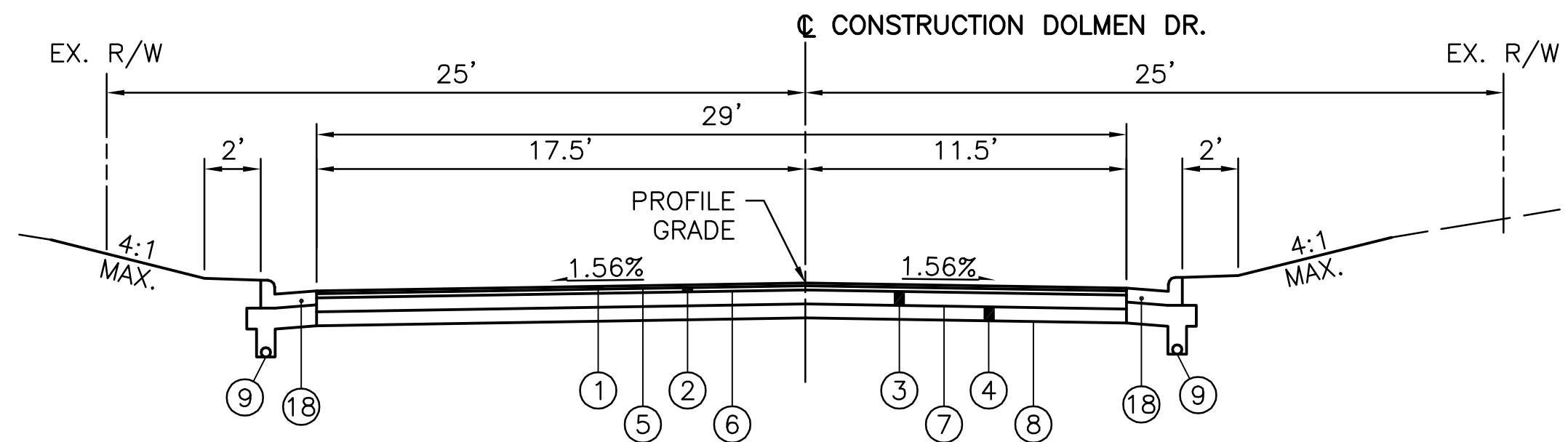
\\173608763\Task 2 - Waggoner Road\design\dolmen\173608763s.dwg TYPICAL SECTIONS Last Saved: Apr 30, 2015 10:34 AM Plotted: May 01, 2015 11:38 AM
MCDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\dolmen\173608763s.dwg



**OVERMONT RIDGE RD.
CURB & GUTTER SECTION**
STA. 70+24 TO STA. 70+66.82 = 42.82 FT.



**OVERMONT RIDGE RD.
CURB SECTION**
STA. 70+66.82 TO STA. 71+50 = 83.18 FT.



**DOLMEN DR.
CURB & GUTTER SECTION**
STA. 99+22 TO STA. 99+76.46 = 36.69 FT.

LEGEND

- | | | | | | |
|---|--|---|--|---|---------------------------------------|
| ① | ITEM 448 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE (MEDIUM TRAFFIC), PG64-22 | ⑬ | ITEM 608 - CONCRETE WALK (4") | Ⓓ | EXISTING 6" AGGREGATE BASE |
| ② | ITEM 448 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE (MEDIUM TRAFFIC), PG64-22 | ⑭ | ITEM 606 - GUARDRAIL, TYPE MGS | Ⓔ | EXISTING 4" CONCRETE WALK |
| ③ | ITEM 301 - 6" ASPHALT CONCRETE BASE | ⑮ | ITEM 606 - GUARDRAIL, BARRIER DESIGN, TYPE MGS | Ⓕ | EXISTING CURB & GUTTER, TYPE 2 (ODOT) |
| ④ | ITEM 304 - 6" AGGREGATE BASE | ⑯ | ITEM SPECIAL - 4' WOOD RAILING | Ⓖ | EXISTING 8" AGGREGATE SHOULDER |
| ⑤ | ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (0.04 GAL./S.Y.) | ⑰ | ITEM 609 - CONCRETE MEDIAN, AS PER PLAN | Ⓗ | EXISTING 4" UNDERDRAIN |
| ⑥ | ITEM 407 - TACK COAT (0.075 GAL./S.Y.) | ⑱ | ITEM 609 - COMBINATION CURB & GUTTER | Ⓘ | EXISTING 1 1/2" INTERMEDIATE COURSE |
| ⑦ | ITEM 408 - PRIME COAT (0.4 GAL./S.Y.) | ⑲ | ITEM 609 - CURB, STRAIGHT 18" | ⓵ | EXISTING 7" CONCRETE BASE |
| ⑧ | ITEM 204 - SUBGRADE COMPACTION | ⑳ | ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE | Ⓚ | EXISTING 1 1/4" INTERMEDIATE COURSE |
| ⑨ | ITEM 605 - 4" PIPE UNDERDRAINS | ㉑ | ITEM 412 - SEAL COAT BITUMINOUS MATERIAL (2 APPLICATIONS @ 0.15 GAL./S.Y.) | Ⓛ | EXISTING 1 1/2" SURFACE COURSE |
| ⑩ | ITEM 659 - SEEDING AND MULCHING | ㉒ | ITEM 412 - SEAL COAT COVER AGGREGATE (2 APPLICATIONS @ 10 LBS./S.Y.) | Ⓜ | EXISTING 1 1/2" INTERMEDIATE COURSE |
| ⑪ | ITEM 448 - 2 1/2" ASPHALT CONCRETE SURFACE COURSE (MEDIUM TRAFFIC), PG64-22 | Ⓐ | EXISTING 1 1/4" SURFACE COURSE | | |
| ⑫ | ITEM 254 - 1 1/4" PAVEMENT PLANING, ASPHALT CONCRETE | Ⓑ | EXISTING 1 3/4" INTERMEDIATE COURSE | | |
| | | Ⓒ | EXISTING 6" ASPHALT BASE | | |

MCDANIEL, ARRON_U:\173608763\Task 2 - Waggoner Road\design\planseal\173608763.pn01.dwg GENERAL NOTES Last Saved: Apr. 28, 2015 11:30 AM Plotted: May 01, 2015 11:38 AM

REFERENCE SPECIFICATIONS

THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS 2012, (CMSC), INCLUDING ALL REVISIONS AND SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THE PLANS UNLESS NOTED OTHERWISE.

PERMITS

WHEN EXCAVATING WITHIN COLUMBUS PUBLIC RIGHT OF WAY LIMITS, THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM CITY OF COLUMBUS, DEPARTMENT OF PUBLIC SERVICE – PERMIT OFFICE BETWEEN THE HOURS OF 7:30AM AND 4:00PM MONDAY THROUGH FRIDAY PHONE (614) 645–7497, FAX (614) 645–1876; EMAIL: COLSPERMITS@COLUMBUS.GOV

UTILITIES

THE IDENTITY AND LOCATION OF EXISTING UNDERGROUND UTILITIES LOCATED IN AND AROUND THE CONSTRUCTION AREA HAVE BEEN SHOWN AND LABELED ON THE PLANS BY USING INFORMATION PROVIDED BY THE RESPECTIVE UTILITY OWNERS. THE CITY OF COLUMBUS OR THE CONSULTING ENGINEER WILL NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF LOCATION OR DEPTH OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLAN.

SUPPORT AND PROTECTION OF ALL UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COSTS FOR THE REPAIR AND RESTORATION OF EXISTING UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CITY OF COLUMBUS UTILITIES WILL ONLY LOCATE AND MARK MAIN LINE FACILITIES. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL SERVICE LATERAL AND LINES. COSTS ASSOCIATED WITH THE ABOVE WORK AND RESPONSIBILITIES SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS.

PRIOR TO EXCAVATION, THE CONTRACTOR SHALL GIVE A 48–HOUR NOTICE TO THE OHIO UTILITIES PROTECTION SERVICE (OUPS) BY CALLING (800) 362–2764. A 48–HOUR NOTICE SHALL BE GIVEN TO THE OWNERS OF UNDERGROUND UTILITIES SHOWN ON THE PLANS WHO ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE.

LISTED BELOW ARE UTILITY COMPANIES THAT HAVE FACILITIES LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT AND SUBSCRIBE TO OUPS.

AMERICAN ELECTRIC POWER 850 TECH CENTER DRIVE GAHANNA, OHIO 43230 614–883–6817 AEP SOLUTIONS CENTER: 1–800–277–2177 ROD SLONEKER	TIME WARNER COMMUNICATIONS 3760 INTERCHANGE ROAD COLUMBUS, OHIO 43204 614–481–5262 RAY MAURER
---	---

AT&T 111 N. FOURTH STREET COLUMBUS, OHIO 43215 614–223–7162 DAMAGE PREVENTION: 1–937–296–3929 AT&T REPAIR & SERVICE: 1–888–611–4466 ROGER MIKESELL	COLUMBUS FIBERNET 1600 WALCUTT ROAD COLUMBUS, OHIO 43228 614–351–6265 BILL VERHOFF
--	--

COLUMBIA GAS OF OHIO 3350 JOHNNY APPLESEED COURT COLUMBUS, OHIO 43231 614–818–2104 DAMAGE PREVENTION: 1–866–632–6243 CUSTOMER SERVICE: 1–800–344–4077 MIKE SUCHARSKI	CITY OF COLUMBUS DIVISION OF WATER 910 DUBLIN ROAD COLUMBUS, OHIO 43215
--	--

TIME WARNER COMMUNICATIONS/INSIGHT 3760 INTERCHANGE ROAD COLUMBUS, OHIO 43204 614–255–0855 JEFFREY WHATLEY 614–827–7974 WARREN “MIKE” BATH	CITY OF COLUMBUS DIVISION OF SEWERAGE & DRAINAGE 1250 FAIRWOOD AVE. COLUMBUS, OHIO 43206
--	---

WIDE OPEN WEST 3675 CORPORATE DRIVE COLUMBUS, OHIO 43231 614–948–4653 ROB CARPENTER	DIVISION OF POWER 3500 INDIANOLA AVE. COLUMBUS, OHIO 43214 614–645–7627
---	--

THE FOLLOWING CITY OF COLUMBUS UTILITIES MAY BE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT AND DO NOT SUBSCRIBE TO A REGISTERED UNDERGROUND PROTECTION SERVICE:

CITY OF COLUMBUS SUPPORT SERVICES DIVISION–COMMUNICATIONS 4211 GROVES ROAD COLUMBUS, OH 43232 TELEPHONE: 614–724–7047 FAX: 614–645–6588 RADIO ROOM: 614–724–4006	JEFFERSON WATER & SEWER DISTRICT 6455 TAYLOR ROAD BLACKLICK, OHIO 43004 614–864–0740
--	---

CITY OF COLUMBUS DEPARTMENT OF TECHNOLOGY CITY HALL, 90 WEST BROAD ST. ROOM 316 COLUMBUS, OH 43215 CONTRACTOR LINE: 614–645–7756 CABLE LOCATES FAX: 614–645–6627	FRANKLIN COUNTY ENGINEER 970 DUBLIN ROAD COLUMBUS, OHIO 43215 614–525–3030
--	---

EMERGENCY PROVISIONS

THE CONTRACTOR SHALL PROVIDE TO THE CITY OF COLUMBUS PROJECT REPRESENTATIVE A LIST OF 24 HOUR EMERGENCY TELEPHONE NUMBERS (IN WRITING) PRIOR TO THE START OF CONSTRUCTION.

SECURING EXCAVATIONS & TRENCHES FOR NON–WORKING HOURS

EXCAVATIONS AND TRENCHES OVER 24 INCHES DEEP SHALL BE SECURELY PLATED OR BACKFILLED DURING NON–WORKING HOURS.

CONSTRUCTION LIMITS

THE CONSTRUCTION LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE OF THESE CONSTRUCTION LIMITS.

MISCELLANEOUS WORK ITEMS

THE CONTRACTOR SHALL PERFORM ALL ITEMS OF WORK CALLED FOR ON THE PLANS, FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED. THE COST OF THESE ITEMS SHALL BE INCLUDED IN THE VARIOUS UNIT PRICES BID FOR THE PROJECT IMPROVEMENT.

BENCHMARKS AND SURVEY MONUMENTS

DO NOT DISTURB ANY FRANKLIN COUNTY CERTIFIED BENCHMARKS (VERTICAL AND/OR HORIZONTAL) LOCATED WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT. CONTRACTOR SHALL CONTACT THE FRANKLIN COUNTY SURVEY DEPARTMENT (614) 462–3026, PRIOR TO CONSTRUCTION, TO COORDINATE THE PROPER PROCEDURES FOR THE RESETTING, RELOCATION, OR REPLACEMENT OF ANY FRANKLIN COUNTY CERTIFIED BENCHMARK OR SURVEY MONUMENT.

SAW CUTTING IS INCLUDED

THE COST OF SAW CUTTING FOR THE REMOVAL OF PAVEMENT, CURB, CURB RAMPS, WALKS, ETC. SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 202 OR 608 WORK ITEMS. SAW CUTTING IS REQUIRED TO PROVIDE SMOOTH STRAIGHT EDGES FOR REMOVAL PURPOSES.

NEW CURB RADIUS

INTERSECTION CORNERS OR HORIZONTAL CURVES SHALL MATCH THE EXISTING RADIUS UNLESS NOTED OTHER WISE.

GAS SERVICE VALVES ADJUSTED TO GRADE

THE CONTRACTOR SHALL CONTACT COLUMBIA GAS (614) 460–2244 TO COORDINATE THE ADJUSTMENT OF GAS SERVICE VALVES.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK SHOWN, LABELED, OR LISTED AS ‘CONTINGENCY’ OR REFERENCED BY PLAN NOTE TO BE USED ‘AS DIRECTED BY THE ENGINEER,’ UNLESS AUTHORIZED BY THE ENGINEER, OR A REPRESENTATIVE OF THE CITY OF COLUMBUS, DIVISION OF DESIGN AND CONSTRUCTION.

SANITARY CONVENIENCE FACILITIES

THE CONTRACTOR SHALL FURNISH AND MAINTAIN SANITARY CONVENIENCE FACILITIES FOR THE WORKERS AND INSPECTORS FOR THE DURATION OF THE WORK. COST SHALL BE INCLUDED IN THE PRICE BID FOR THE PROJECT IMPROVEMENTS.

CONSTRUCTION STAKING

FIELD STAKING OF THE PROJECT IS REQUIRED BY THE CONTRACTOR. A QUANTITY FOR CONSTRUCTION STAKING IS INCLUDED IN THE GENERAL SUMMARY UNDER ITEM 623, CONSTRUCTION LAYOUT STAKES.

SURVEY AND BENCHMARKS

ELEVATIONS ARE BASED ON NORTH AMERICAN DATUM OF 1988 (NAVD 88).

BASIS OF BEARINGS ARE TIED TO FRANKLIN COUNTY SURVEY MONUMENTS BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, AS LOCATED ON THE PLAN AND PROFILE SHEETS.

ALL VERTICAL CONTROL POINTS WERE SET USING A COUNTY, OR CITY CERTIFIED SOURCE MONUMENT FOR ITS POINT OF ORIGIN, AS SHOWN ON THE PLAN AND PROFILE SHEETS, AND SCHEMATIC PLAN, SHEETS 2–4.

ALL FOUND RIGHT–OF–WAY MARKERS, CENTERLINE AND SURVEY MONUMENTS FALLING WITHIN THE WORK LIMITS OF THE PROJECT, INCLUDING MONUMENTS ADJACENT TO THE PROJECT, AND CENTERLINE OF CONSTRUCTION CONTROL POINTS ARE SHOWN ON THE PLAN, AND LISTED ON THE SCHEMATIC PLAN, SHEETS 2–4.

MONUMENTED PROPERTY CORNERS

AVOID DISTURBING PROPERTY CORNER PINS/MARKERS DURING CONSTRUCTION. IF DISTURBED DURING CONSTRUCTION, THE PINS/MARKERS SHALL BE REPLACED PER CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, SECTION 107.11.

EROSION CONTROL

PAYMENT FOR THE REMOVAL OF PROPOSED EROSION CONTROL ITEMS SHALL BE INCLUDED IN THE UNIT BID COST OF THESE ITEMS.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING NECESSARY AND ADEQUATE MEASURES FOR PROPER MAINTENANCE AND INSPECTION IN COMPLIANCE WITH THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.

WATERING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH FOR THE PERMANENT SEEDED AREAS AS PER 659.09

ITEM 659 – WATER	XX M GAL.
------------------	-----------

ITEM 653, TOPSOIL FURNISHED AND PLACED

THIS ITEM IS TO BE USED IN THE AREAS OF PAVEMENT REMOVAL TO BRING THE SITE TO GRADE AND PROVIDE A GOOD SEEDBED FOR THE SEEDING AND MULCHING IN THESE AREAS. THE ITEM IS ALSO TO BE USED AS DIRECTED BY THE ENGINEER TO PROVIDE SEEDBED IN AREAS WHERE EXISTING SOIL PROVIDES AN INADEQUATE SEED BED.

ITEM 653 – TOPSOIL FURNISHED AND PLACED	XXX CU. YD.
---	-------------

MAINTAIN DRAINAGE

THE FLOW IN ALL SEWERS, DRAINS, FIELD TILES, AND WATERCOURSES ENCOUNTERED SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS OWN EXPENSE, AND WHENEVER SUCH WATERCOURSES AND DRAINS ARE DISTURBED OR DESTROYED DURING THE PROSECUTION OF THE WORK, THEY SHALL BE RESTORED BY THE CONTRACTOR AT HIS OWN COST AND EXPENSE TO A CONDITION SATISFACTORY TO THE ENGINEER.

REPLACEMENT OF DRAIN TILE AND STORM SEWER

ALL DRAIN TILE AND STORM SEWERS DAMAGED, DISTURBED, OR REMOVED AS A RESULT OF THE CONTRACTOR’S OPERATIONS SHALL BE REPLACED WITH THE SAME QUALITY PIPE OR BETTER, MAINTAINING THE SAME GRADIENT AS THE EXISTING. THE DRAIN TILE AND/OR STORM SEWER SHALL BE CONNECTED TO THE CURB SUB–DRAIN, STORM SEWER SYSTEM OR PROVIDED WITH AN OUTLET INTO THE ROADWAY DITCH AS APPLICABLE. REPLACEMENT DRAIN TILE/STORM SEWER SHALL BE LAID ON COMPACTED BEDDING EQUAL IN DENSITY TO SURROUNDING STRATUM. REPLACEMENT WORK SHALL BE DONE AT THE TIME OF THE BACKFILL OPERATION. COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE PROJECT IMPROVEMENTS.

NON–RUBBER TIRED VEHICLES

NON–RUBBER–TIRED VEHICLES SHALL NOT BE MOVED ON PUBLIC STREETS. THE CITY ENGINEER MAY GRANT EXCEPTIONS WHEN SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING, AND ANY DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE CITY.

EXISTING TREES

ALL TREES AND BUSHES, WHETHER SHOWN OR NOT ON THE PLANS, ARE NOT TO BE DESTROYED UNLESS DESIGNATED AS SUCH ON THE PLANS OR APPROVAL TO REMOVE HAS BEEN GIVEN IN WRITING BY THE ENGINEER. THE CONTRACTOR SHALL USE SPECIAL PRECAUTIONS TO AVOID DAMAGE TO ALL OTHER TREES.

CONCRETE WALKS

ALL EXISTING CONCRETE SIDEWALKS BEING REPLACED WITH NEW CONCRETE SIDEWALKS SHALL BE REMOVED AT AN EXISTING JOINT AND REPLACED PER STANDARD DRAWING 2300. INSTALL EXPANSION JOINT WHERE NEW CONCRETE ADJOINS EXISTING SIDEWALK.

ALL EXISTING CONCRETE SIDEWALKS NOT SCHEDULED FOR REPLACEMENT BUT BEING CROSSED BY THE INSTALLATION OF TRAFFIC ITEMS, ELECTRICAL CONDUIT, PIPING, ETC. SHALL BE FULLY REMOVED AT AN EXISTING JOINT AND REPLACED PER STANDARD DRAWING 2300 UNLESS NOTED OTHERWISE.

PAYMENT SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 608 – CONCRETE WALK.

STORMWATER FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE OWNER, THE ENGINEER AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. THE ENGINEER SHALL KEEP RECORDS OF THE INSPECTION IN WRITING.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED OR RECONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE OWNER.

ALL EXISTING MANHOLES, CATCH BASINS, DRAINS, SEWERS, AND APPURTENANCES INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR SHALL CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR’S OPERATIONS TO THE SATISFACTION OF THE ENGINEER. THE ABOVE IS NOT APPLICABLE FOR STRUCTURES TO BE ABANDONED. THE CONTRACTOR SHALL REMOVE DEBRIS, SILT, ETC. FROM THE EXISTING MANHOLES AND CATCH BASINS THAT HAVE BEEN AFFECTED BY CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL MAINTAIN SERVICE IN EXISTING SEWERS DURING CONSTRUCTION.

CALCULATED	MRO	CHECKED	TJS
GENERAL NOTES			
WAGGONER ROAD SHARED USE PATH & WIDENING FROM EAST BROAD ST TO CHAPEL STONE RD			
8 82			

McDANIEL, ARRON_U:\173608763\Task 2 - Waggoner Road\design\plan\173608763.mxd - GENERAL NOTES - Last Saved: Apr 28, 2015 11:30 AM Plotted: May 01, 2015 11:38 AM

DIVISION OF SEWERAGE AND DRAINAGE UTILITIES

CITY OF COLUMBUS LOCATORS WILL ONLY LOCATE AND MARK MAIN LINE SEWERS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL SERVICE LATERALS AND FIELD VERIFYING THE LOCATION OF MAIN SEWER LINES. ANY DAMAGE AND/OR REPAIRS TO THE MAIN SEWER LINES OR SERVICE LATERALS ARE THE RESPONSIBILITY OF THE SEWER CONTRACTOR. REPAIRS MUST BE COMPLETED BY A LICENSED SEWER CONTRACTOR UNDER A SEPARATE SEWER PERMIT.

CLEAN WATER CONNECTIONS TO SANITARY SEWERS

ROOF DRAINS, FOUNDATION DRAINS, DRAIN TILES, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SYSTEM ARE **PROHIBITED**.

TRAFFIC SIGNS TO BE REPLACED

THE CONTRACTOR AS PART OF THIS PROJECT SHALL REPLACE ALL CITY OF COLUMBUS TRAFFIC SIGNS THAT ARE LOCATED INSIDE THE LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL REMOVE ALL TRAFFIC SIGNS AND SIGN SUPPORTS AND DELIVER THEM TO THE TRAFFIC MAINTENANCE SHOP AT 1820 EAST 17TH. AVENUE (PHONE # (614) 645-7393). THE CONTRACTOR SHALL PURCHASE NEW SIGNS AND SIGN SUPPORTS TO INSTALL AS INDICATED ON THE PLANS OR IF NOT SHOWN THEN AT THE PREVIOUS LOCATION FOR THE SIGN BEING REPLACED. PERFORMANCE OF AND PAYMENT FOR THIS WORK SHALL BE AS PER ITEM 630 "TRAFFIC SIGNS AND SIGN SUPPORTS" FROM THE COC CONSTRUCTION AND MATERIAL SPECIFICATIONS.

ITEM 630 – STREET NAME SIGN SUPPORT, AS PER PLAN

STREET NAME SIGN SUPPORTS CONSIST OF A 2.5" OR 4" NPS GALVANIZED STEEL PIPE. THE 2.5" PIPE IS 17' IN LENGTH AND THE 4" PIPE IS 21' LONG. THE SIZE OF PIPE IS DETERMINED BY THE LOCATION. ONLY A 2.5" NPS SUPPORT SHALL BE USED AT THE INTERSECTIONS OF TWO RESIDENTIAL STREETS AND WILL SUPPORT 9" STREET NAME SIGNS. THE 4" NPS SUPPORT SHALL BE USED AT THE LOCATION OF TWO ARTERIALS OR THE COMBINATION OF AN ARTERIAL AND NON-ARTERIAL STREET. ALL SUPPORTS SHALL BE EMBEDDED IN CONCRETE IN ACCORDANCE WITH 499 CLASS C, 511. 2.5" NPS SUPPORT SHALL BE CONCRETED IN A HOLE WITH A MINIMUM DEPTH OF 4' AND A DIAMETER OF 10" AND SHALL HAVE A MINIMUM OF 11' ABOVE GROUND LEVEL. 4" NPS SUPPORTS SHALL BE CONCRETED IN A HOLE WITH A MINIMUM DEPTH OF 4' AND A DIAMETER OF 10". THE SUPPORT SHALL HAVE A MINIMUM OF 17' ABOVE GROUND LEVEL.

FOR THE DIVISION OF POWER

THE DIVISION OF POWER HAS UNDERGROUND STREET LIGHTING AT THIS WORK SITE. THE CONTRACTOR IS HEREBY **REQUIRED** TO CONTACT OUPS AT 1-800-362-2764 FORTY-EIGHT HOURS PRIOR TO CONDUCTING **ANY ACTIVITY** WITHIN THE CONSTRUCTION AREA. THE DOP DISPATCH OFFICE NUMBER IS (614) 645-7627 (VOICE).

ANY REQUIRED RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S ELECTRICAL FACILITIES IN THE CONSTRUCTION AREA IS TO BE PERFORMED BY THE CONTRACTOR UNDER THE DIRECTION OF DOP PERSONNEL AND AT THE EXPENSE OF THE PROJECT. DOP SHALL MAKE ALL FINAL CONNECTIONS TO DOP'S EXISTING ELECTRICAL SYSTEM AT THE EXPENSE OF THE PROJECT. THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FOLLOWING DOP'S "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMS). ANY NEW OR REINSTALLED UNDERGROUND STREETLIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1000.18 OF THE CMS MANUAL. THE CONTRACTOR SHALL CONFORM TO DOP'S EXISTING CONDUCTOR SAFETY POLICY AND HOLD CARD SYSTEM, MIS-95, COPIES OF WHICH ARE AVAILABLE FROM DOP. IF YOU HAVE ANY QUESTIONS, CALL SCOTT WOLFE AT (614) 724-4351 OR CHRIS STORTS (614) 645-6851.

IF ANY ELECTRIC FACILITY BELONGING TO DOP IS DAMAGED IN ANY MANNER BY THE CONTRACTOR, ITS AGENTS, SERVANTS, OR EMPLOYEES, AND REQUIRES EMERGENCY REPAIRS, DOP SHALL MAKE ALL NECESSARY REPAIRS, AND THE EXPENSE OF SUCH REPAIRS AND OTHER RELATED COSTS SHALL BE PAID BY THE CONTRACTOR TO THE DIVISION OF POWER CITY OF COLUMBUS, OHIO.

WATER

ALL WATER MAIN MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT RULES AND REGULATIONS OF THE CITY OF COLUMBUS, DIVISION OF WATER. ALL CITY OF COLUMBUS, DIVISION OF WATER STANDARD DRAWINGS SHALL APPLY TO THE PROJECT, UNLESS OTHERWISE NOTED.

FOR ANY EMERGENCIES INVOLVING THE WATER DISTRIBUTION SYSTEM, PLEASE CONTACT THE DIVISION OF WATER DISTRIBUTION MAINTENANCE OFFICE AT 614-645-7788.

ALL BRASS FITTINGS ASSOCIATED WITH WATER WORK, INCLUDING REPAIRS TO THE EXISTING SYSTEM, SHALL CONFORM TO THE **REVISED ALLOWABLE LEAD EXTRACTION LIMIT PER THE UPDATED NSF/ANSI 61 STANDARD**. THE DIVISION OF WATER'S APPROVED MATERIALS LIST HAS BEEN UPDATED TO REFLECT THIS REQUIREMENT.

IT SHALL BE UNLAWFUL FOR ANY PERSON TO PERFORM ANY WORK ON CITY OF COLUMBUS WATER LINE SYSTEMS WITHOUT FIRST SECURING LICENSE TO ENGAGE IN SUCH WORK, AS INDICATED IN COLUMBUS CITY CODE SECTION 1103.02 AND 1103.06. THIS WORK INCLUDES ANY ATTACHMENTS, ADDITIONS TO OR ALTERATIONS IN ANY CITY SERVICE PIPE OR APPURTENANCES (INCLUDING WATER SERVICE LINES AND TAPS). THIS REQUIREMENT MAY BE MET BY UTILIZATION OF A SUBCONTRACTOR WHO HOLDS A CITY OF COLUMBUS WATER CONTRACTOR LICENSE OR A COMBINED WATER/SEWER CONTRACTOR LICENSE TO PERFORM THIS WORK. UTILIZATION OF A SUBCONTRACTOR MUST MEET THE LICENSING REQUIREMENTS OF CITY OF COLUMBUS BUILDING CODE, IN PARTICULAR SECTION 4114.119 AND 4114.529.

THE CONTRACTOR SHALL OBTAIN THE PROPER HYDRANT PERMIT(S), AND PAY ANY APPLICABLE FEES, FOR ANY APPROVED HYDRANT USAGE DEEMED NECESSARY FOR WORK UNDER THIS IMPROVEMENT. PERMITS MAY BE OBTAINED THROUGH THE DIVISION OF WATER PERMIT OFFICE (645-7330). THE CONTRACTOR SHALL ADHERE TO ALL RULES & REGULATIONS GOVERNING SAID PERMIT AND MUST HAVE THE ORIGINAL PERMIT ON SITE ANYTIME IN WHICH THE HYDRANT IS IN USE. COST TO BE INCLUDED IN THE VARIOUS BID ITEMS.

WATER SERVICE BOXES SHALL BE PLACED 1' FROM THE EDGE OF THE PROPOSED OR EXISTING SIDEWALK BETWEEN THE SIDEWALK AND THE CURB, OR 2 FEET INSIDE THE RIGHT-OF-WAY OR EASEMENT LINE WHEN NO SIDEWALK IS PRESENT OR PROPOSED. REFER TO STANDARD DRAWING L-9901 FOR ADDITIONAL INFORMATION.

DURING CONSTRUCTION, THE CONTRACTOR SHALL USE EXTREME CAUTION NOT TO DAMAGE THE EXISTING 30 INCH WATER MAIN DUE TO MINIMAL COVER.

CONDUIT BANK WATER LINE CROSSING

CONTRACTOR TO MAINTAIN 12" MINIMUM VERTICAL CLEARANCE AT ALL CONDUIT BANK CROSSINGS WITH WATERLINE.

FRANKLIN COUNTY ENGINEER'S GENERAL NOTES

FRANKLIN COUNTY PERMIT (FOR ALL OTHER PROJECTS) – THE CONTRACTOR SHALL SECURE A WRITTEN PERMIT FROM THE FRANKLIN COUNTY ENGINEER'S OFFICE, 970 DUBLIN RD, A MINIMUM OF TWO WORKING DAYS PRIOR TO BEGINNING WORK WITHIN FRANKLIN COUNTY MAINTAINED CULVERT. THE CONTRACTOR MAY BE REQUIRED TO POST A BOND WITH THE FRANKLIN COUNTY ENGINEER PRIOR TO ISSUANCE OF THE PERMIT TO INSURE PROPER RESTORATION OF THE CULVERT. THE CONTRACTOR SHALL PROVIDE THE FRANKLIN COUNTY ENGINEER'S OFFICE A 24-HOUR TELEPHONE NUMBER TO BE USED IN CASE OF AN EMERGENCY.

BIOSWALE MAINTENANCE SCHEDULE

ACTIVITY	SCHEDULE
DEBRIS REMOVAL	MONTHLY
1. BIORETENTION AND CONTRIBUTING AREAS CLEAN OF DEBRIS	
2. ANY DUMPING OF YARD WASTES INTO FACILITY	
3. LITTER (BRANCHES, ETC.) BEEN REMOVED	
VEGETATION	MONTHLY
1. PLANT HEIGHT NO LESS THAN DESIGN WATER	
2. PLANT COMPOSITION ACCORDING TO APPROVED PLANS	
3. NO PLACEMENT OF INAPPROPRIATE PLANTS	
4. GRASS HEIGHT NOT GREATER THAN 6 INCHES	
5. NO EVIDENCE OF EROSION	
DEWATERING	MONTHLY
1. DEWATERS BETWEEN STORMS	
2. NO EVIDENCE OF STANDING WATER	
SEDIMENT DEPOSITION	ANNUAL
1. SWALE CLEAN OF SEDIMENTS	
2. SEDIMENTS SHOULD NOT BE > THAN 20% OF SWALE DESIGN DEPTH	
OUTLETS/OVERFLOW SPILLWAY	ANNUAL & AFTER MAJOR STORM
1. GOOD CONDITION (NO NEED FOR REPAIR)	
2. NO EVIDENCE OF EROSION	
3. NO EVIDENCE OF BLOCKAGES	
INTEGRITY OF FACILITY	ANNUAL
1. FILTER BED HAS NOT BEEN BLOCKED OR FILLED INAPPROPRIATELY	
2. VANDALISM	

LEGEND

Mag Nail Set	● MN #XX	Electric Manhole	Ⓢ	Guy wire anchor	⋈
Iron Pin Set	● IP #XX	Electric Pull Box	Ⓢ	Power Pole	⋈
Benchmark	⬮	Transformer, pad mounted	Ⓢ	Power Pole with Telephone	⋈
Survey Monument in Concrete	▲	Telephone Handhole	Ⓢ	Power Pole with Telephone and Light	⋈
Water Valve	Ⓢ	Telephone Pedestal	Ⓢ	Traffic Signal Strain Pole	⋈
Water Valve(proposed)	Ⓢ	Telephone Manhole	Ⓢ	Street Light (unspecified type)	⋈
Fire Hydrant(existing)	⋈	Fiber Optic Manhole	Ⓢ	Power Pole with Light	⋈
Fire Hydrant(proposed)	⋈	Push Button on Post	⋈	Telephone Pole	⋈
Water Well	Ⓢ	Mailbox	⋈	Telephone Pole with Light	⋈
Water Service Valve--Found	WS Ⓢ	Post	⋈	Lamp Post	⋈
Water Service Valve--(Proposed)	WS Ⓢ	Bollard	⋈	Pavement Reflector	⋈
Water Service Valve--Not Found	WSNF Ⓢ	Parking Meter	⋈	Mile Post	⋈
Gas Gate Valve	⋈	Irrigation Sprinkler	⋈	Sign	⋈
Gas Service Valve	⋈	Ex. Concrete	⋈	Bush (leaves)	⋈
Gas Meter	⋈	Ex. Electric	— E —	Shrub (needles)	⋈
Combined Sewer Manhole	Ⓢ	Ex. Overhead Electric	— OE —	Tree w/ leaves	⋈
Sanitary Sewer Cleanout	⋈	Ex. Water	— — —	Tree w/ needles	⋈
Sanitary Sewer Manhole	Ⓢ	Ex. Traffic	— TR —	Rock	⋈
Curb Inlet	⋈	Ex. Gas	— G —		
Curb Inlet	⋈	Ex. Telephone	— T —		
Circle Catch Basin	⋈	Ex. Fiber Optic Cable	— FOC —		
Square Catch Basin	⋈	Ex. Storm	EX. X" STM.		
Storm Drain Manhole	Ⓢ	Ex. Sanitary	EX. X" SAN.		
		Ex. R/W	EX. R/W		
		Constr. Limits	— • —		
		Prop. Walk	— — —		
		Ex. Curb	== == ==		
		Ex. E/P	— — —		

SUMMARY OF POST-CONSTRUCTION STORMWATER CONTROL FACILITIES

OUTLET STRUCTURE NUMBER	CONTROL FUNCTIONS	DRAINAGE AREA AC.	FACILITY TYPE
7	WATER QUALITY/QUANTITY	0.84	BIOSWALE
10	WATER QUALITY/QUANTITY	0.29	BIOSWALE
A	WATER QUALITY/QUANTITY	1.01	BIOSWALE
11	WATER QUALITY/QUANTITY	0.44	BIOSWALE
13	WATER QUALITY/QUANTITY	0.07	BIOSWALE
14	WATER QUALITY/QUANTITY	0.59	BIOSWALE
27	WATER QUALITY/QUANTITY	0.42	BIOSWALE
28	WATER QUALITY/QUANTITY	0.14	BIOSWALE

MCDANIEL, ARRON: U:\173608763\Task 2 - Waggoner Road\design\plansee\Joint of Traffic\173608763mgn01.dwg MAINTENANCE OF TRAFFIC Last Saved: Apr 24, 2015 5:01 PM Plotted: May 01, 2015 11:38 AM

TEMPORARY TRAFFIC CONTROL ITEMS

ALL TEMPORARY TRAFFIC CONTROL (TTC) DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (OMUTCD), CURRENT EDITION. COPIES ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, OFFICE OF CONTRACTS, 1980 WEST BROAD STREET, COLUMBUS, OHIO 43216. **NOTE:** ALL DEVICES SHALL COMPLY, FOR CONDITION AND LOCATION, WITH THE CURRENT EDITION OF THE NCHRP 350 CRASH TESTING GUIDELINES.

CONSTRUCTION OPERATIONS SHALL **NOT** BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY THE DIVISION OF DESIGN AND CONSTRUCTION INSPECTOR. IF THE CONTRACTOR DOES NOT COMPLY WITH THE STANDARDS, INCLUDING THE INSTALLATION OF TEMPORARY PAVEMENT MARKINGS AND THE REMOVAL OF CONFLICTING TRAFFIC CONTROLS, THERE PERMIT SHALL BE REVOKED AND ALL WORK SHALL BE TERMINATED. TEMPORARY PAVEMENT MARKINGS TO INCLUDE, BUT NOT LIMITED TO, CHANNELIZING LINES, EDGE LINES, AND CENTERLINES SHALL BE INSTALLED AND MAINTAINED ON ALL CONSTRUCTION OPERATIONS LASTING A MINIMUM OF 14 CALENDAR DAYS OR AS DIRECTED BY THE TEMPORARY TRAFFIC CONTROL COORDINATOR OR THE PROJECT ENGINEER.

THE CONTRACTOR SHALL GIVE ADVANCE NOTIFICATION (WRITTEN AND VERBALLY) TO THE TEMPORARY TRAFFIC CONTROL COORDINATOR AT (614) 645-6269 OR (614) 645-5845, THE COLUMBUS PAVING THE WAY PROGRAM COORDINATOR AT (614) 645-7283 OR 645-6016, AND THE PROJECT ENGINEER, INFORMING THEM OF ALL UPCOMING MAINTENANCE OF TRAFFIC CHANGES ON A WEEKLY BASIS. NOTIFICATION SHALL INCLUDE, BUT NOT LIMITED TO, WHAT, WHERE, WHEN, AND HOW PEDESTRIAN AND VEHICULAR TRAFFIC WILL BE AFFECTED, AND THE TEMPORARY TRAFFIC CONTROL PROCEDURES THE CONTRACTOR IS PLANNING TO USE. THE TYPE OF TRAFFIC CHANGES SHALL DETERMINE THE LENGTH OF ADVANCE NOTIFICATION REQUIRED:

TYPE OF CHANGE	ADVANCE NOTIFICATION NEEDED
DETOURS/ROAD CLOSURES	30-DAY NOTIFICATION PRIOR TO CLOSURE
LANE CLOSURE LASTING TWO WEEKS OR MORE	2-WEEKS
LANE CLOSURE LESS THAN TWO WEEKS	3-DAYS
LANE CLOSURE OF TWO DAYS OR LESS	1-DAY

ANY OTHER UNFORESEEN IMPACTS TO TRAFFIC SHALL BE IMMEDIATELY REPORTED AS THEY OCCUR.

A TTC PLAN (TTCP) INCLUDING PEDESTRIAN CONTROL SHALL BE SUBMITTED TO THE TTC COORDINATOR AT (614) 645-6269 OR (614) 645-5845 AT THE PRE-CONSTRUCTION MEETING OR A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO THE BEGINNING OF WORK. COPIES OF THE APPROVED TTCP SHALL BE GIVEN TO THE PROJECT ENGINEER AND KEPT ON SITE ALONG WITH THE STREET CLOSURE/OCCUPANCY PERMIT.

TYPE C STEADY-BURN OR TYPE D 360-DEGREE STEADY BURN WARNING LIGHTS SHALL BE REQUIRED ON ALL BARRICADES, DRUMS, AND SIMILAR TRAFFIC CONTROL DEVICES IN USE AT NIGHT. ONLY 42” REFLECTORIZED CHANNELIZING DEVICES (CONES) SHALL BE PERMITTED FOR NIGHTTIME WORK WITH THE APPROVAL OF THE TTC COORDINATOR AT (614) 645-6269 OR (614) 645-5845 PER ODOT STANDARDS.

A FLASHING ARROW PANEL (48”X96” – TYPE C) SHALL BE USED IN LANE CLOSURES AS PER THE OHIO MANUAL.

ALL TRENCHES WITHIN THE ROAD RIGHT OF WAY SHALL BE BACKFILLED OR SECURELY PLATED PER CITY OF COLUMBUS GENERAL POLICY ON STEEL PLATE USAGE DATED 11/15/2006 AND 2013 STD. DWG. 1441 DURING NON-WORKING HOURS.

ACCESS FOR PEDESTRIAN AND VEHICULAR TRAFFIC TO ALL ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.

ALL TRAFFIC LANES SHALL BE FULLY OPEN TO TRAFFIC FROM 6:00 A.M. TO 9:00 A.M. AND 4:00 P.M. TO 6:00 P.M., MONDAY THROUGH FRIDAY ON WAGGONER ROAD. 1 LANE MAY BE CLOSED TO TRAFFIC DURING WORKING HOURS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND SAFE MOVEMENT OF PEDESTRIAN THROUGH, AROUND, OR DETOURED AWAY FROM THE CONSTRUCTION SITE. TRAFFIC CONTROL FOR PEDESTRIAN MOVEMENT SHALL BE AS PER FIGURES 6H-28 (TA-28) AND 6H-29 (TA-29) OF PART VI OF THE OMUTCD. ALL SIDEWALKS DIVERSIONS AND TEMPORARY MID-BLOCK CROSSINGS SHALL BE PRE-APPROVED BY THE PROJECT ENGINEER OR THE TEMPORARY TRAFFIC CONTROL COORDINATOR.

TRAFFIC OPERATIONS’ PERSONNEL SHALL LOCATE AND MARK ALL UNDERGROUND TRAFFIC CONTROL CABLES. THE TRAFFIC OPERATIONS SHOP SHALL BE NOTIFIED 645-7393 (FAX 645-5967) AT LEAST FORTY-EIGHT (48) HOURS (EXCLUDING SAT. & SUN.) PRIOR TO THE BEGINNING OF ANY WORK WITHIN 450 FEET OF ANY SIGNALIZED INTERSECTION(S) OR WITHIN ANY POSTED AREA WHERE THE DIVISION HAS UNDERGROUND CABLE. THE SIGNAL OPERATION ENGINEER (645-6418) SHALL BE NOTIFIED SIX (6) WEEKS IN ADVANCE FOR SIGNAL REVISIONS OR POLE RELOCATIONS.

NO EXCAVATION SHALL BE MADE WITHIN FIVE (5) FEET OF ANY FOUNDATION THAT SUPPORTS SIGNAL POLES, TRAFFIC SIGNAL DISPLAYS OR SIGNS BY MAST ARM OR SIGNAL SPAN. EXCAVATION WITHIN EIGHT (8) FEET, BUT MORE THAN FIVE (5) FEET SHALL REQUIRE ADDITIONAL SUPPORT (DOWN GUY, HEAD GUY, BASE GUY, ETC.) THE CONTRACTOR SHALL CONTACT SIGNAL OPERATION PERSONNEL AT 645-0423 (CELL 419-4501) AT LEAST DORTY-EIGHT (48) HOURS (EXCLUDING SAT. & SUN.) PRIOR TO THE BEGINNING OF SUCH EXCAVATION SO THAT THE CITY CAN APPROVE THE STABILIZATION SETUP BY THE CONTRACTOR. IF UNABLE TO MAKE CONTACT THROUGH ABOVE NUMBERS, CALL 645-7393. STABILIZATION WILL BE DONE BY THE CONTRACTOR AT THE OWNERS’/CONTRACTING AGENCY’S EXPENSE.

WHEN ANY TRAFFIC CONTROL DEVICE, CONDUIT, OR CABLE IS DAMAGED, THE CONTRACTOR SHALL NOTIFY SIGNAL OPERATION PERSONNEL AT 645-0423 (CELL 419-4501) BETWEEN 7:00 AM AND 4:00 PM, MONDAY THROUGH FRIDAY. IF UNABLE TO MAKE CONTACT THROUGH THE OTHER NUMBERS, CALL 645-7393.

THE ROADWAY SHALL NOT BE OPENED TO NON-CONSTRUCTION TRAFFIC UNTIL THE CRITICAL PERMANENT TRAFFIC CONTROLS ARE IN PLACE, OR UNTIL TEMPORARY TRAFFIC CONTROLS APPROVED BY THE ENGINEER, ARE INSTALLED. THE CRITICAL PERMANENT TRAFFIC CONTROLS ARE STOP, YIELD, ONE WAY, DO NOT ENTER AND RESTRICTED TURN SIGNS. OTHER CRITICAL SIGNS MAY BE NOTED ON THE PLANS AS WELL. THE CONTRACTOR ASSUMES ALL LIABILITY FOR THE PREMATURE REMOVAL OF TEMPORARY TRAFFIC CONTROLS.

THE CONTRACTOR SHALL MAINTAIN ALL PERMANENT TRAFFIC CONTROLS NOT IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROLS THROUGHOUT THIS PROJECT. PERMANENT TRAFFIC CONTROLS MAY BE TEMPORARILY RELOCATED OR COVERED, AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR MISSING, DAMAGED, OR IMPROPERLY PLACED SIGNS.

ANY WORK DONE BY THE DIVISION OF PLANNING AND OPERATIONS, INCLUDING INSTALLATION, RELOCATION, REMOVAL AND/OR REPLACEMENT OF TEMPORARY TRAFFIC CONTROL DEVICES AS A RESULT OF WORK DONE BY THE CONTRACTOR OR AS A RESULT OF NEGLIGENCE OF THE CONTRACTOR, SHALL BE AT THE CONTRACTORS’ EXPENSE.

WHENEVER YELLOW CENTERLINES OR TURN-LANE LINES ARE PAVED OVER, REMOVED, OR OTHERWISE UNSERVICEABLE, THE CONTRACTOR SHALL INSTALL CLASS II TEMPORARY STRIPING (MINIMUM 4’ LONG SEGMENTS). TEMPORARY PAINT SHALL BE USED ON ALL MILLED SURFACES. TEMPORARY TAPE SHALL BE USED ON ALL FINAL COURSES OF ASPHALT. PAINT OR TAPE MAY BE USED ON INTERMEDIATE COURSES OF ASPHALT. IF APPROVED BY THE ENGINEER, DRUMS WITH STEADY BURNING TYPE C OR TYPE D 360 DEGREE WARNING LIGHTS AND "KEEP RIGHT" SIGNS MAY BE SUBSTITUTED FOR CENTERLINE MARKINGS.

ITEM 614 – MAINTAINING TRAFFIC

ALL COSTS THAT CONSIST OF MAINTAINING AND PROTECTING VEHICULAR AND PEDESTRIAN TRAFFIC ACCORDING TO THE LATEST EDITION OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (OMUTCD), AND PER THE REQUIREMENTS DESIGNATED IN THE PLAN INCLUDING ALL LAW ENFORCEMENT OFFICER (LEO) AND FLAGGER HOURS SHALL BE INCLUDED IN THE LUMP SUM ITEM 614.

IN ADDITION TO THE REQUIREMENTS HEREIN, AND THE LATEST EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, A UNIFORMED LAW ENFORCEMENT OFFICER (LEO) SHALL BE PROVIDED FOR CONTROLLING TRAFFIC UNDER THE FOLLOWING CONDITIONS:

- WORK WITHIN A SIGNALIZED INTERSECTION, DEFINED AS THE AREA BOUNDED BY THE REAR X-WALK LINES
- WHEN FLAGGING WITHIN THE INTERSECTION OF TWO ARTERIAL ROADWAYS
- WHEN SPECIFIED IN THE MAINTENANCE OF TRAFFIC PLAN OR AS DIRECTED BY THE PROJECT ENGINEER

A LAW ENFORCEMENT OFFICER (LEO) WITH PATROL CAR SHALL BE REQUIRED ONLY WHEN DIRECTED BY THE CITY. THE OFFICER PATROL CAR WITH WORKING TOP MOUNTED EMERGENCY FLASHING LIGHTS SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE.

A FLAGGER SHALL BE UTILIZED TO ASSIST IN CONTROLLING TRAFFIC WHILE EQUIPMENT IS ENTERING OR EXITING AN INTERSECTION OR WORK ZONE. THE CONTRACTOR MAY UTILIZE HIS OWN OR LEO UNDER PAY ITEM 614 MAINTAINING TRAFFIC, LUMP SUM.

FLAGGERS AND LEO’S SHALL BE EQUIPPED ACCORDING TO THE STANDARDS FOR FLAGGING TRAFFIC CONTAINED IN THE OMUTCD. FLAGGING OPERATIONS PERFORMED BY LEO’S OR DESIGNATED FLAGGERS SHALL ONLY BE PERMITTED AS LONG AS ALL TRAFFIC CONTROL IS IN PLACE ACCORDING TO FIGURE 6H-10 (TA-10) IN THE OHIO MANUAL.

IF THE CONTRACTOR WISHES TO UTILIZE LEOS’ FOR TRAFFIC CONTROL OTHER THAN FOR THE REQUIRED IN THE PLANS, THEY DO SO AT THEIR OWN EXPENSE. THE CONTRACTOR SHALL MAKE ARRANGEMENT THROUGH THE COLUMBUS POLICE DIVISION AT (614) 645-4795.

LEO’S SHALL BE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH EMPLOYED BY THE CONTRACTOR, THE CITY REPRESENTATIVE SHALL HAVE CONTROL OVER THEIR PLACEMENT.

IF A SAFETY HAZARD DEVELOPS, A LEO MAY BE ASSIGNED BY THE COLUMBUS SAFETY AND SERVICE DIRECTOR AT THE CONTRACTOR’S EXPENSE.

ITEM 614 – LAW ENFORCEMENT OFFICER (LEO) WITHOUT PATROL CAR, AS PER PLAN

IN ADDITION TO THE LEO AND FLAGGER HOURS INCLUDED IN ITEM 614 MAINTAINING TRAFFIC, LUMP SUM; THE FOLLOWING QUANTITIES HAVE BEEN CARRIED FORWARD TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER OR AN ACCEPTABLE REPRESENTATIVE OF THE CITY OF COLUMBUS. THE CONTRACTOR SHALL BE PAID FOR THIS BID ITEM ONLY IF DIRECTED BY THE ENGINEER.

ITEM 614 – LAW ENFORCEMENT OFFICER WITHOUT PATROL CAR, AS PER PLAN 40 HOURS

EXISTING PERMANENT TRAFFIC CONTROL ITEMS

ALL OVERHEAD CABLE, DOWN GUYS OR BACK GUYS SHALL NOT BLOCK ANY PORTION OF A TRAFFIC SIGNAL, TRAFFIC CONTROL SIGN, OR OTHER TRAFFIC CONTROL DEVICE SUCH THAT VISIBILITY OR OPERATION OF THE TRAFFIC CONTROL DEVICE IS IMPAIRED.

ANY WORK DONE BY THE DIVISION OF PLANNING AND OPERATIONS, INCLUDING INSTALLATIONS, RELOCATION, REMOVAL AND/OR REPLACEMENT OF PERMANENT TRAFFIC CONTROL DEVICES AS A RESULT OF WORK DONE BY THE CONTRACTOR OR AS A RESULT OF NEGLIGENCE OF THE CONTRACTOR, SHALL BE AT THE CONTRACTORS’ EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REINSTALLATION AND/OR REPLACEMENT OF ALL PERMANENT TRAFFIC CONTROL DEVICES DAMAGED OR REMOVED DURING CONSTRUCTION. PERMANENT TRAFFIC CONTROL NO LONGER IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE REPLACED IMMEDIATELY.

AT ANY LOCATION WHERE THE CONTRACTOR DAMAGES DETECTORS AND/OR THEIR LEAD-IN CABLES THE CONTRACTOR SHALL REPLACE THEM. AT ANY LOCATION WHERE DETECTION IS CHANGED FROM MAG PROBE UNITS TO LOOPS, THE CONTRACTOR SHALL REPLACE THE PROBE LEAD-IN WITH LOOP LEAD-IN CABLE. **ALL REPAIRS TO DETECTION SHALL BE COMPLETED WITHIN 21 DAYS FROM DAMAGE TO DETECTION ON A PER INTERSECTION BASIS.** IF THE 21 DAY REPAIR REQUIREMENT CANNOT BE SATISFIED AT ANY LOCATION WHERE THE CONTRACTOR DAMAGES DETECTORS AND/OR THEIR LEAD-IN CABLES, THE CONTRACTOR, AT THE DISCRETION OF SIGNAL OPERATIONS PERSONNEL, MAY BE REQUIRED TO INSTALL A VERSICAM FLEX CAMERA SYSTEM OR TEMPORARY LOOP DETECTION. ANY CONTRACTOR FAILING TO COMPLY WITH THESES GUIDELINES **SHALL BE SUBJECT TO PENALTY TO THE SUM OF \$100.00 PER DAY** FOR EACH DAY BEYOND THE 21 DAY REPAIR PERIOD ON A PER INTERSECTION BASIS, UNTIL CONDITIONS ARE MET TO THE SATISFACTION OF THE SIGNAL OPERATIONS PERSONNEL. THIS PENALTY DEDUCTION SHALL BE SPECIFIC FOR EACH SIGNALIZED INTERSECTION EFFECTED BY THIS PROJECT AND SEPARATE FROM ANY LIQUIDATED DAMAGES FOR THE PROJECT AS A WHOLE. THE WORK TO INSTALL THE DETECTION SHALL CONFORM TO O.D.O.T. STANDARD CONSTRUCTION DRAWING TC-82.10 (DATED 4/19/02 OR LATER) AND TO THE CURRENT STATE OF OHIO CONSTRUCTION AND MATERIAL SPECIFICATIONS WITH THE FOLLOWING PROVISIONS:

- A) THE CONTRACTOR SHALL PROVIDE THE DIVISION OF DESIGN AND CONSTRUCTION’S INSPECTOR, PRIOR TO THE COMMENCEMENT OF WORK, THE IMSA (INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION) CERTIFICATION PAPERS FOR ALL SIGNAL TECHNICIANS WORKING ON THIS PROJECT.
- B) LOCATIONS OF THE REPLACEMENT DETECTION SHALL BE FIELD MARKED OR DIMENSIONED DRAWINGS SHALL BE SUBMITTED TO THE INSPECTION SERVICES SECTION BY DIVISION OF DESIGN AND CONSTRUCTION SECTION PERSONNEL. LOCATION OF FINAL PAVEMENT MARKINGS OR THE MARKINGS THEMSELVES SHALL BE CLEARLY INDICATED ON THE ASPHALT PRIOR TO DETECTOR LOCATIONS BEING MARKED. THE CONTRACTOR SHALL LAYOUT THE LOOPS ON THE PAVEMENT IF DRAWINGS ARE SUBMITTED. IF DRAWINGS HAVE NOT BEEN PROVIDED, CONTACT SIGNAL OPERATIONS PERSONNEL AT 645-0423 (CELL 419-4501) AT LEAST TWO WORKING DAYS PRIOR TO NEEDING THE LOCATION MARKED. IF UNABLE TO MAKE CONTACT THROUGH THE ABOVE NUMBERS, CALL 645-7393.
- C) THE SAW SLOT DEPTH FOR LOOP WIRE INSTALLATION SHALL BE FOUR (4) INCHES WITH SIX (6) INCHES AT THE CONDUIT ENTRANCE. IF ADVERSE PAVEMENT CONDITIONS WARRANT, DEPTH MAY BE INCREASED TO SIX (6) INCHES THROUGHOUT AND SHALL BE DETERMINED BY THE DIVISION OF DESIGN AND CONSTRUCTION INSPECTOR.
- D) EACH LOOP SHALL HAVE ITS OWN CONDUIT FROM EDGE OF PAVEMENT TO PULL BOX UNLESS SPECIFIED OTHERWISE BY THE DIVISION OF DESIGN AND CONSTRUCTION INSPECTOR.
- E) THE PULLBOX ASSEMBLY SHALL BE RATED AS MEDIUM TO HEAVY DUTY, TO BE INSTALLED IN CONCRETE WALKWAYS, AND SHALL HAVE ALL STAINLESS STEEL HARDWARE. THE PULLBOX COVER SHALL HAVE THE WORD **"TRAFFIC"** ON IT. THE COVER SHALL BE BOLTED TO THE BOX AND SHALL BE EITHER POLYMER CONCRETE OR STEEL PLATE. THE COVER PLUS HOUSING AS A UNIT SHALL BE RATED TO WITHSTAND A MINIMUM 20,000 LB. STATIC LOAD OVER A 10"x10" AREA AS PER ASTM C-857. THE BOX DEPTH SHALL BE 18 INCHES MINIMUM TO 30 INCHES MAXIMUM. IF THE PROJECT DOES NOT SPECIFY 713.08 CONCRETE PULL BOXES, THE SUPPLIED ASSEMBLIES SHALL BE AS FOLLOWS: CDR SYSTEMS MODEL SA32-1015-18, OR SYNERTECH MODEL 11"x18", SIX (6) INCHES OF #4 AGGREGATE SHALL BE PLACED AT THE BOTTOM OF THE PULLBOX. NO CONDUIT SHALL PROTRUDE MORE THAN THREE (3) INCHES INSIDE THE PULLBOX. CONDUIT ELLS OR EXTENSIONS MAY BE USED TO ALIGN THE CONDUIT WITH THE HOUSING. THE COST FOR EXTENSIONS OR ELLS IF NEEDED SHALL BE INCIDENTAL TO THE PER UNIT PRICE,
- F) WHEN A PULLBOX IS NOT USED, THE SOLDERED SPLICE SHALL BE MADE IN AN ANCHOR BASE STRAIN POLE OR A CONDUIT RISER SPECIFIED BY THE DIVISION OF PLANNING AND OPERATIONS’ REPRESENTATIVE, EXCEPT WHERE A CONTROLLER CABINET IS MOUNTED ON THAT POLE IN WHICH CASE THE LOOP WIRE SHALL BE ROUTED DIRECTLY INTO THE CABINET.
- G) THE CONTRACTOR SHALL NOT MAKE ANY WIRING CONNECTIONS OR ADJUSTMENTS INSIDE THE CONTROL CABINET. WHEN SUCH CONNECTIONS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE TRAFFIC OPERATIONS SHOP 645-7393, MON.-FRI., 8 AM TO 4 PM, TO SCHEDULE **CITY** FORCES FOR MAKING THE ACTUAL CONNECTIONS. THE CONTRACTOR SHALL BE AVAILABLE AT THE AGREED TIME. THE CONTRACTOR WILL BE BILLED FOR ANY TIME THAT **CITY** FORCES ARE REQUIRED TO WAIT FOR THE CONTRACTORS’ WORK TO BE COMPLETED.

CALCULATED
MRD
CHECKED
TJS

MAINTENANCE OF TRAFFIC

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

10
82

3123-E

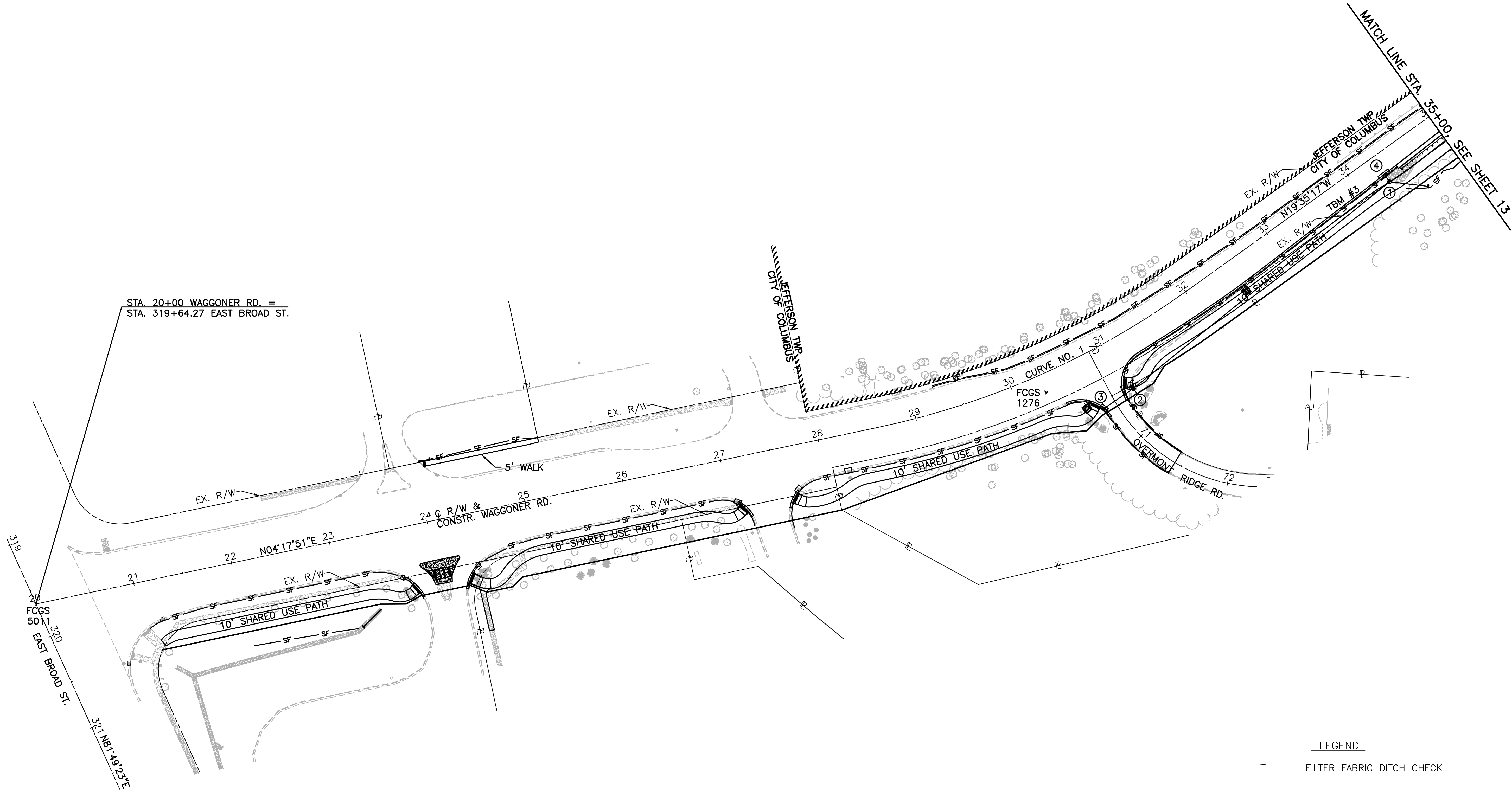
MCDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\planses\Joint of Traffic\173608763mgt001.dwg MAINTENANCE OF TRAFFIC Last Saved: Apr 24, 2015 5:01 PM Plotted: May 01, 2015 11:35 AM

- H) CONDUIT PLACED IN "RIGHT OF WAY" AREAS BEARING NO TRAFFIC FOR DETECTOR LEAD IN SHALL BE ODOT ITEM 725.051, ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS, LATEST EDITION. CONDUIT PLACED UNDER A ROADWAY OR IN AREAS THAT MAY BEAR TRAFFIC SHALL BE ODOT ITEM 725.04 (SIZES AND TYPE TO BE DETERMINED BY THE DIVISION OF PLANNING AND OPERATIONS' REPRESENTATIVE. ALL CONDUITS SHALL BE PLACED AT A MINIMUM DEPTH OF 24 INCHES.
- I) LOOP WIRE SHALL BE IDENTIFIED WITH A PLASTIC TAG (WBLT, EBRT, ETC.) AT THE SPLICE POINT OR AT ENTRANCE TO THE CABINET IF LEAD-IN CABLE IS NOT USED.

THE CONTRACTOR SHALL NOTIFY SIGNAL OPERATION PERSONNEL AT 645-0423 (CELL 419-4501) AFTER ALL LOOPS HAVE BEEN INSTALLED AT EACH INTERSECTION. IF UNABLE TO MAKE CONTACT THROUGH THE ABOVE NUMBER, CALL 645-7393. THE DIVISION OF PLANNING AND OPERATIONS SHALL INSPECT ALL SENSORS AND TEST AS NECESSARY. THE CONTRACTOR SHALL REPLACE ALL LOOPS NOT MEETING SPECIFICATIONS.

1182	WAGGONER ROAD SHARED USE PATH & WIDENING FROM EAST BROAD ST TO CHAPEL STONE RD	MAINTENANCE OF TRAFFIC	
		CALCULATED MRD CHECKED TJS	

MCDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\plan\3123-E.dwg STORM WATER POLLUTION PREVENTION PLAN Last Saved: Apr 27, 2015 12:56 PM Plotted: May 01, 2015 11:39 AM



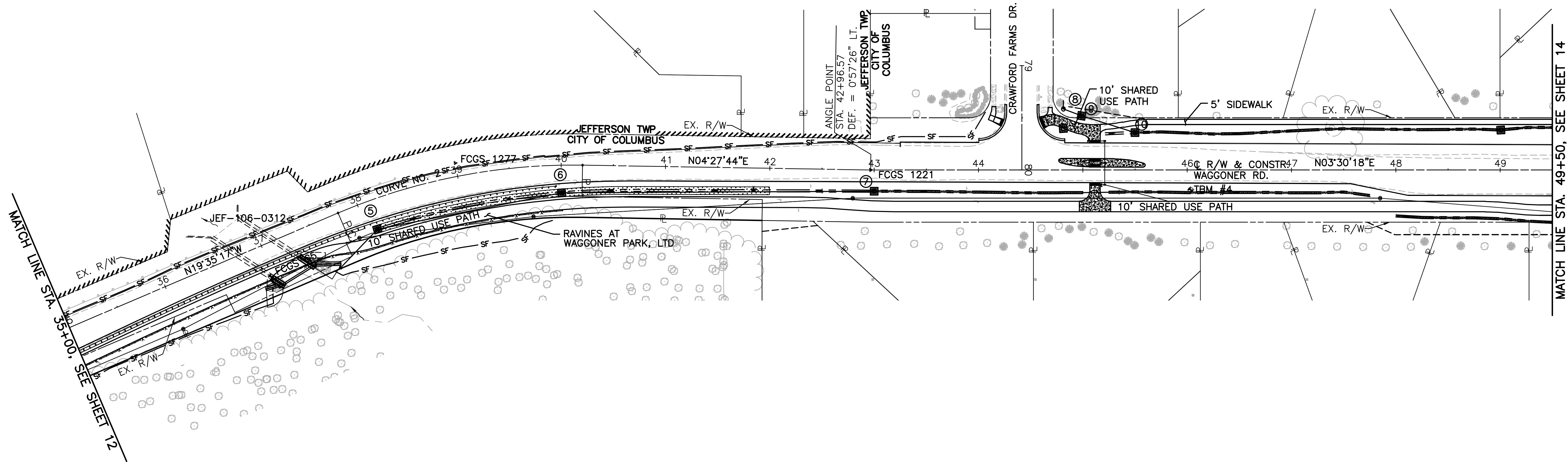
STA. 20+00 WAGGONER RD. =
STA. 319+64.27 EAST BROAD ST.

SEDIMENT AND EROSION CONTROL QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
207	-	EACH	CATCH BASIN PROTECTION (BAG TYPE)
207	-	EACH	INLET PROTECTION (CURB WITH GRATE)
207	-	FT	PERIMETER FILTER FABRIC FENCE
207	-	FT	FILTER FABRIC DITCH CHECK

NOTE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ON-SITE DRAINAGE AT ALL TIMES DURING CONSTRUCTION. NO SEPARATE PAYMENT SHALL BE MADE FOR MAINTAINING DRAINAGE.

- LEGEND
- FILTER FABRIC DITCH CHECK
 - INLET PROTECTION (CURB WITH GRATE)
 - CATCH BASIN PROTECTION
 - ⊗ STRUCTURE NUMBER
 - ⊗ EXISTING STRUCTURE
 - SF PERIMETER FABRIC FENCE

\\MCDANIEL-ARROW-USA\173608763\Task 2 - Waggoner Road\design\plan\173608763\waggoner2.dwg STORM WATER POLLUTION PREVENTION PLAN Last Saved: Apr 27, 2015 12:57 PM Plotted: May 01, 2015 11:39 AM



SEDIMENT AND EROSION CONTROL QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
207	-	EACH	CATCH BASIN PROTECTION (BAG TYPE)
207	-	EACH	INLET PROTECTION (CURB WITH GRATE)
207	-	FT	PERIMETER FILTER FABRIC FENCE
207	-	FT	FILTER FABRIC DITCH CHECK

NOTE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ON-SITE DRAINAGE AT ALL TIMES DURING CONSTRUCTION. NO SEPARATE PAYMENT SHALL BE MADE FOR MAINTAINING DRAINAGE.

- LEGEND
- FILTER FABRIC DITCH CHECK
- INLET PROTECTION (CURB WITH GRATE)
- CATCH BASIN PROTECTION
- ⊗

STRUCTURE NUMBER
- ⊗

EXISTING STRUCTURE
- SF-

PERIMETER FABRIC FENCE

CALCULATED

CNK

CHECKED

TJS

STORM WATER POLLUTION PREVENTION PLAN

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

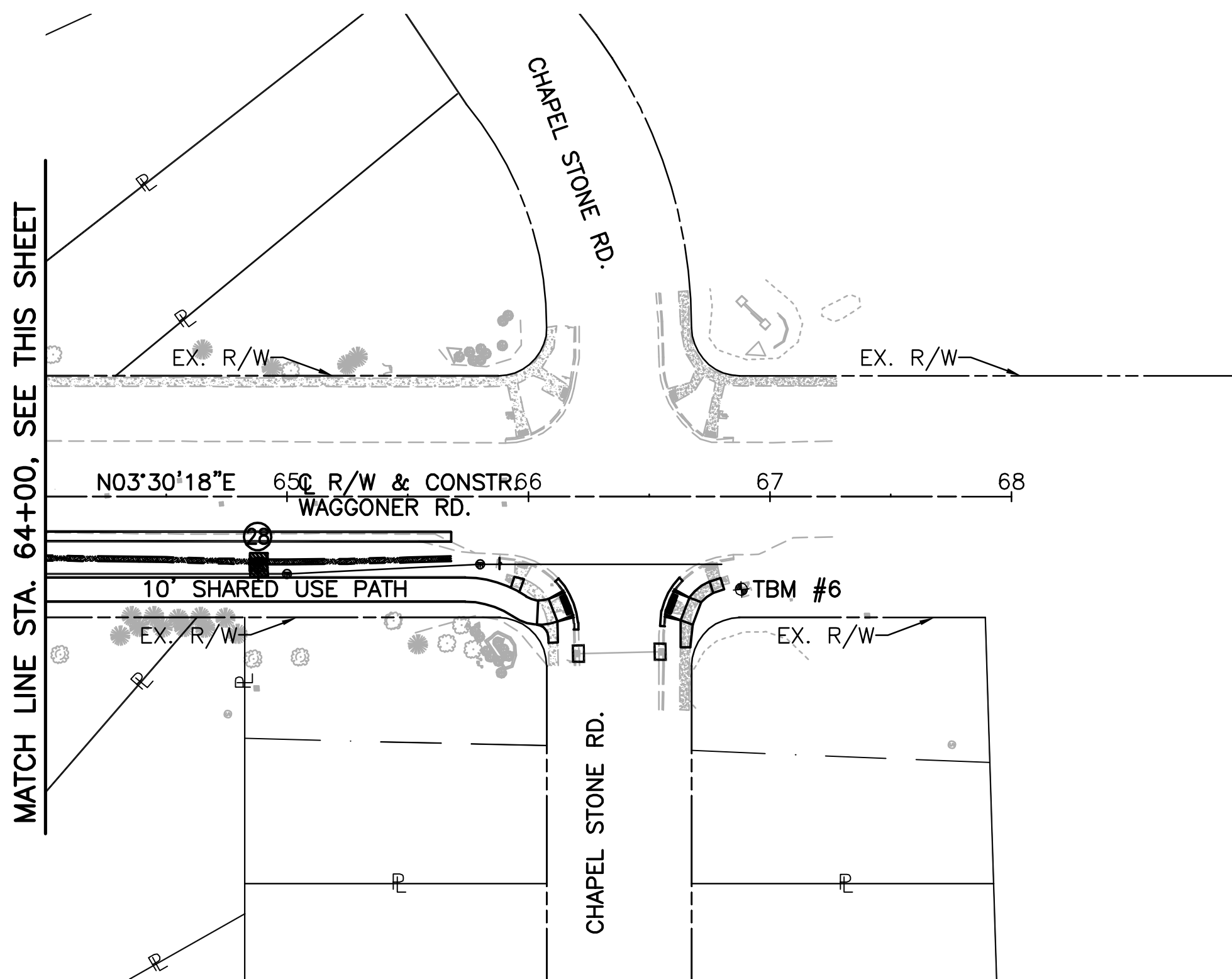
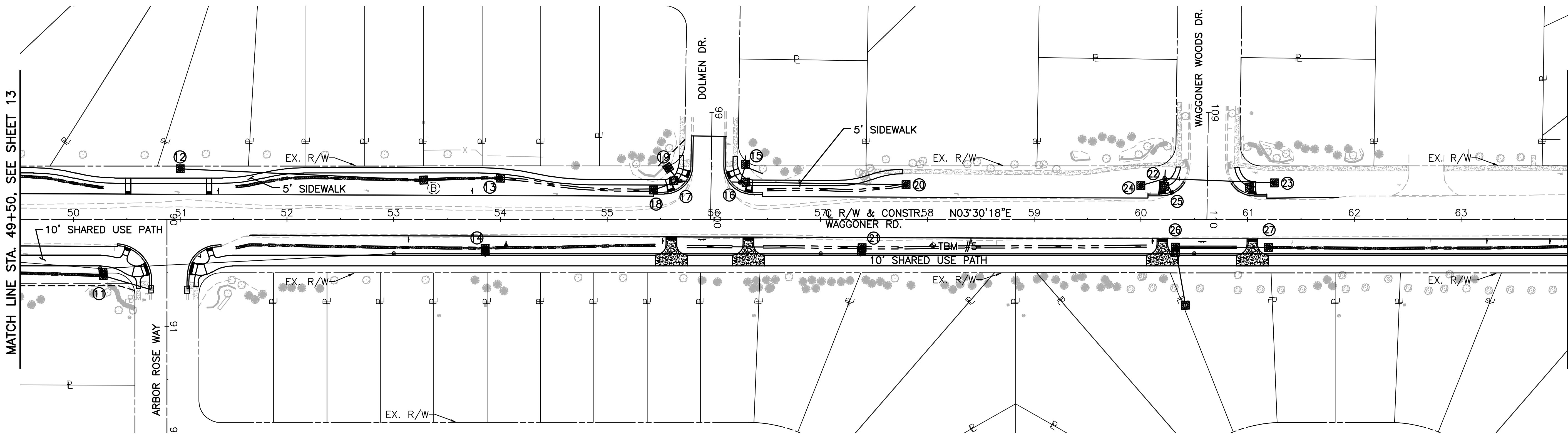
13
82

N

0 50 100

SCALE IN FEET

3123-E

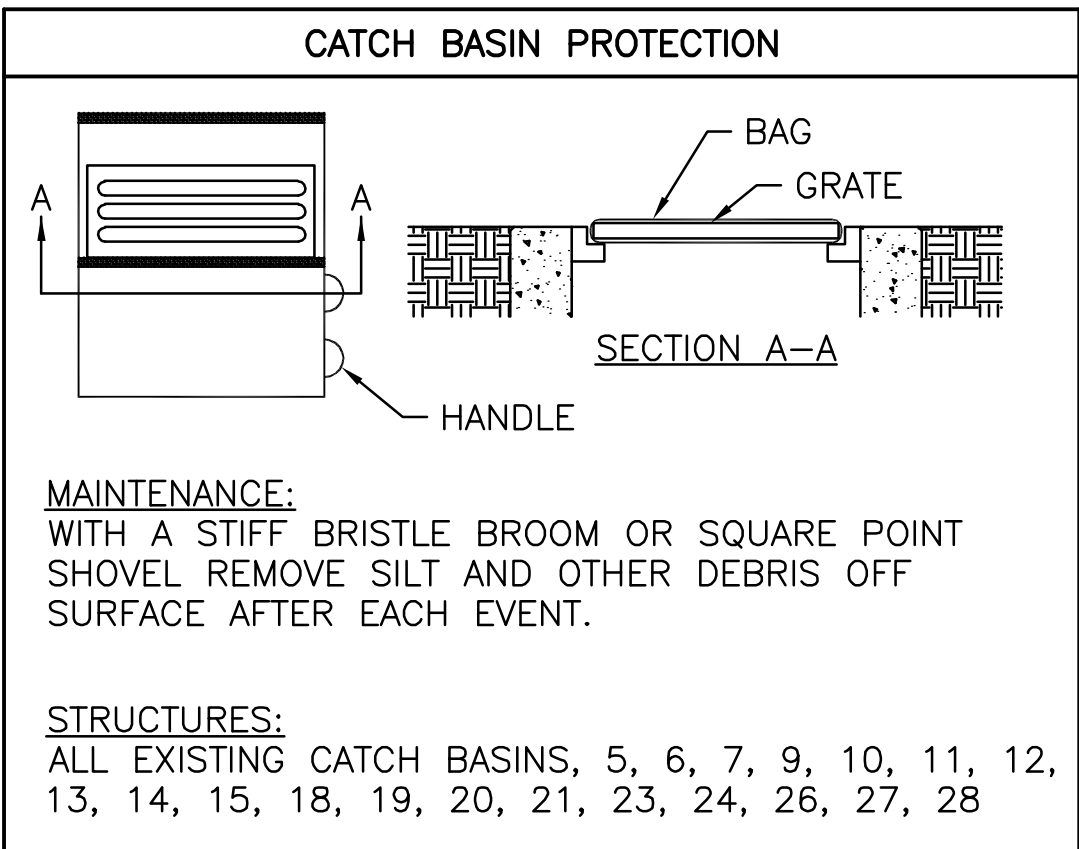
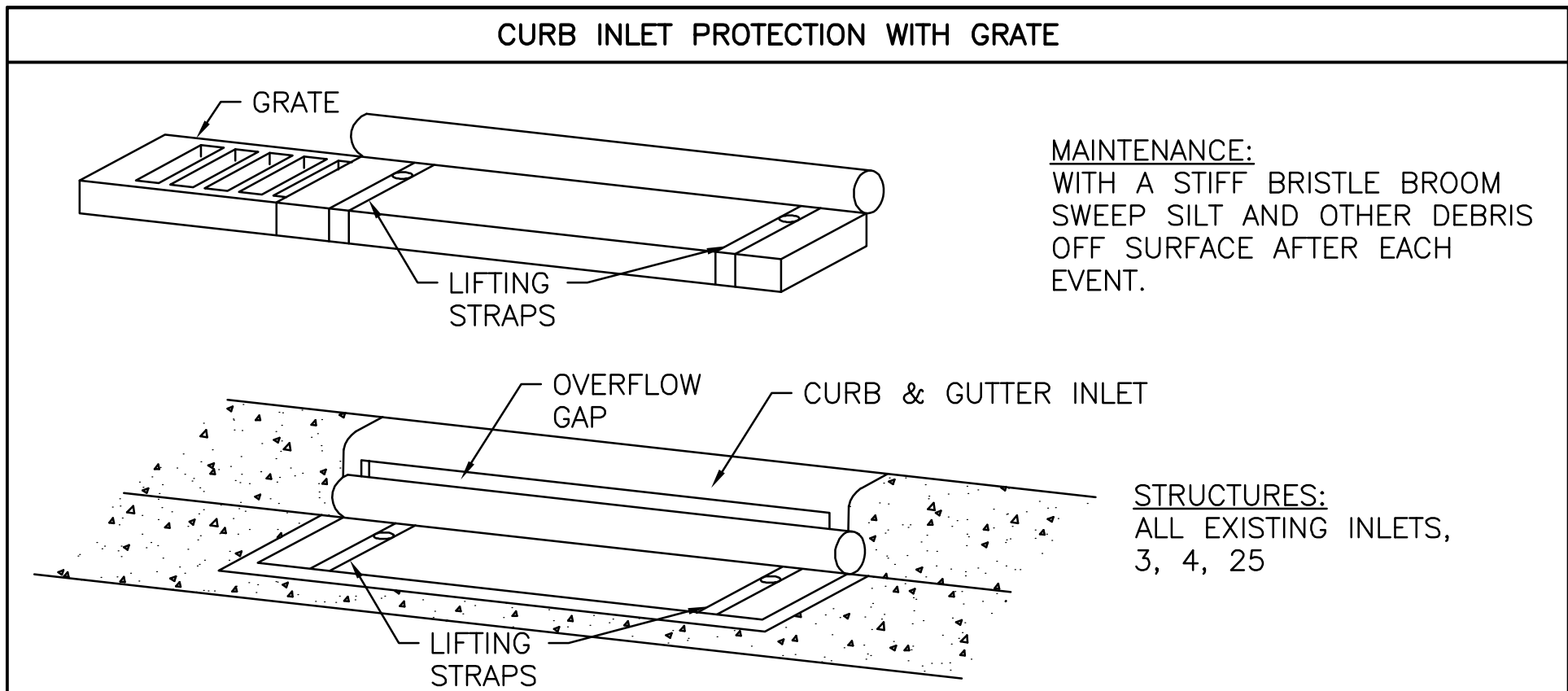
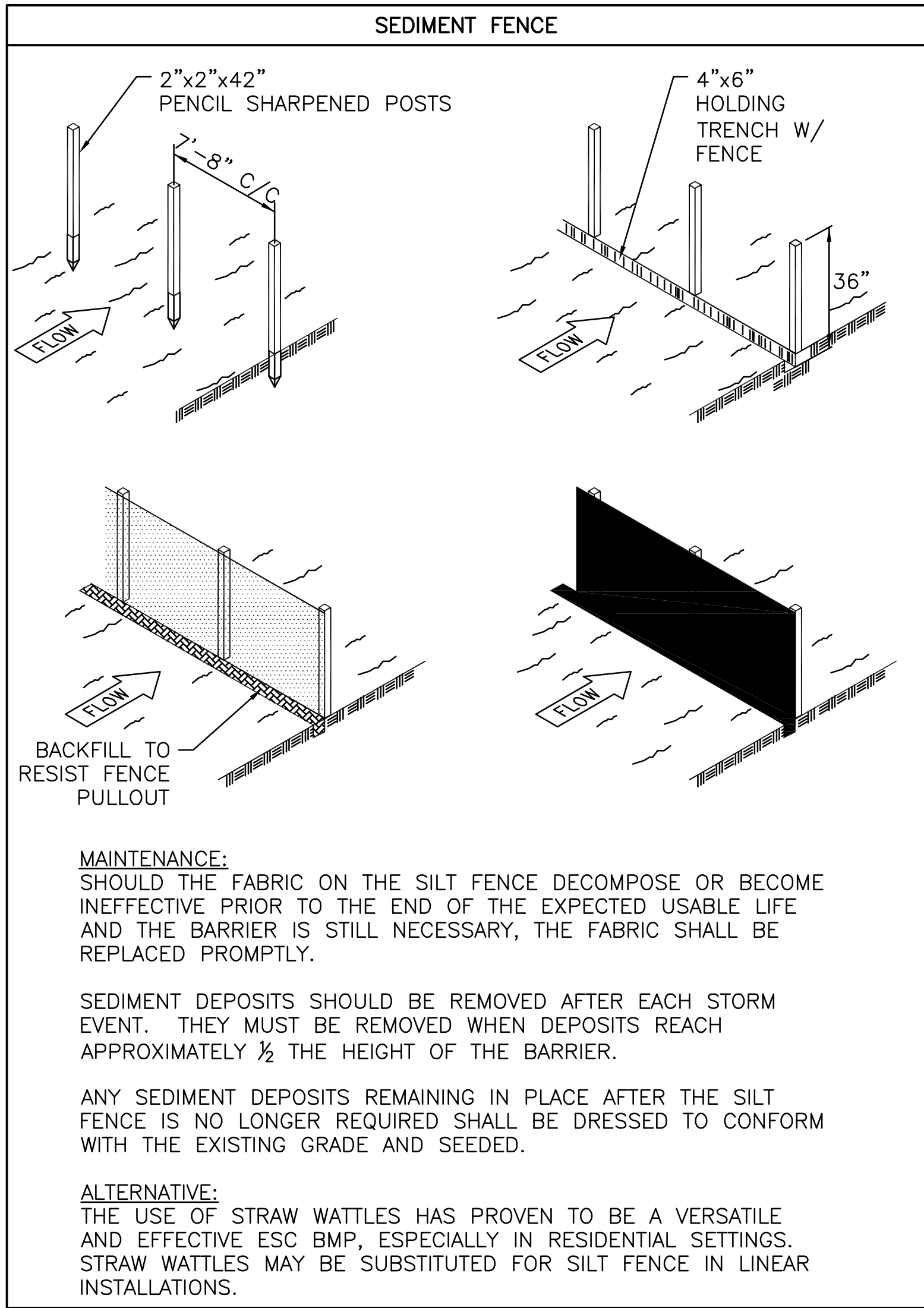
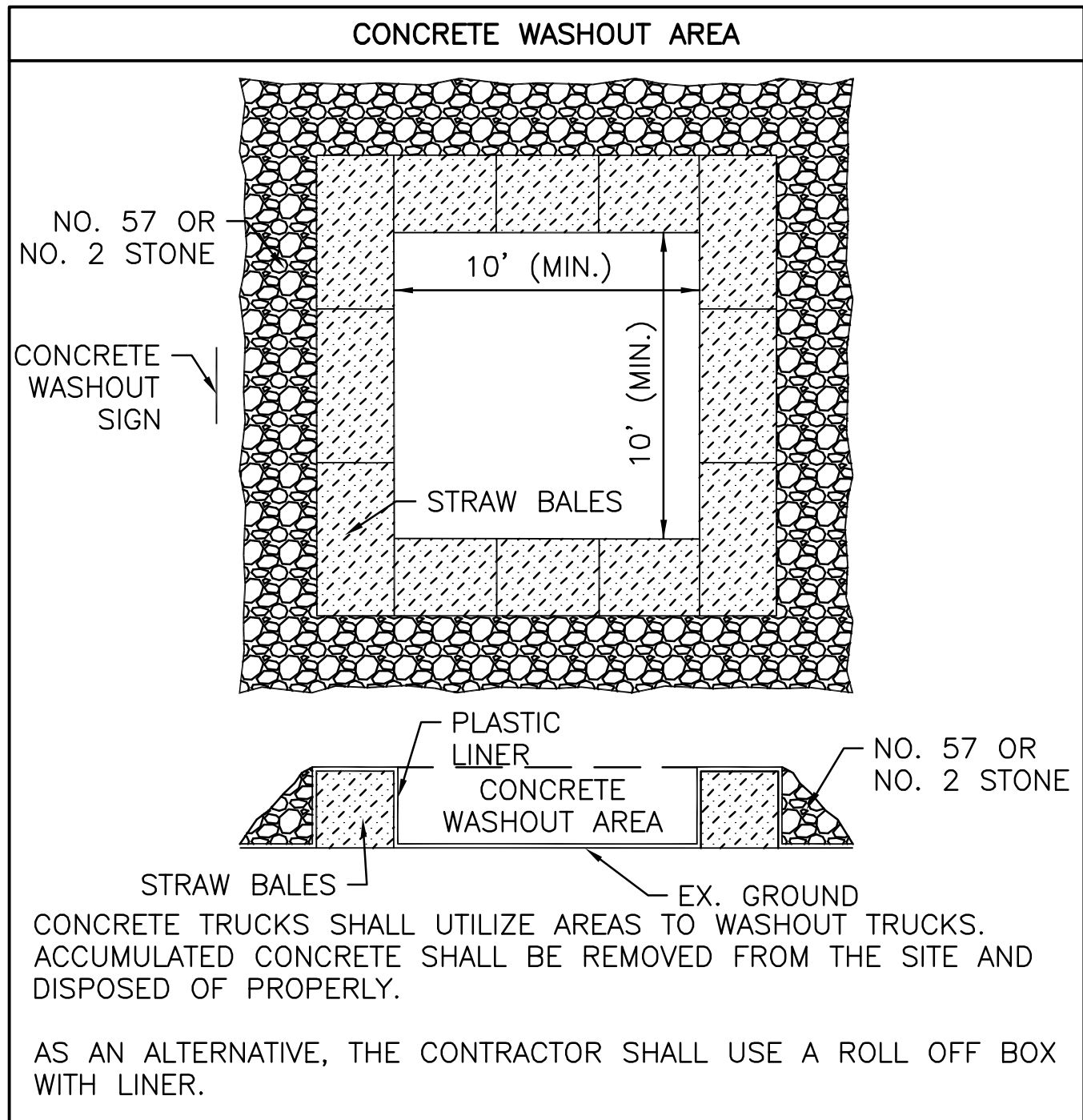


SEDIMENT AND EROSION CONTROL QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
207	—	EACH	CATCH BASIN PROTECTION (BAG TYPE)
207	—	EACH	INLET PROTECTION (CURB WITH GRATE)
207	—	FT	PERIMETER FILTER FABRIC FENCE
207	—	FT	FILTER FABRIC DITCH CHECK

NOTE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ON-SITE DRAINAGE AT ALL TIMES DURING CONSTRUCTION. NO SEPARATE PAYMENT SHALL BE MADE FOR MAINTAINING DRAINAGE.

- | <u>LEGEND</u> | |
|---|------------------------------------|
|  | FILTER FABRIC DITCH CHECK |
|  | INLET PROTECTION (CURB WITH GRATE) |
|  | CATCH BASIN PROTECTION |
|  | STRUCTURE NUMBER |
|  | EXISTING STRUCTURE |
|  | PERIMETER FABRIC FENCE |

\\173608763\Task 2 - Waggoner Road\design\plan\173608763swppp04.dwg STORM WATER POLLUTION PREVENTION PLAN Last Saved: Apr 24, 2015 5:02 PM Plotted: May 01, 2015 11:40 AM
MCDANIEL, ARRON



CONTRACTOR RESPONSIBILITY: DETAILS HAVE BEEN PROVIDED ON THE PLANS IN AN EFFORT TO HELP THE CONTRACTOR PROVIDE EROSION AND SEDIMENTATION CONTROL. THE DETAILS SHOWN ON THE PLAN SHALL BE CONSIDERED A MINIMUM. ADDITIONAL OR ALTERNATED DETAILS MAY BE FOUND IN THE O.D.N.R. MANUAL "RAINWATER AND LAND DEVELOPMENT". THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING NECESSARY AND ADEQUATE MEASURES FOR THE PROPER CONTROL OF EROSION AND SEDIMENT RUNOFF FROM THE SITE ALONG WITH PROPER MAINTENANCE AND INSPECTION IN COMPLIANCE WITH THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.

THIS PLAN MUST BE POSTED ON-SITE. A COPY OF THE SWPPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (WITH THE SITE-SPECIFIC NOI NUMBER) SHALL BE KEPT ON-SITE AT ALL TIMES.

PRIOR TO CONSTRUCTION OPERATIONS IN AN AREA, ALL SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE IN PLACE. FIELD ADJUSTMENTS WITH RESPECT TO LOCATIONS AND DIMENSIONS MAY BE MADE BY THE ENGINEER.

THE CONTRACTOR SHALL PLACE INLET EROSION CONTROL IMMEDIATELY AFTER CONSTRUCTION.

THE LIMITS OF SEEDING AND MULCHING ARE AS SHOWN ON THE PLANS. THOSE AREAS DISTURBED OUTSIDE THE WORK LIMITS SHALL BE SEEDED AND MULCHED AT THE CONTRACTOR'S EXPENSE.

MAINTENANCE: IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE SEDIMENT CONTROL FEATURES USED ON THIS PROJECT. THE SITE SHALL BE INSPECTED PERIODICALLY AND WITHIN 24 HOURS OF A RAINFALL EVENT. RECORDS OF THESE INSPECTIONS SHALL BE KEPT AND MADE AVAILABLE TO JURISDICTIONAL AGENCIES IF REQUESTED. ANY SEDIMENT OR DEBRIS WHICH HAS REDUCED THE EFFICIENCY OF A STRUCTURE SHALL BE REMOVED IMMEDIATELY. SHOULD A STRUCTURE OR FEATURE BECOME DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE AT NO ADDITIONAL COST TO THE CITY.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE OFF-SITE TRACKING OF SEDIMENTS BY VEHICLES AND EQUIPMENT IS MINIMIZED.

STREET CLEANING (ON AN AS-NEEDED BASIS) IS REQUIRED THROUGH THE DURATION OF THIS CONSTRUCTION PROJECT. THIS INCLUDES SWEEPING, POWER CLEANING AND (IF NECESSARY) MANUAL REMOVAL OF DIRT OR MUD IN THE STREET GUTTERS.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT NO SOLID OR LIQUID WASTE IS DISCHARGED INTO STORMWATER RUNOFF. SEDIMENT LADEN WATER SHALL BE FILTERED THROUGH THE USE OF FILTER FENCES OR SEDIMENTATION BASINS PRIOR TO DISCHARGE TO SURFACE WATERS. CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE INTO OR ALONGSIDE RIVERS, STREAMS AND CREEKS OR INTO NATURAL OR MAN MADE CHANNELS/SWALES. CONCRETE TRUCK WASH WATER AND SURPLUS CONCRETE SHALL BE CONFINED TO AREAS APPROVED BY THE ENGINEER; AFTER HARDENING, THESE WASTE MATERIALS SHALL BE REMOVED FROM THE SITE.

ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DIRECTION OF THE CITY AND/OR OHIO EPA.

PLAN DESIGNER:

STANTEC CONSULTING
1500 LAKE SHORE DR. SUITE 100
COLUMBUS, OHIO 43204

OWNER:

CITY OF COLUMBUS
DIVISION OF SEWERAGE AND DRAINAGE
1250 FAIRWOOD AVE.
COLUMBUS, OHIO 43206

PROJECT DESCRIPTION:

PROVIDES FOR 0.91 MI. OF PEDESTRIAN SAFETY IMPROVEMENTS ALONG WAGGONER ROAD. INCLUDES WAGGONER ROAD WIDENING FROM CRAWFORD FARMS DRIVE TO WAGGONER WOODS DRIVE, MILLING AND OVERLAY OF WAGGONER ROAD, EXTENSION OF DYSART DITCH CULVERT, SHARED-USE PATH ALONG THE EAST SIDE OF WAGGONER ROAD, SIDEWALK ON THE WEST SIDE OF WAGGONER ROAD, MARKED CROSSWALKS, CURB RAMPS, SIGNAGE AND PAVEMENT MARKINGS.

EXISTING SITE CONDITIONS:

THE PROJECT CONSISTS OF OPEN CHANNEL, AND CLOSED DRAINAGE SYSTEMS THAT OUTLET INTO VARIOUS NEIGHBORHOODS, AND DYSAR DITCH.

ADJACENT AREAS:

RESIDENTIAL AND COMMERCIAL AREAS

EROSION & SEDIMENT MEASURES:

EROSION AND SEDIMENT WILL BE CONTROLLED BY THE USE OF INLET PROTECTION AND FILTER FABRIC FENCE.

MAINTENANCE:

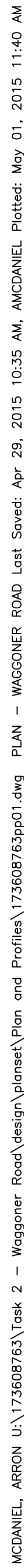
ALL EROSION CONTROL DEVICES ARE TO BE INSPECTED BY THE SUPERINTENDENT DAILY AND AFTER RAINFALL EVENTS. ANY DAMAGED FACILITIES ARE TO BE REPLACE OR REPAIRED IMMEDIATELY.

CONSTRUCTION:

THE CONTRACTOR SHALL PROVIDE A SCHEDULE OF OPERATIONS TO THE CITY. SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THIS SCHEDULE.

SITE CONTACT:

CITY OF COLUMBUS
TERRY STEWART
614-645-5671
TLStewart@Columbus.gov



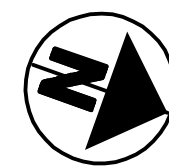
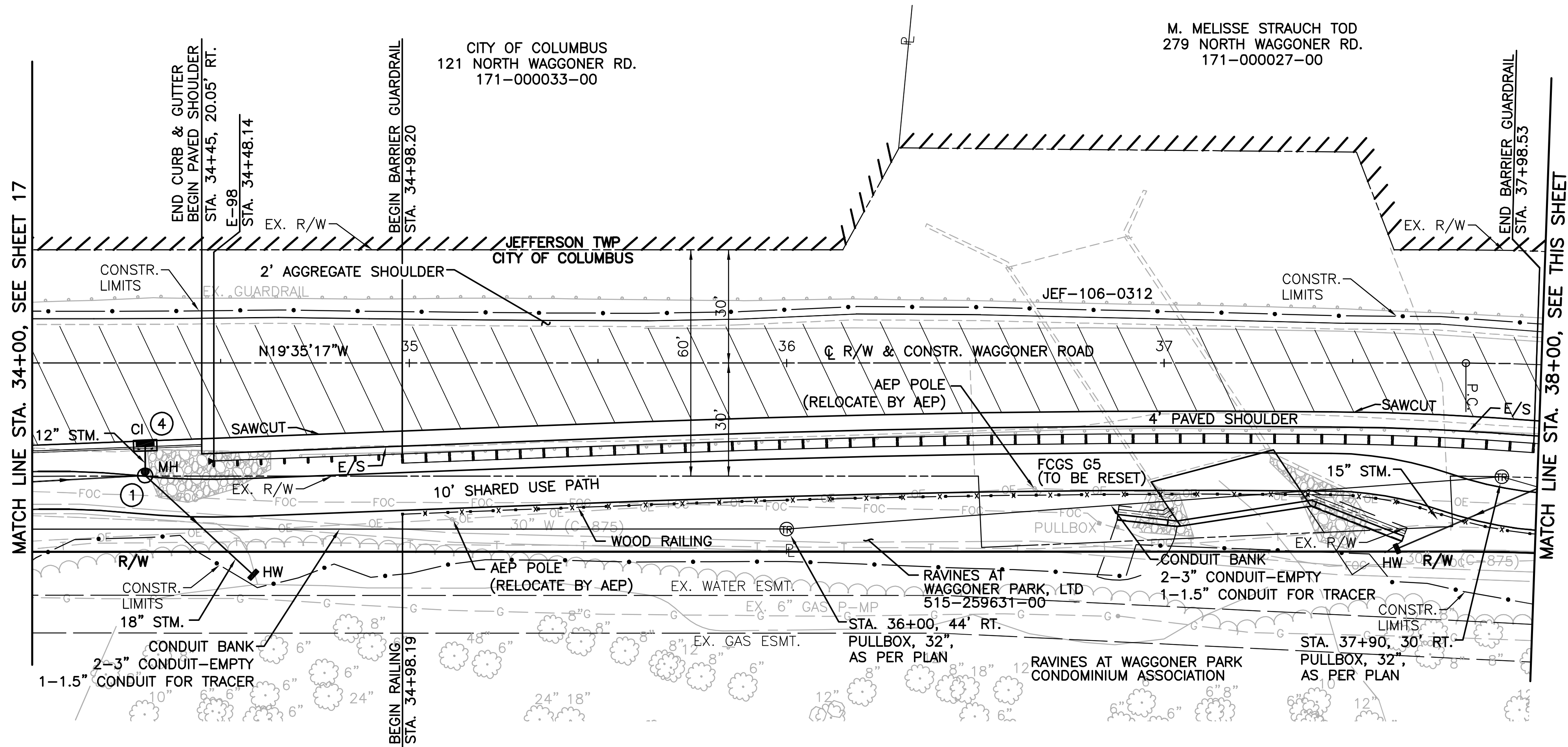
CALCULATED	
CNK	
CHECKED	
TJS	

PLAN - WAGGONER ROAD
STA. 20+55.36 TO STA. 26+00

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

16
82

McDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\plan\plan.dwg PLAN - WAGGONER ROAD Last Saved: Apr 29, 2015 4:11 PM, AMCDANIEL Plotted: May 01, 2015 11:41 AM

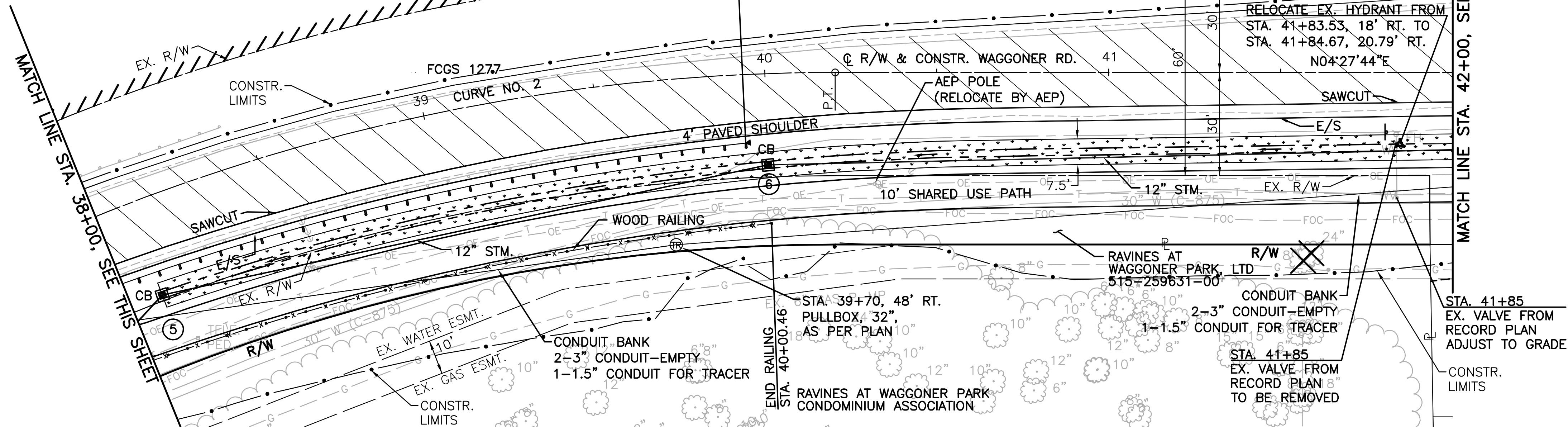


MATCH LINE STA. 38+00, SEE THIS SHEET

1-1 1/4" PAVEMENT PLAINING

CURVE DATA
CURVE NO. 2
P.I. STA. 39+02.00
 $\Delta = 24^{\circ}03'02''$ RT.
 $D_c = 10^{\circ}00'00''$
 $R = 572.96'$
 $T = 122.05'$
 $L = 240.51'$
 $E = 12.86'$
P.C. STA. 37+79.95
P.T. STA. 40+20.45

M. MELISSE STRAUCH TOD
279 NORTH WAGGONER RD.
171-000027-00



MATCH LINE STA. 42+00, SEE SHEET 19

SUB SUMMARY

82 18		WAGGONER ROAD SHARED USE PATH & WIDENING FROM EAST BROAD ST TO CHAPEL STONE RD		PLAN - WAGGONER ROAD STA. 34+00 TO STA. 42+00									
TOTALS TO GENERAL JOURNAL				CALCULATED		CNK		CHECKED		TJS		0 20 40 SCALE IN FEET	

MCDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\plan\plan.dwg PLAN - WAGGONER ROAD Last Saved: Apr 29, 2015 4:10 PM, AMCDANIEL Plotted: May 01, 2015 11:41 AM

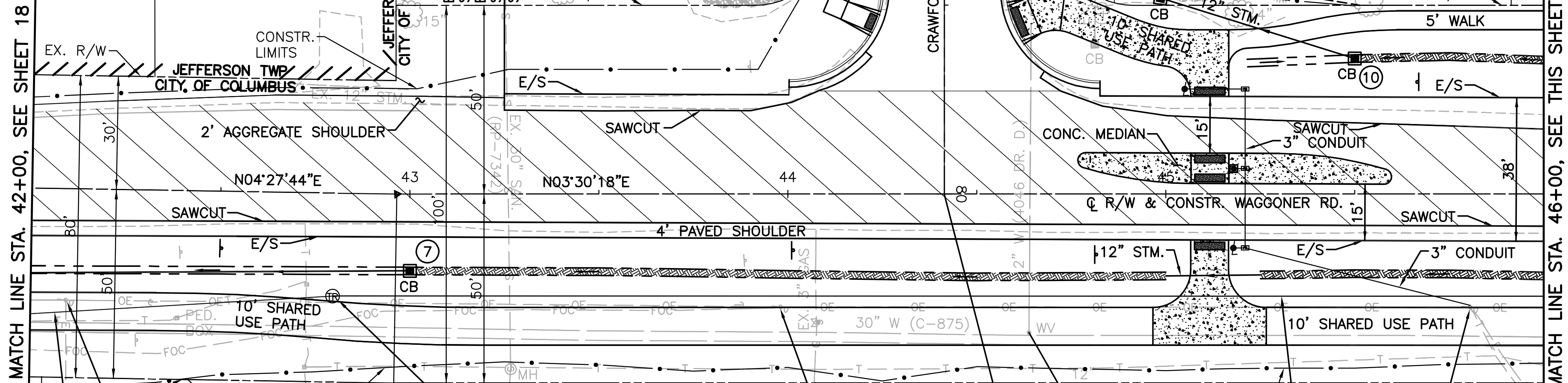
MARY M. STRAUCH
279 NORTH WAGGONER RD.
171-000565-00

M. MELISSE STRAUCH TOD
279 NORTH WAGGONER RD.
171-000027-00

CHANDA L. LANOS
7999 CRAWFORD
FARMS DR.
515-237577-00

GIRUM H. KIBRON
& SOFIA A. YIRGA
7996 CRAWFORD
FARMS DR.
515-237620-00

MATCH LINE STA. 42+00, SEE SHEET 18



MATCH LINE STA. 46+00, SEE THIS SHEET

THOMAS R. & KAREN S. HARDIN
7947 CULLOM CT.
515-237613-00

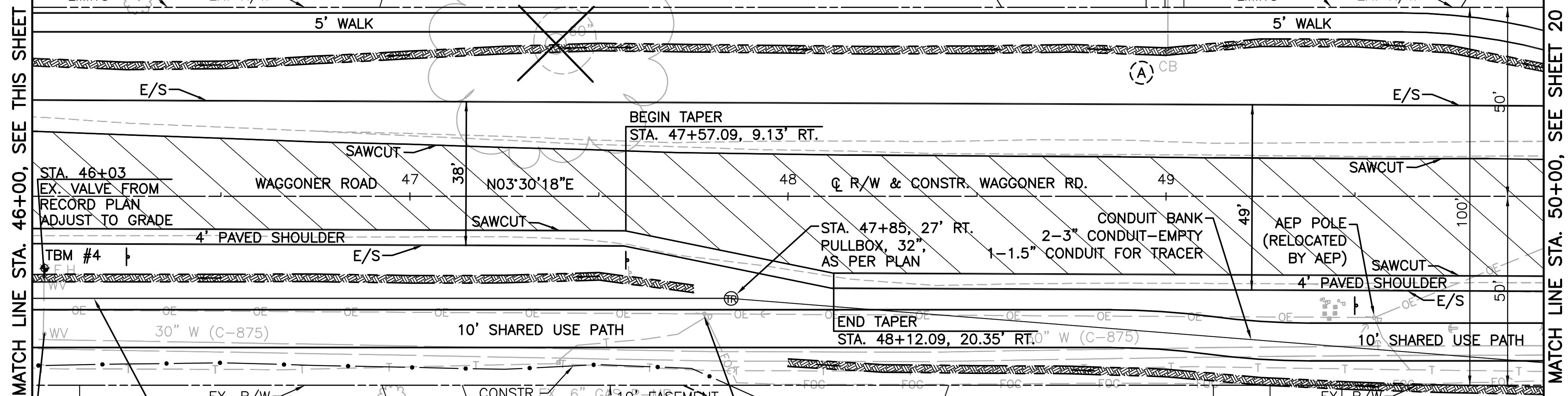
TIMOTHY BROWN
7948 CULLOM CT.
515-237612-00

JILL SCHOSKER
& META L. POWELL
7942 CULLOM CT.
515-237611-00

CARL & FREDA FOX
406 HANCES DR.
515-237604-00

STACEY MALKUS &
RODNEY THOMAS
412 HANCES DR.
515-237603-00

MATCH LINE STA. 46+00, SEE THIS SHEET



MATCH LINE STA. 50+00, SEE SHEET 20

STA. 46+03
EX. VALVE FROM
RECORD PLAN
ADJUST TO GRADE

LOUIS HARPER
7981 EUROGREY CT.
515-245486-00

KIMBERLY BEDDOW
7976 EUROGREY CT.
515-245487-00

EVAN SPENCE
7982 EUROGREY CT.
515-245488-00

TBM #4
"4" SET ON THE WEST SIDE OF THE TOP FLANGE TO THE FIRE
HYDRANT LOCATED 30'± EAST OF THE CENTERLINE OF
WAGGONER RD. AND 450'± SOUTH OF THE CENTERLINE OF
ARBOR ROSE WAY WAGGONER RD. STA. 46+03.32, 19.03' RT.

ELEV. 999.70

SUB SUMMARY

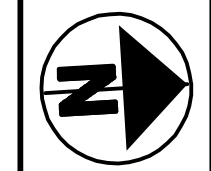
PLAN - WAGGONER ROAD
STA. 42+00 TO STA. 50+00

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

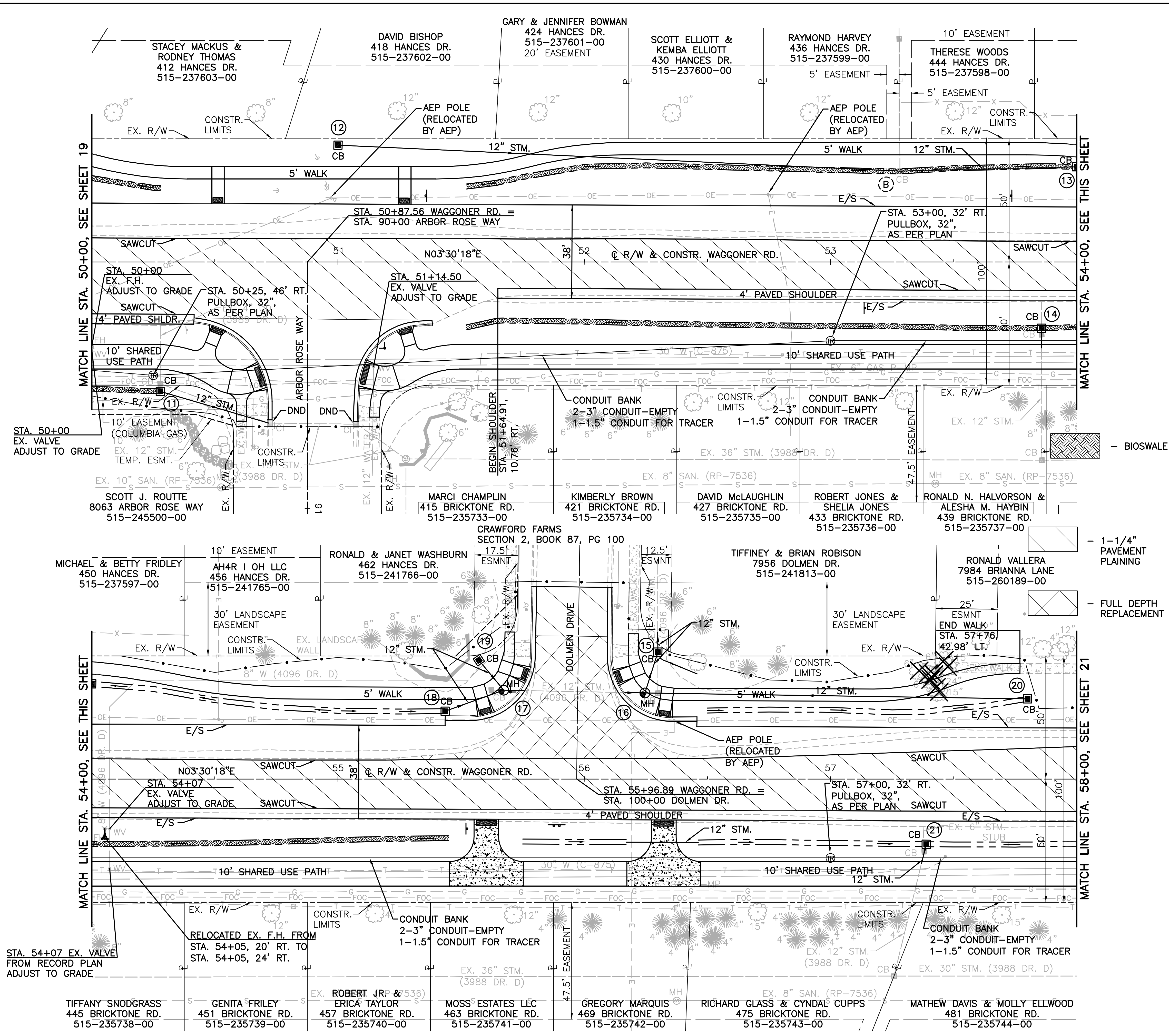
TOTALS TO GENERAL SUMMARY

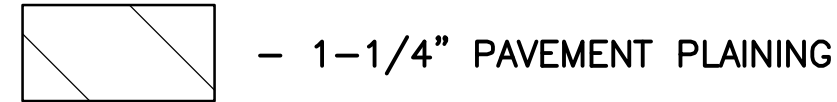
19
82

0 20 40
SCALE IN FEET
CALCULATED
CNK
CHECKED
TJS



3123 E

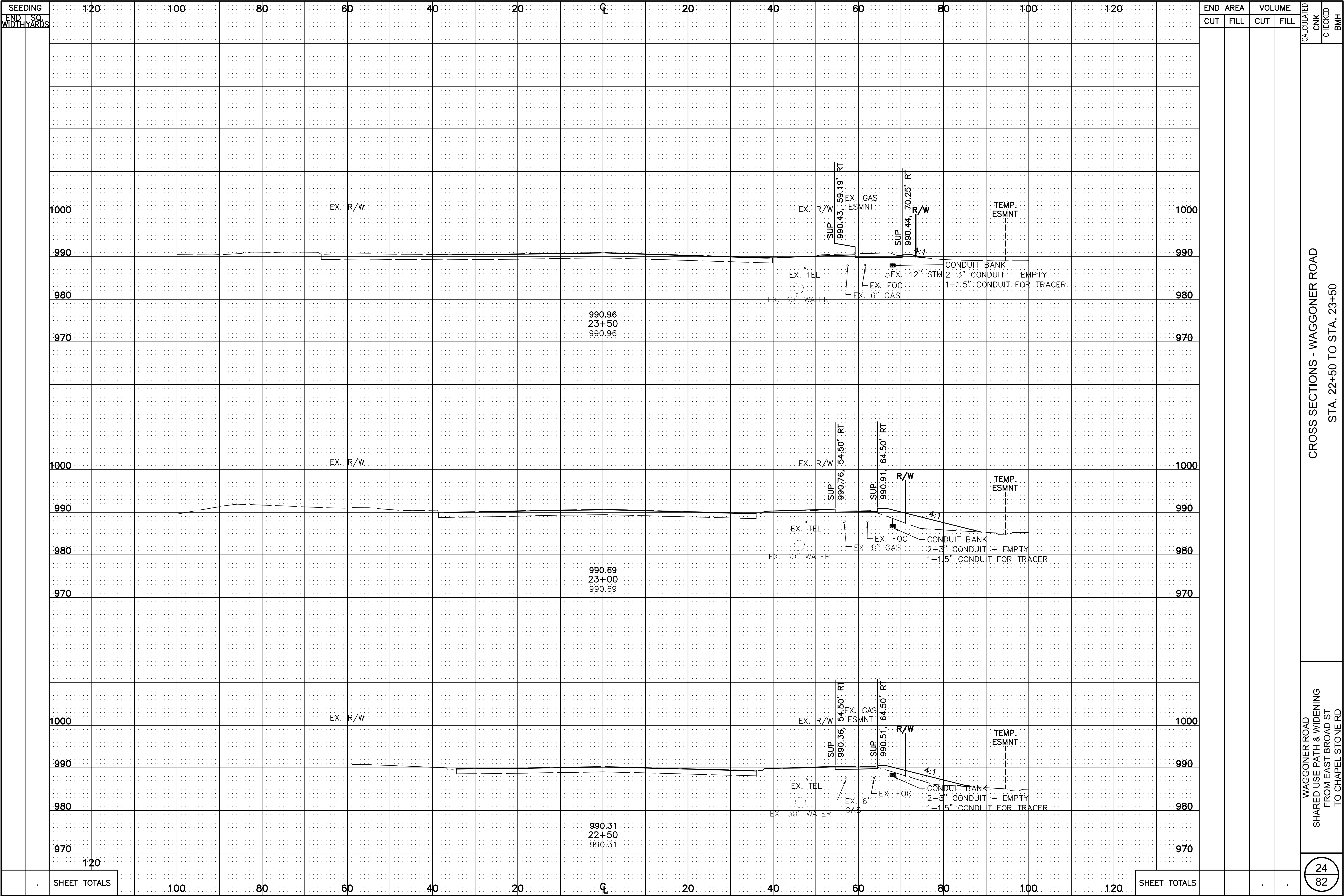
[illegible]



ELEV. 1001.78

22
82

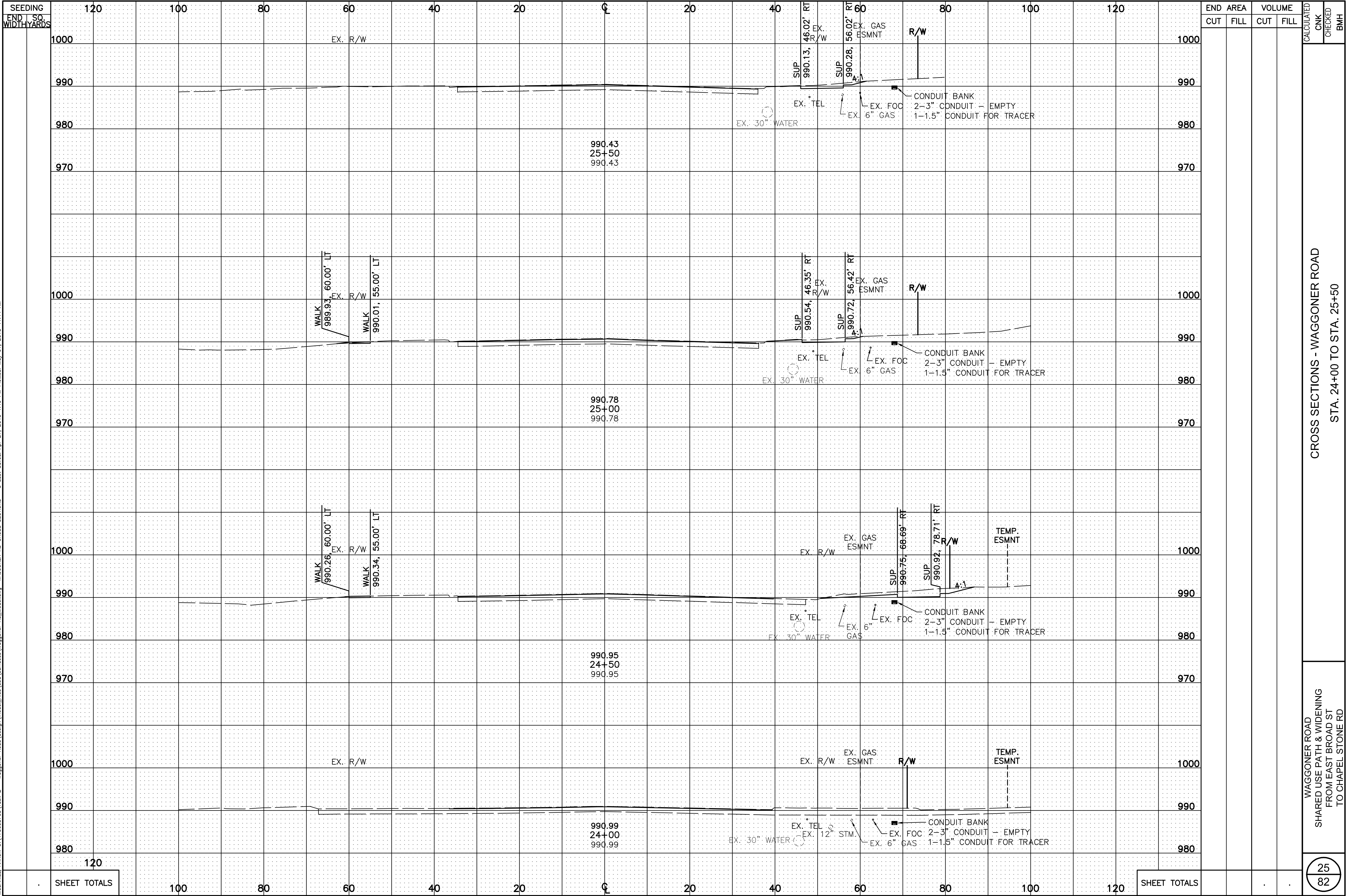
MC DANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 2 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:44 AM



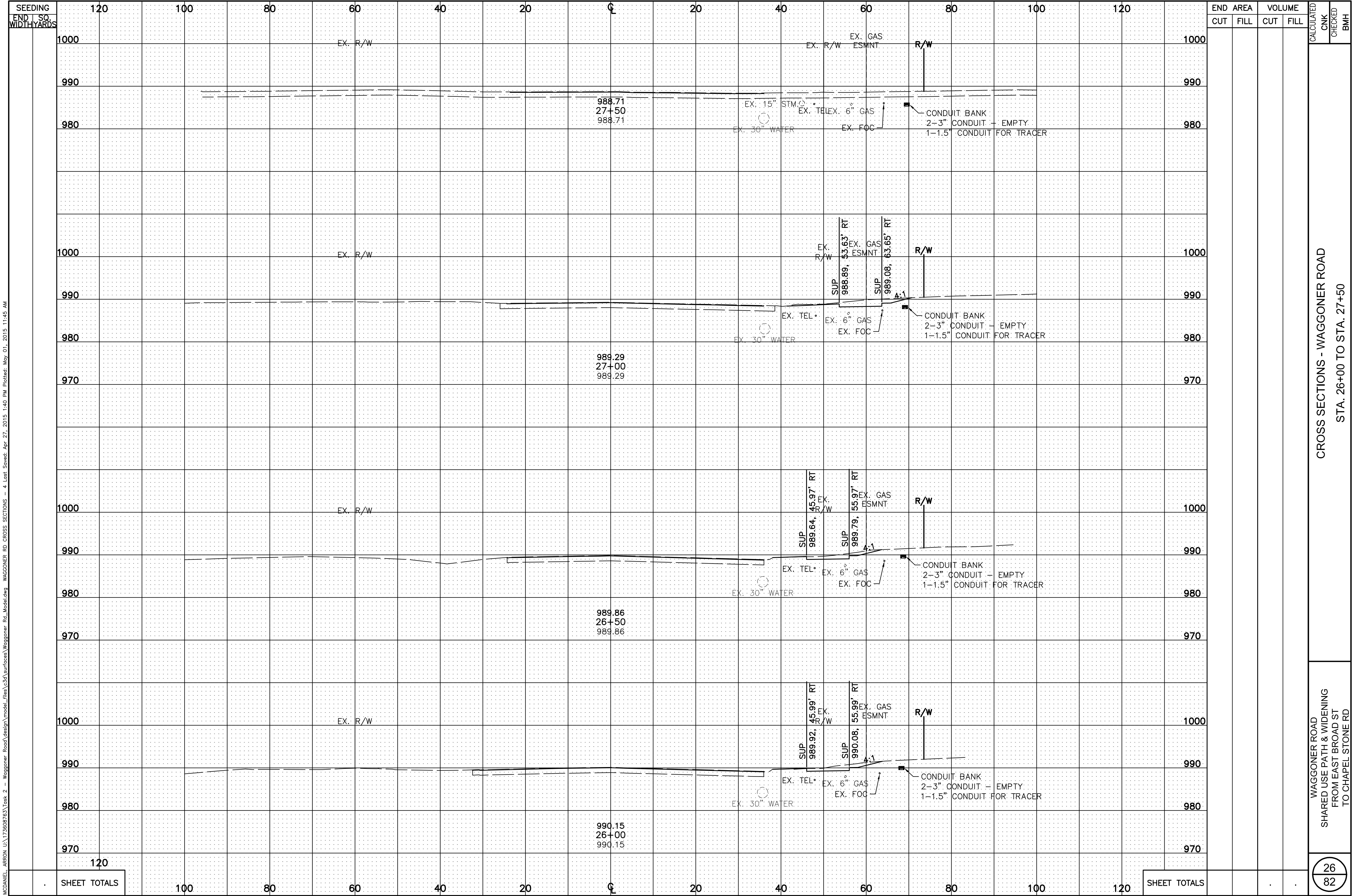
CROSS SECTIONS - WAGGONER ROAD
STA. 22+50 TO STA. 23+50

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

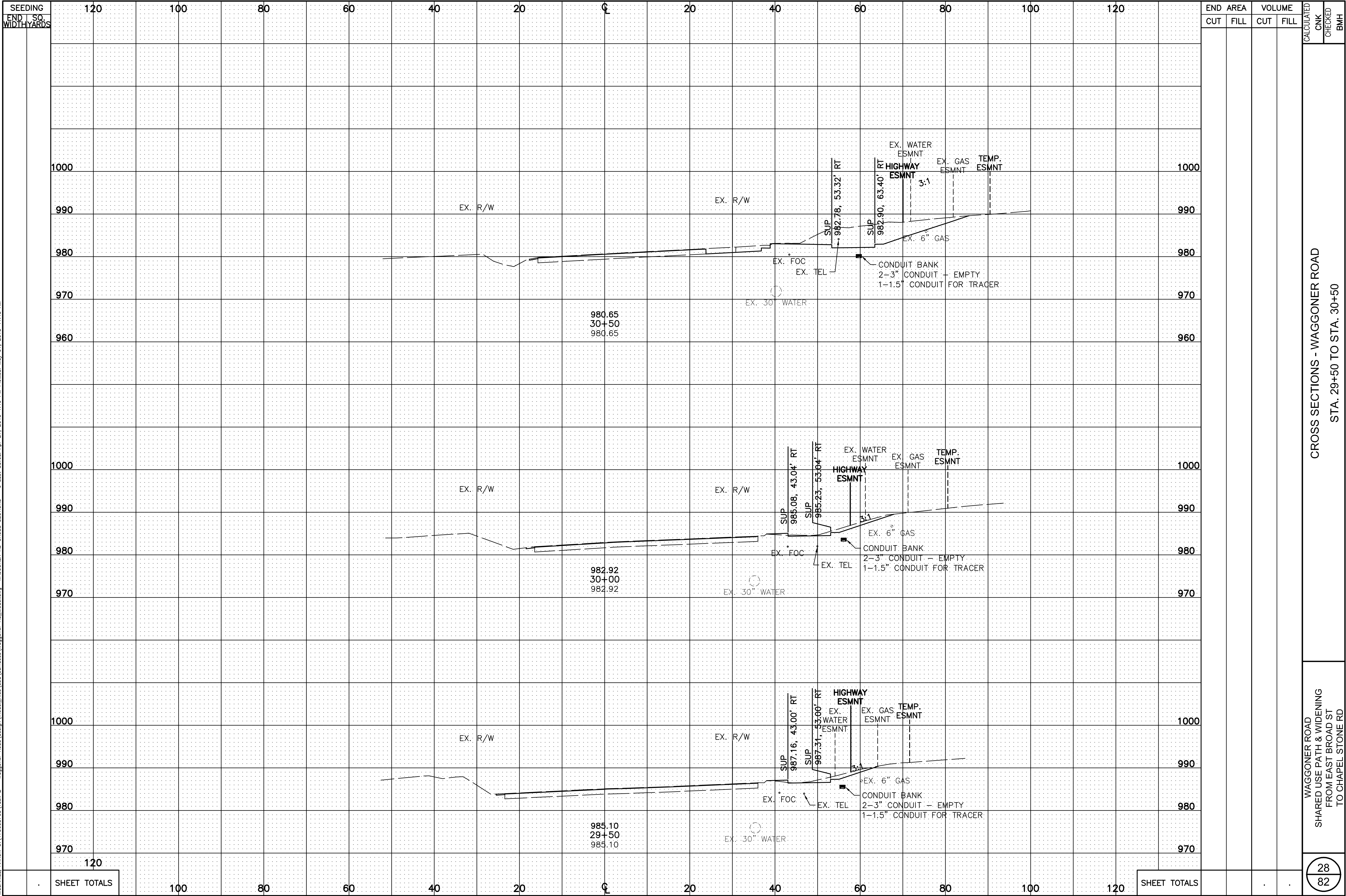
McDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 3 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:44 AM



McDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 4 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:45 AM



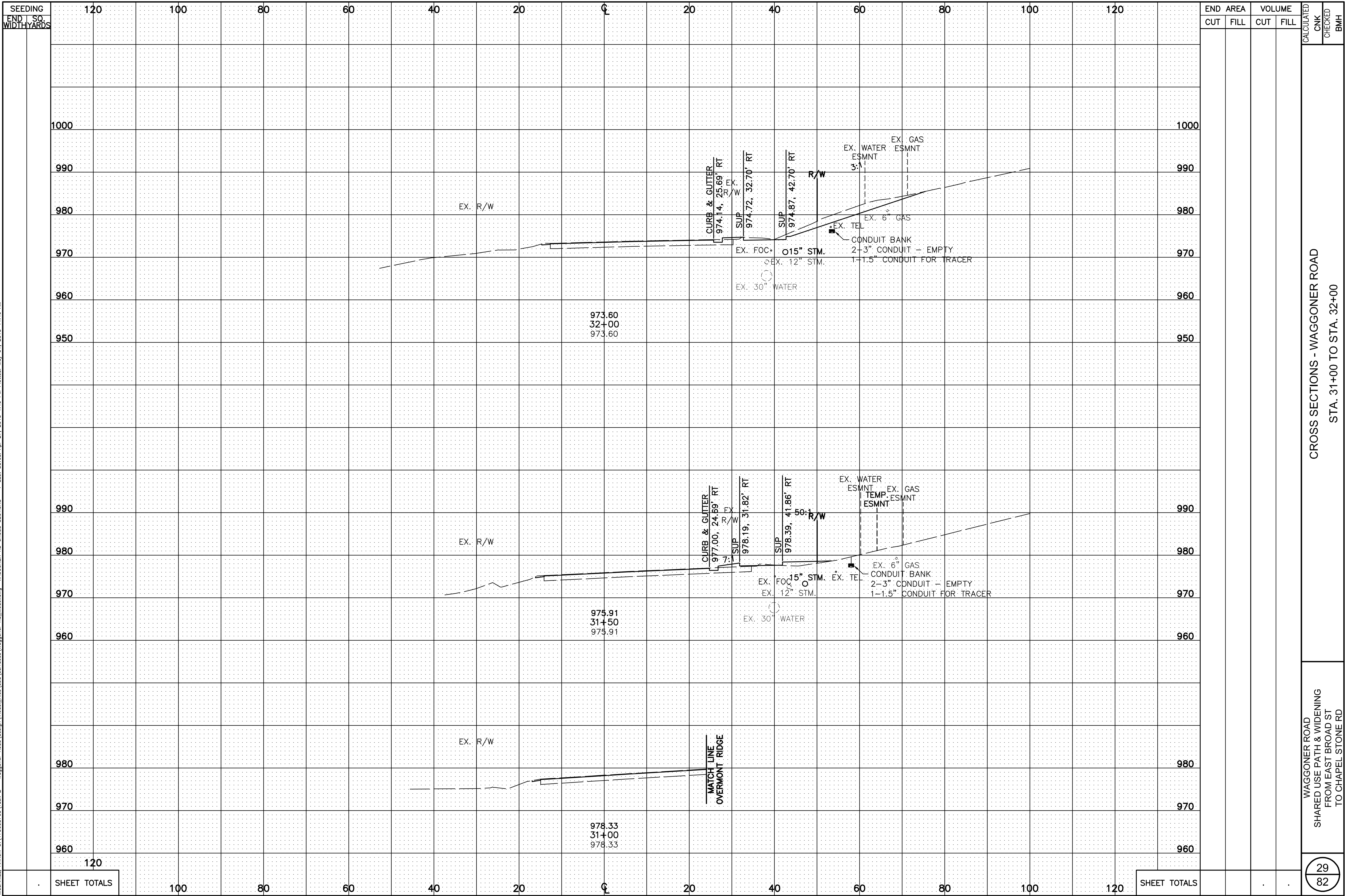
McDANIEL, ARRON_U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner_Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 6 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:45 AM



CROSS SECTIONS - WAGGONER ROAD
STA. 29+50 TO STA. 30+50

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

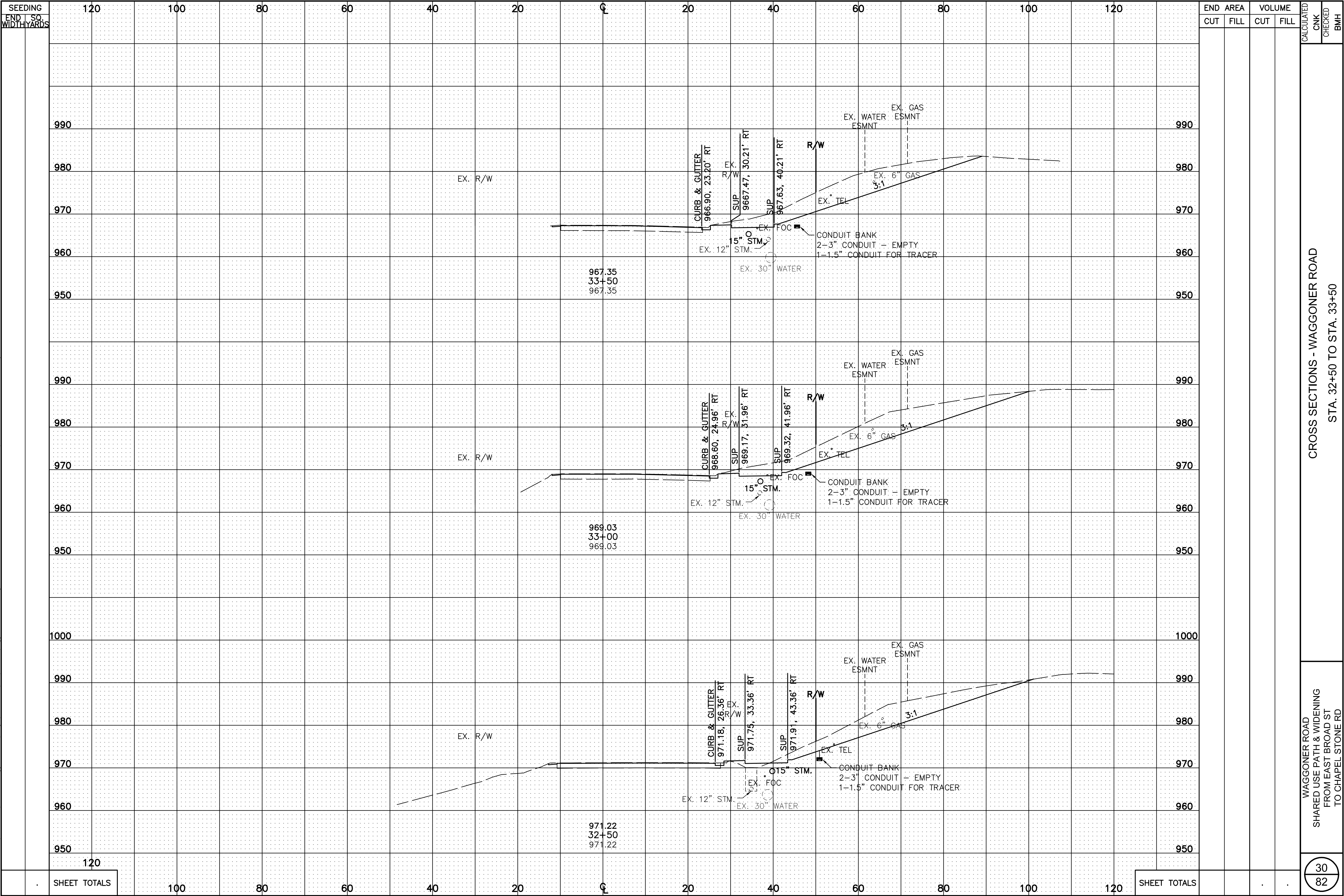
\\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 7 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:46 AM



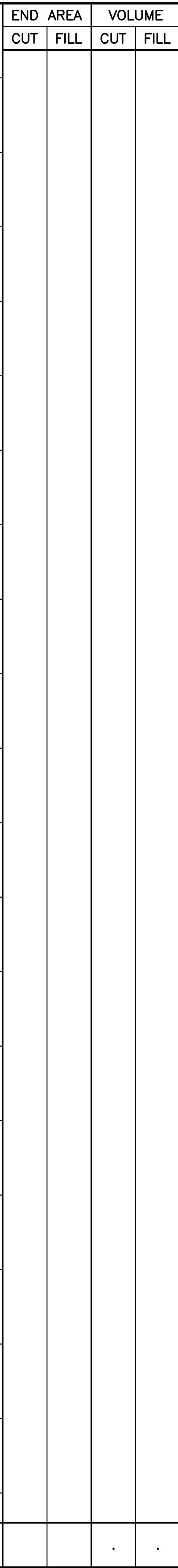
CROSS SECTIONS - WAGGONER ROAD
STA. 31+00 TO STA. 32+00

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

McDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 8 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:46 AM



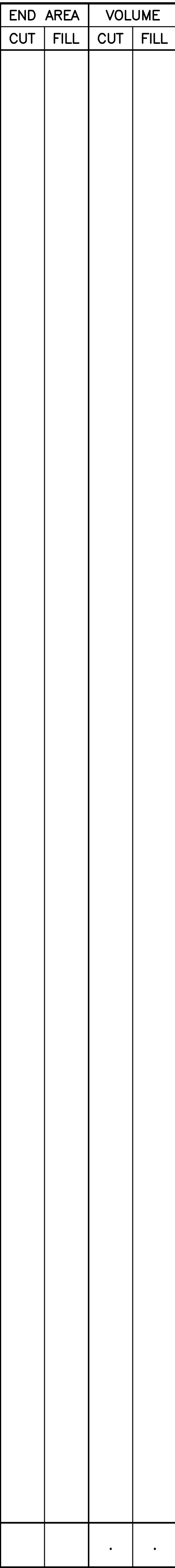
WAGGONER ROAD SHARED USE PATH & WIDENING FROM EAST BROAD ST TO CHAPEL STONE RD	CROSS SECTIONS - WAGGONER ROAD STA. 34+00 TO STA. 35+00
---	--



WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

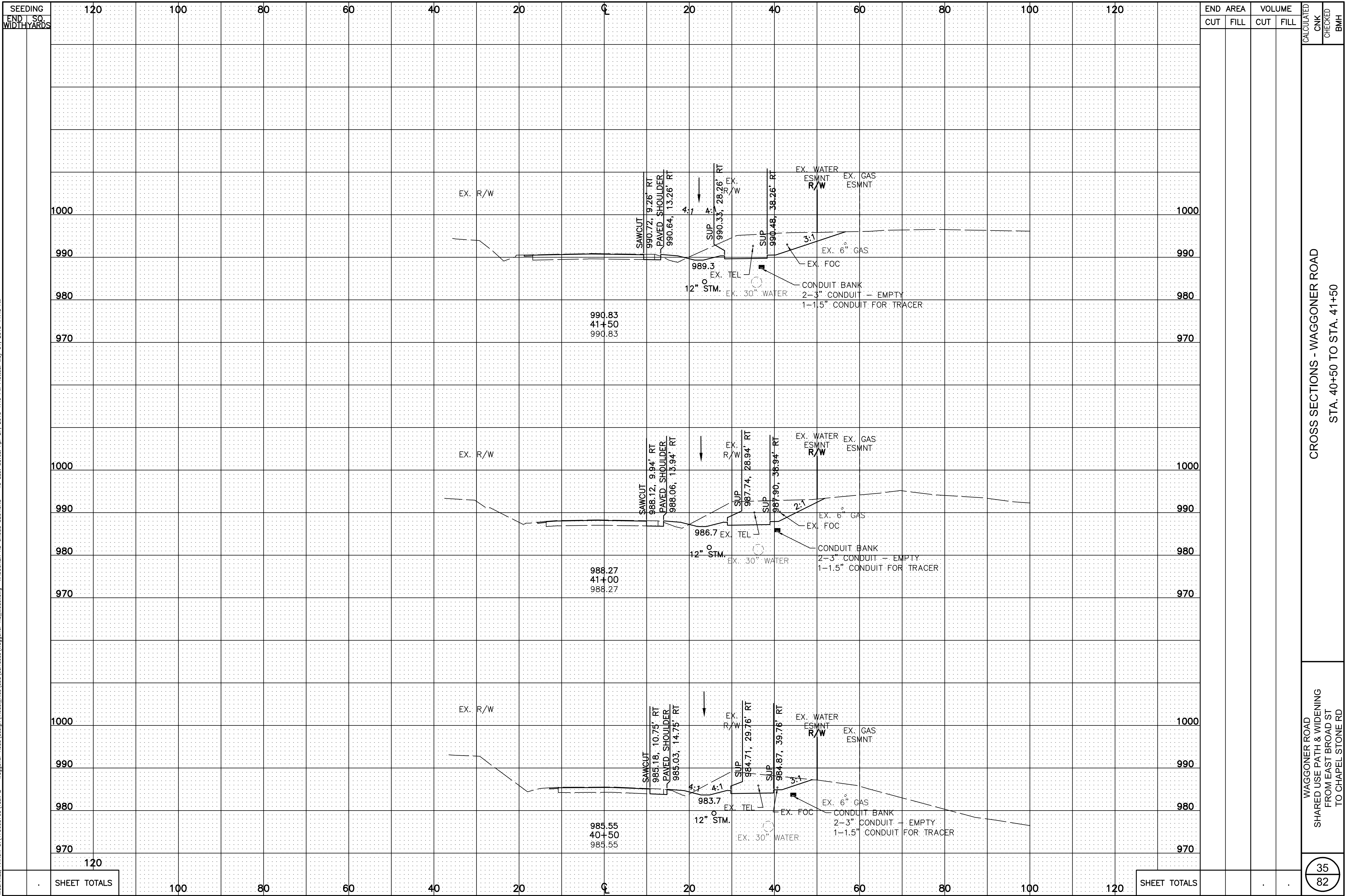
CROSS SECTIONS - WAGONER ROAD
STA. 37+50 TO STA. 38+50

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD



WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

McDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 13 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:48 AM



CROSS SECTIONS - WAGGONER ROAD

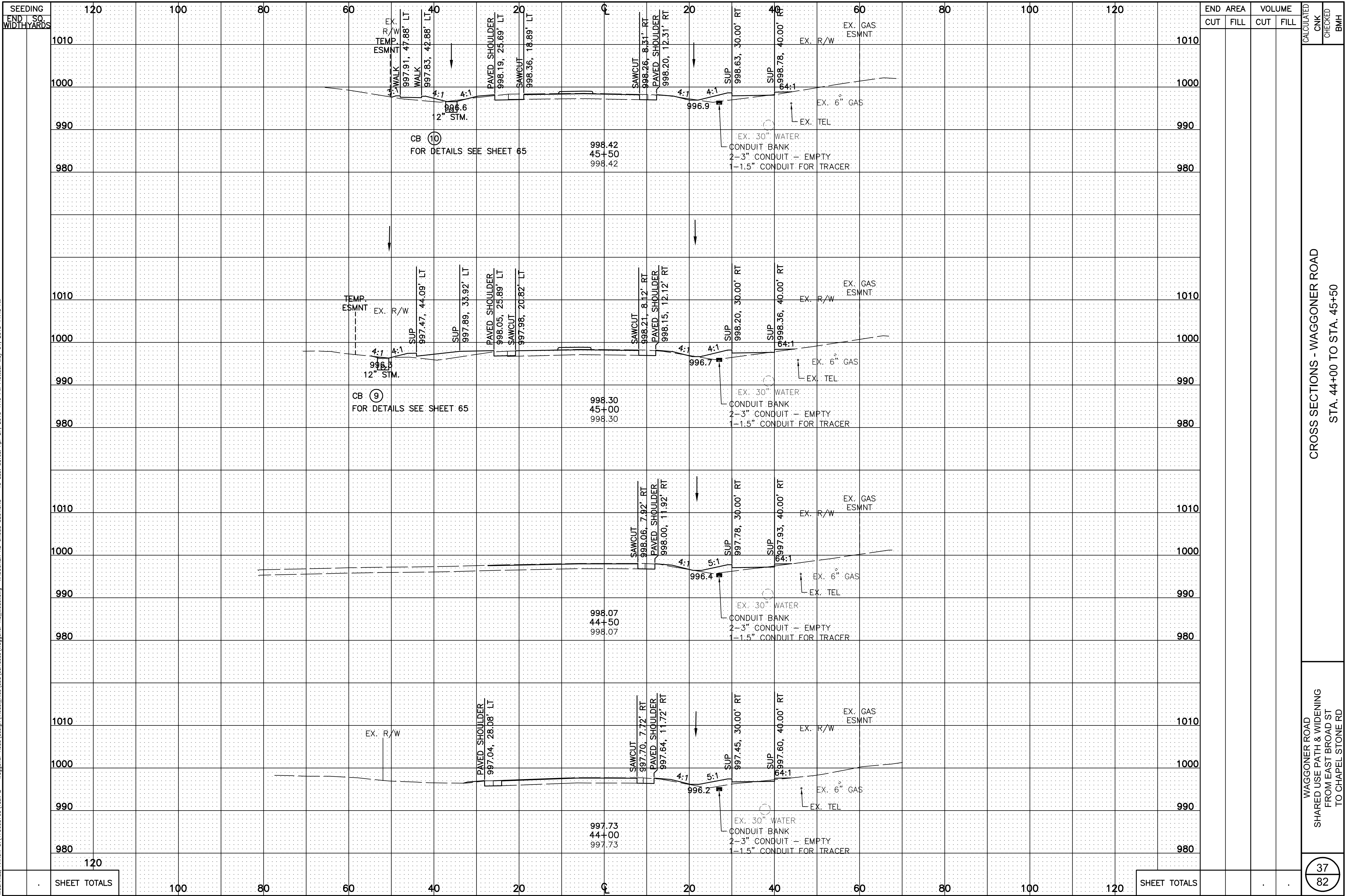
STA. 40+50 TO STA. 41+50

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

CROSS SECTIONS - WAGONER ROAD
STA. 42+00 TO STA. 43+50

WAGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

MC DANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 15 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:48 AM



CROSS SECTIONS - WAGGONER ROAD
STA. 44+00 TO STA. 45+50

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

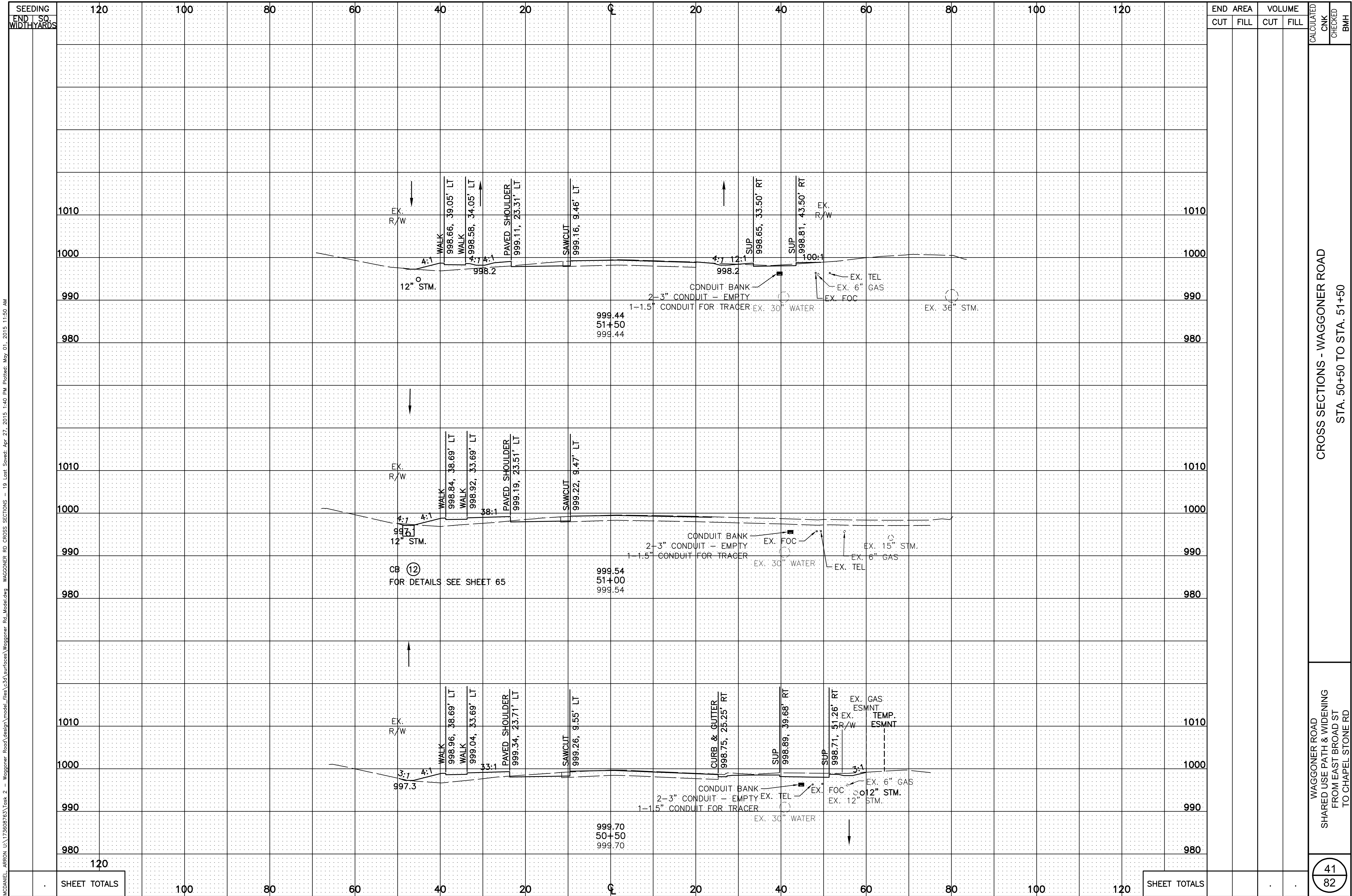
38 82	WAGGONER ROAD SHARED USE PATH & WIDENING FROM EAST BROAD ST TO CHAPEL STONE RD	CROSS SECTIONS - WAGGONER ROAD STA. 46+00 TO STA. 47+00	CALCULATED CNK CHECKED BMH
--	--	---	--

CROSS SECTIONS - WAGGONER ROAD
STA. 47+50 TO STA. 48+50

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

40
82

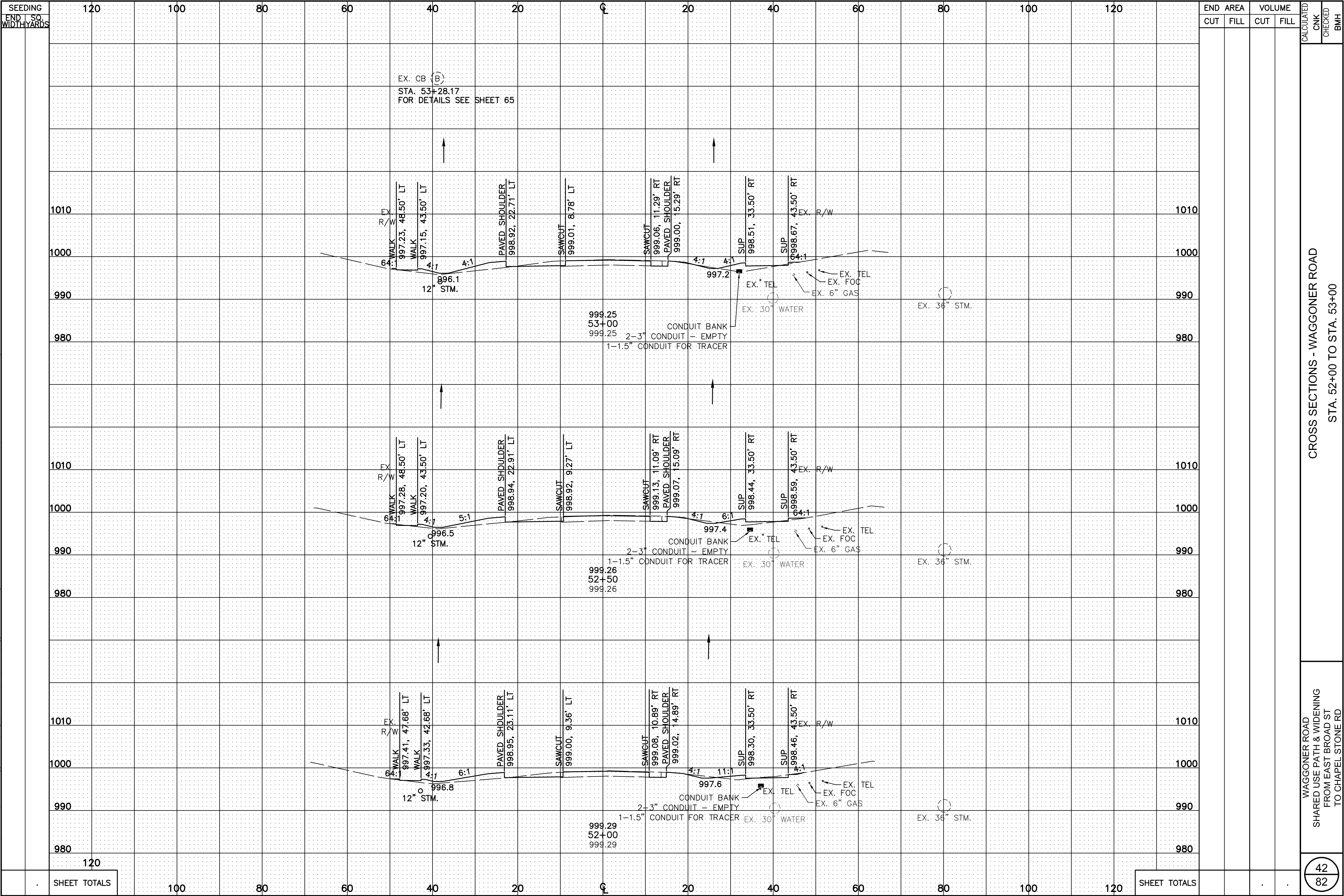
MC DANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 19 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:50 AM



CROSS SECTIONS - WAGGONER ROAD
STA. 50+50 TO STA. 51+50

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

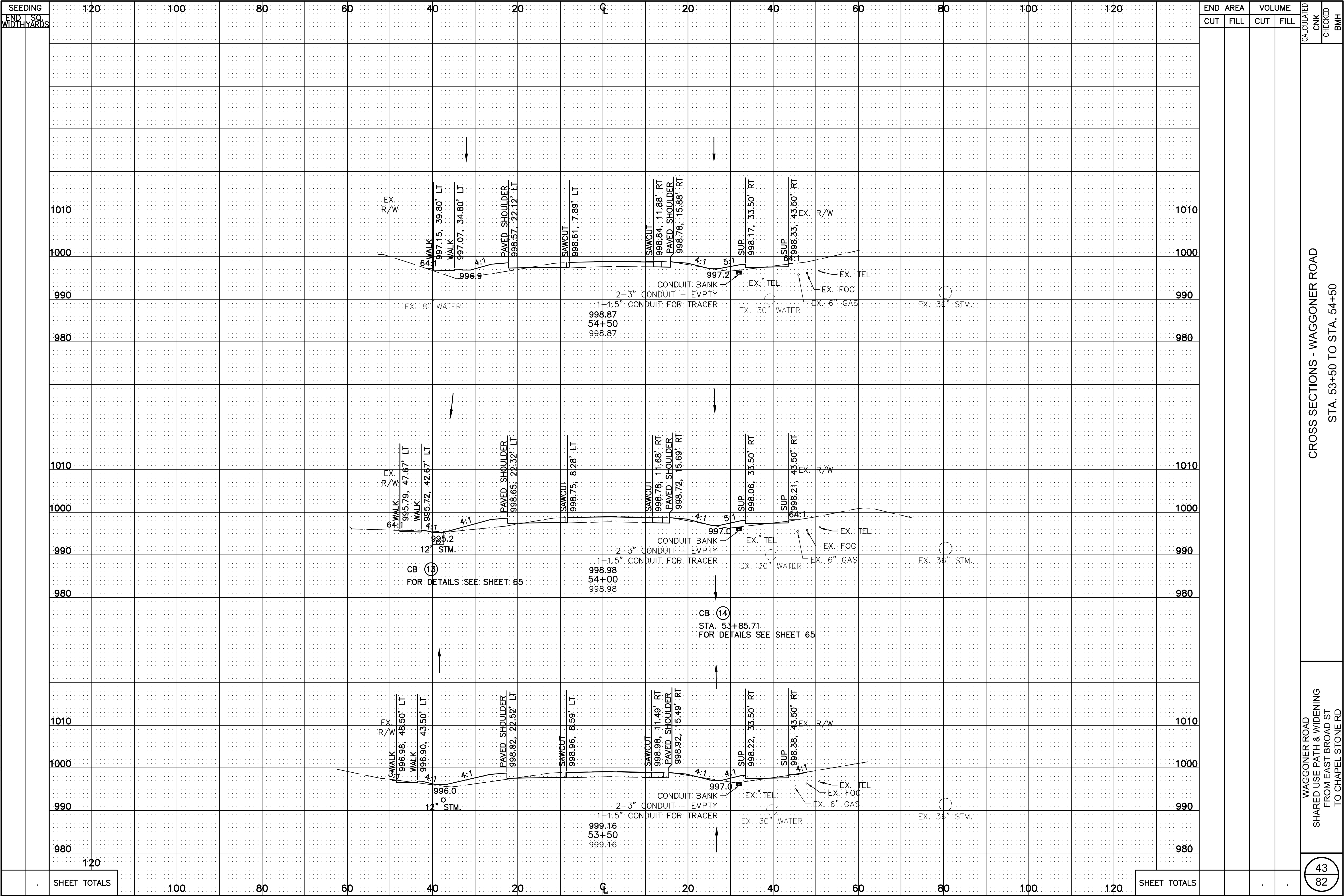
McDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 20 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:50 AM



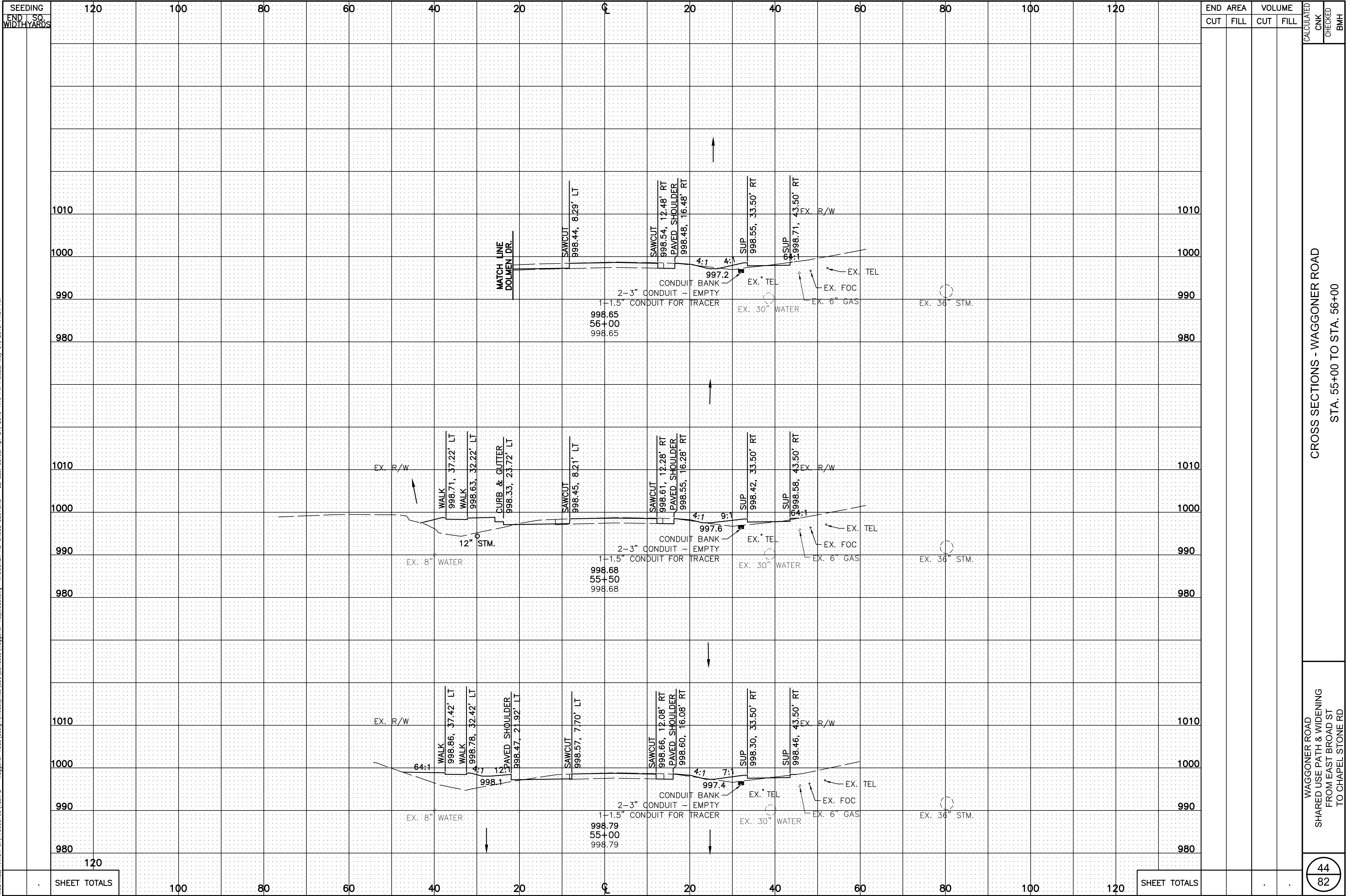
WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

CROSS SECTIONS - WAGGONER ROAD
STA. 52+00 TO STA. 53+00

McDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner_Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 21 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:50 AM



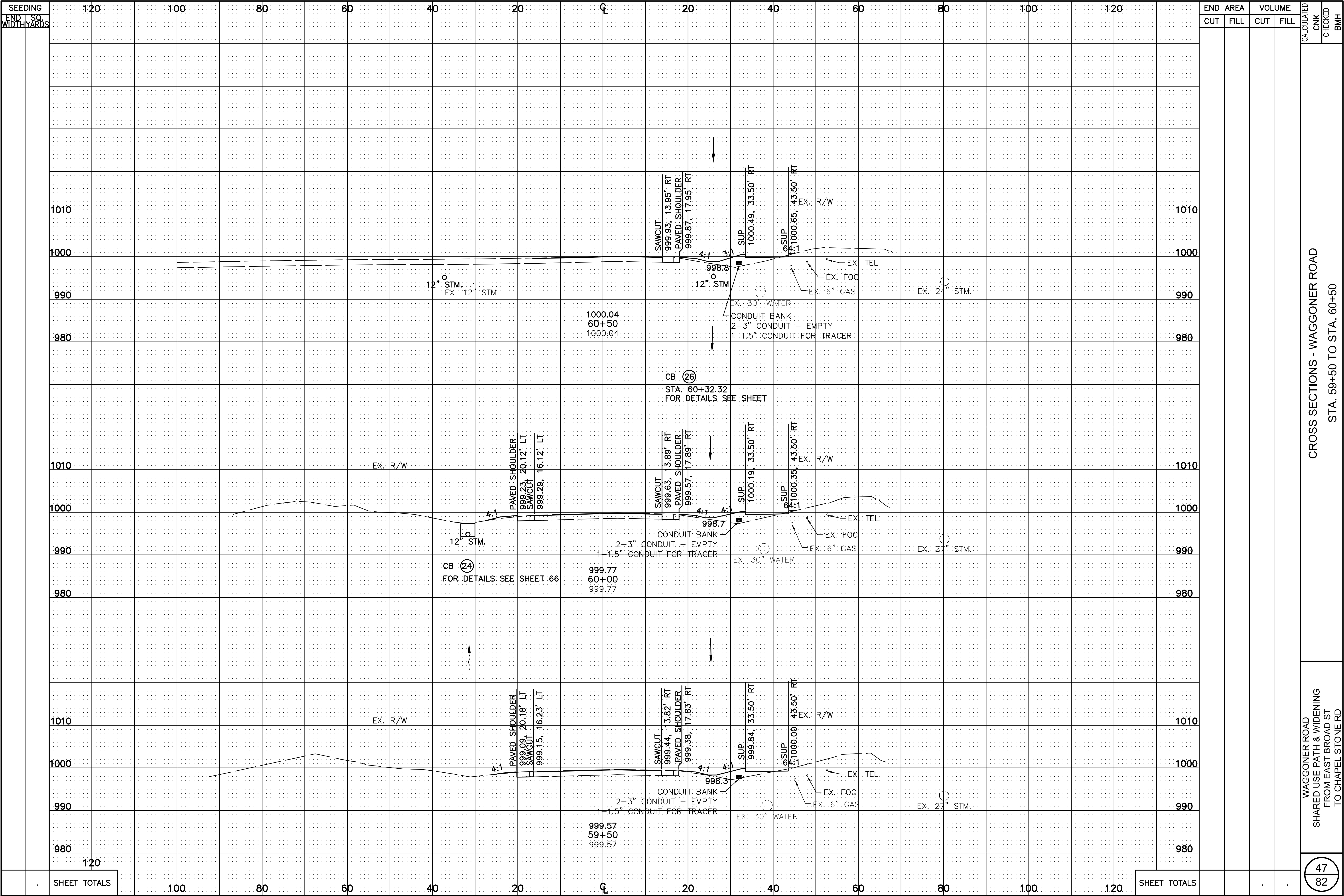
McDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 22 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:51 AM



45
82

WAGGONER ROAD SHARED USE PATH & WIDENING FROM EAST BROAD ST TO CHAPEL STONE RD	CROSS SECTIONS - WAGGONER ROAD STA. 58+00 TO STA. 59+00
---	--

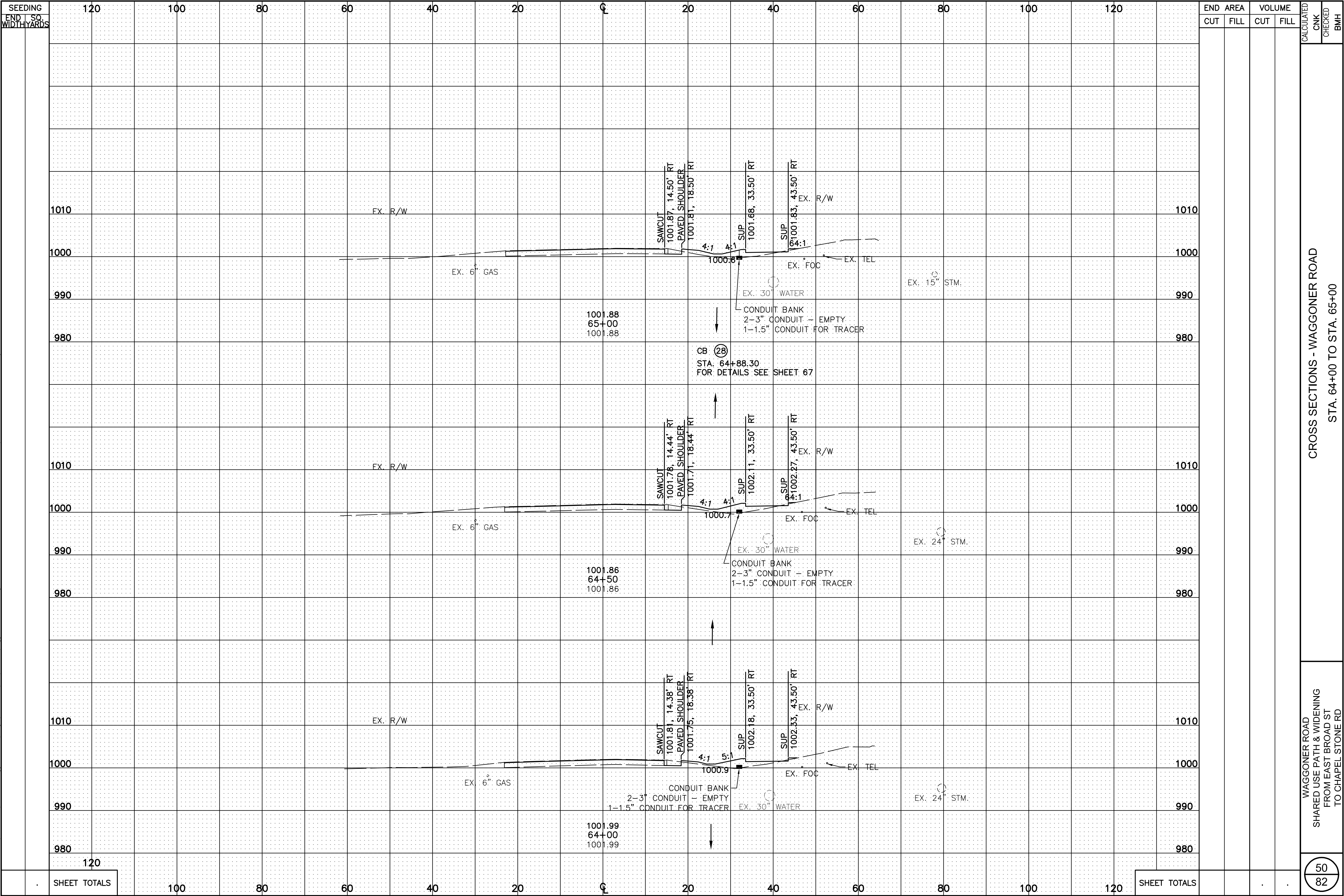
McDANIEL, ARRON U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 25 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:52 AM



	WAGGONER ROAD SHARED USE PATH & WIDENING FROM EAST BROAD ST TO CHAPEL STONE RD	CROSS SECTIONS - WAGGONER ROAD			
		STA. 61+00 TO STA. 62+00			
		CALCULATED	CNK	CHECKED	BMH

49 82	WAGGONER ROAD SHARED USE PATH & WIDENING FROM EAST BROAD ST TO CHAPEL STONE RD	CROSS SECTIONS - WAGGONER ROAD STA. 62+50 TO STA. 63+50	CALCULATED
			CNK
			CHECKED
			BMH

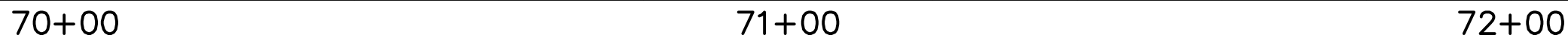
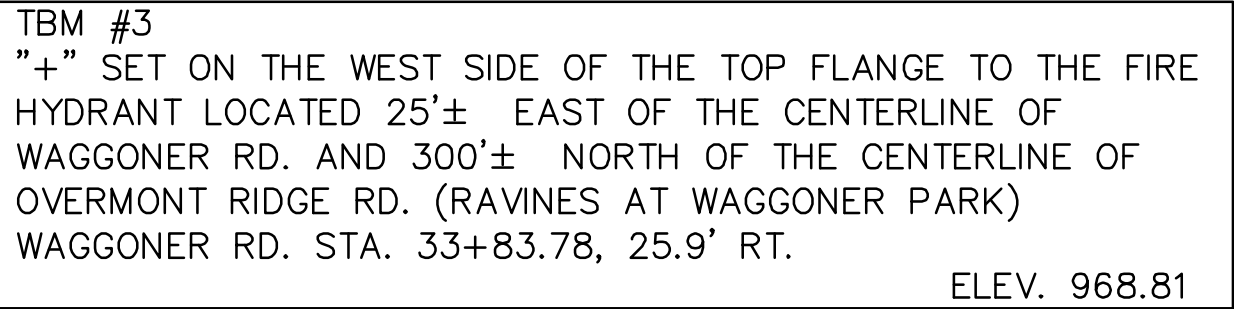
McDANIEL, ARRON_U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner_Rd_Model.dwg WAGGONER RD CROSS SECTIONS - 28 Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:53 AM



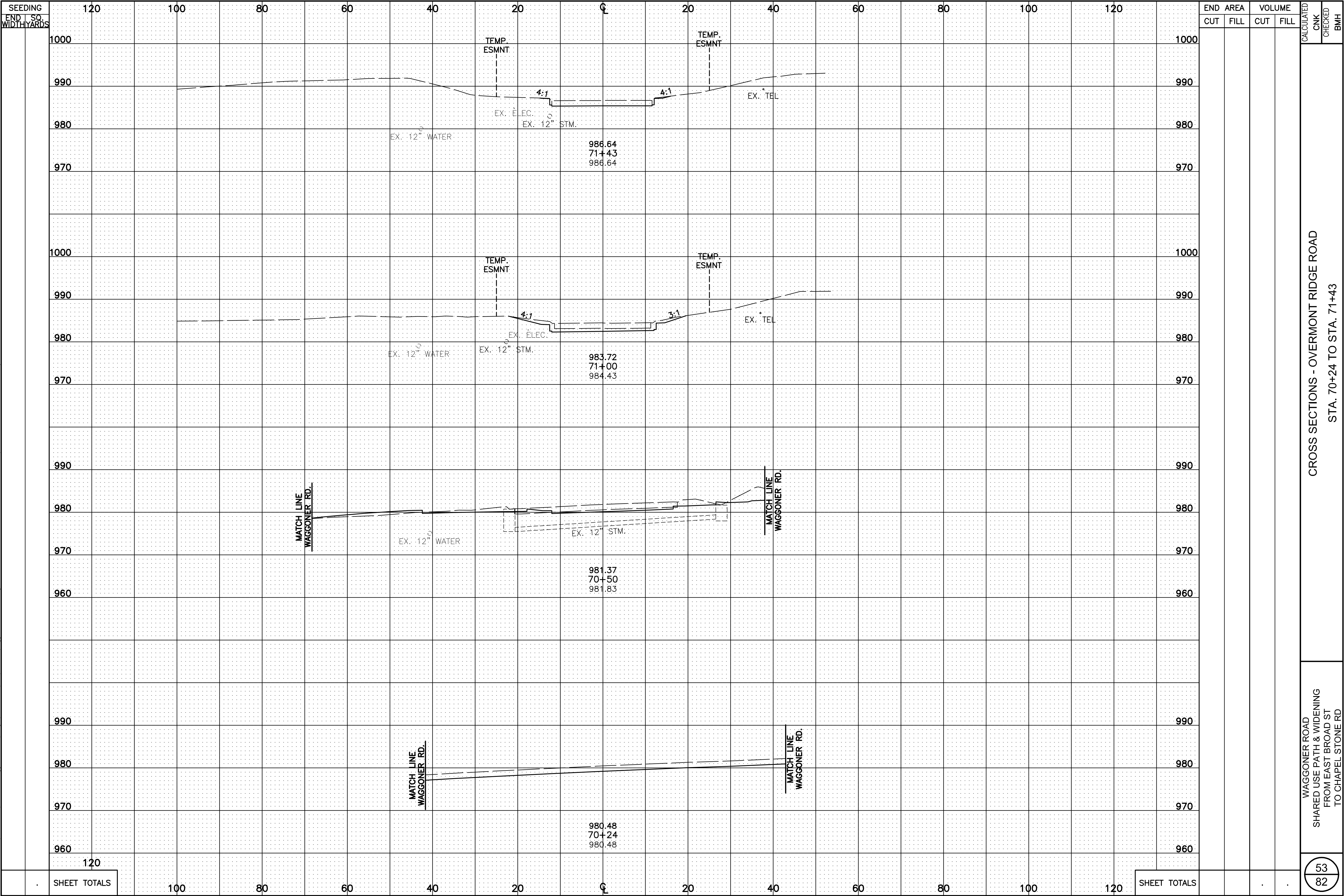
CROSS SECTIONS - WAGGONER ROAD
STA. 64+00 TO STA. 65+00

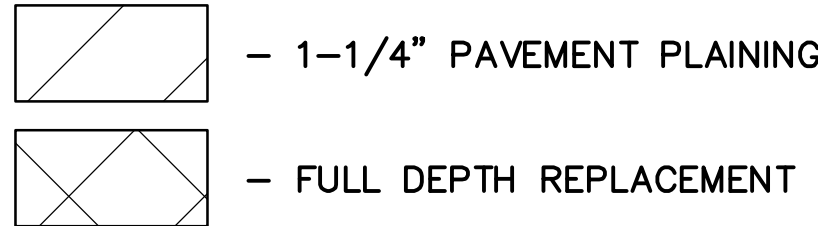
WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

51
82



McDANIEL, ARRON_U:\173608763\Task 2 - Waggoner Road\design\model_files\c3d\surfaces\Waggoner_Rd_Model.dwg OVERMONT RIDGE CROSS SECTIONS Last Saved: Apr 27, 2015 1:40 PM Plotted: May 01, 2015 11:54 AM





54 WAGGONER ROAD SHARED USE PATH & WIDENING FROM EAST BROAD ST TO CHAPEL STONE RD	PLAN & PROFILE - DOLMEN DR.	40 20 0 N SCALE IN FEET
---	--	--



\\CDANIEL-ARCON-USA\173608763\Task 2 - Waggoner Road\design\plan\173608763\01.dwg INTERSECTION & CURB RAMP DETAILS Last Saved: Apr 24, 2015 3:50 PM Plotted: May 01, 2015 11:56 AM

SHARED USE PATH
CURVE B
 $\Delta = 28^{\circ}03'05''$
 $R = 60'$
 $T = 14.99'$
 $L = 29.38'$
P.C. STA. 23+26.74, 54.50' RT.
R.P. STA. 23+26.74, 114.50' RT.
P.R.C. STA. 23+54.96, 61.55' RT.

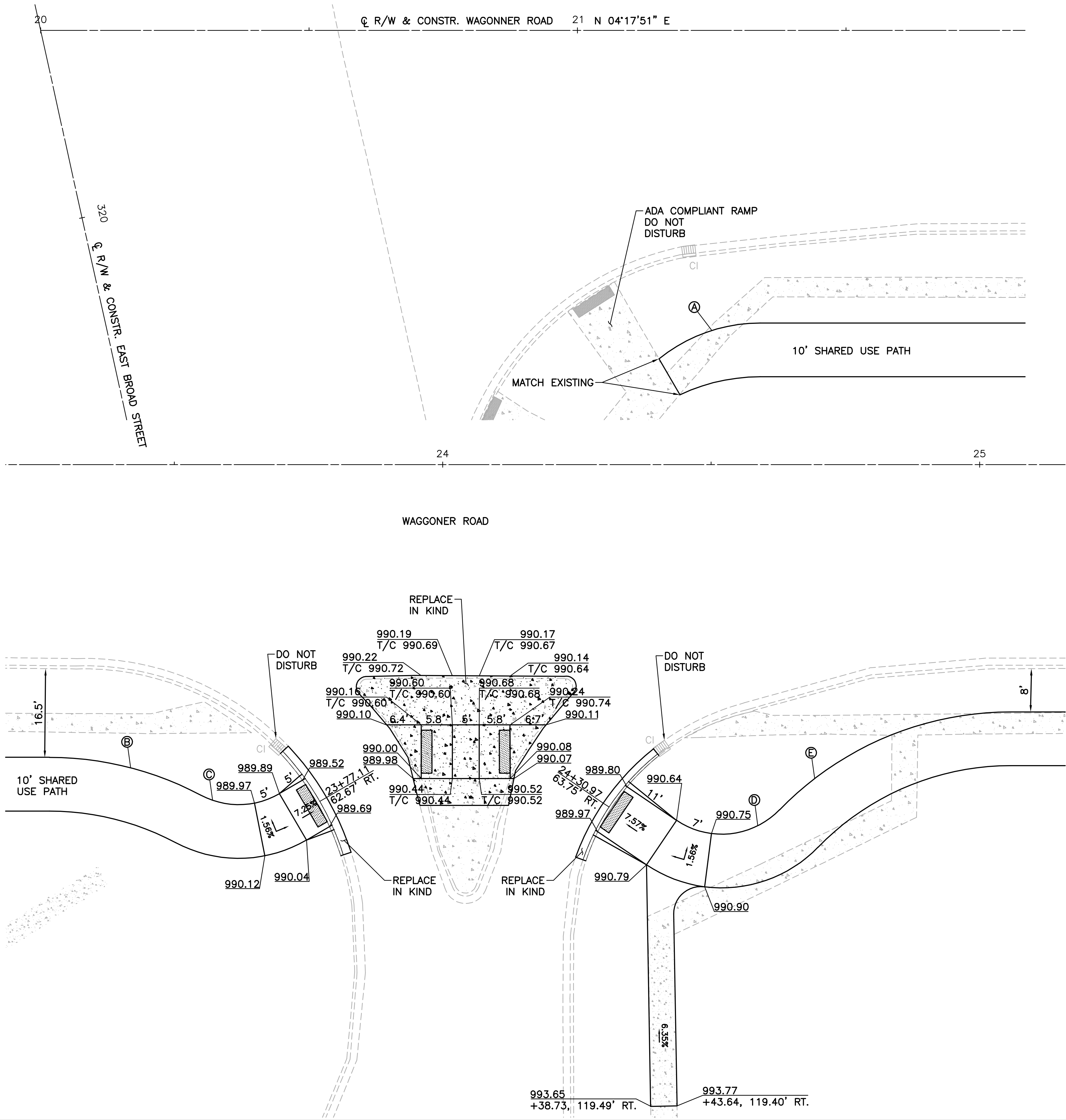
SHARED USE PATH
CURVE C
 $\Delta = 58^{\circ}20'32''$
 $R = 15'$
 $T = 8.37'$
 $L = 15.27'$
P.R.C. STA. 23+54.96, 61.55' RT.
R.P. STA. 23+62.01, 48.31' RT.
P.T. STA. 23+69.58, 61.26' RT.

SHARED USE PATH
CURVE D
 $\Delta = 80^{\circ}03'12''$
 $R = 15'$
 $T = 12.60'$
 $L = 20.96'$
P.C. STA. 24+43.56, 66.24' RT.
R.P. STA. 24+51.98, 53.83' RT.
P.R.C. STA. 24+62.75, 64.28' RT.

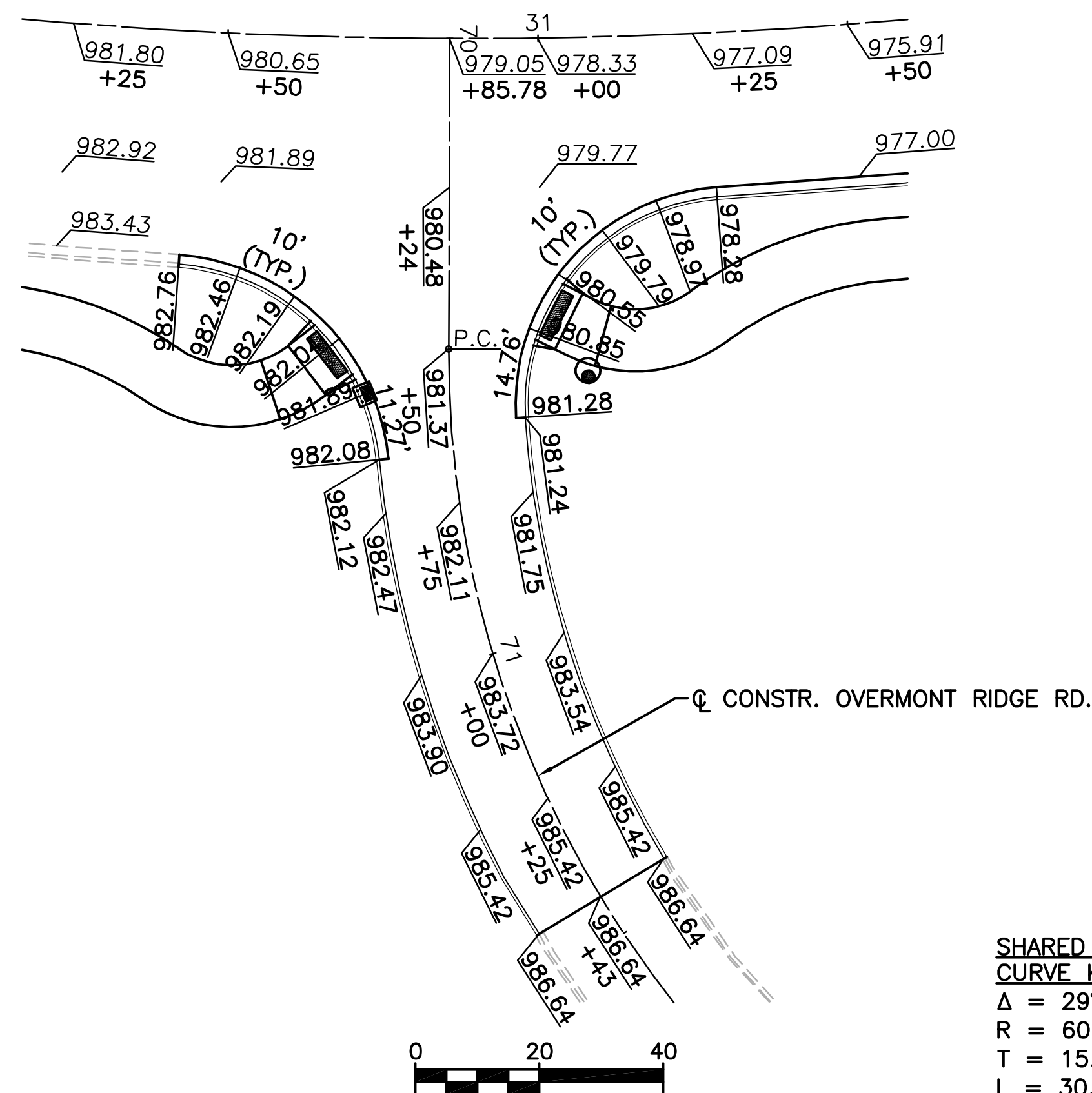
SHARED USE PATH
CURVE E
 $\Delta = 45^{\circ}51'13''$
 $R = 60'$
 $T = 25.38'$
 $L = 48.02'$
P.R.C. STA. 24+62.75, 64.28' RT.
R.P. STA. 25+05.82, 106.04' RT.
P.T. STA. 25+05.79, 46.04' RT.

— DETECTABLE WARNING, TYPE E

NOTE: ALL ELEVATIONS ARE TOP OF PAVEMENT
UNLESS OTHERWISE NOTED. TOP OF CURB
ELEVATION LABELED AS T/C.

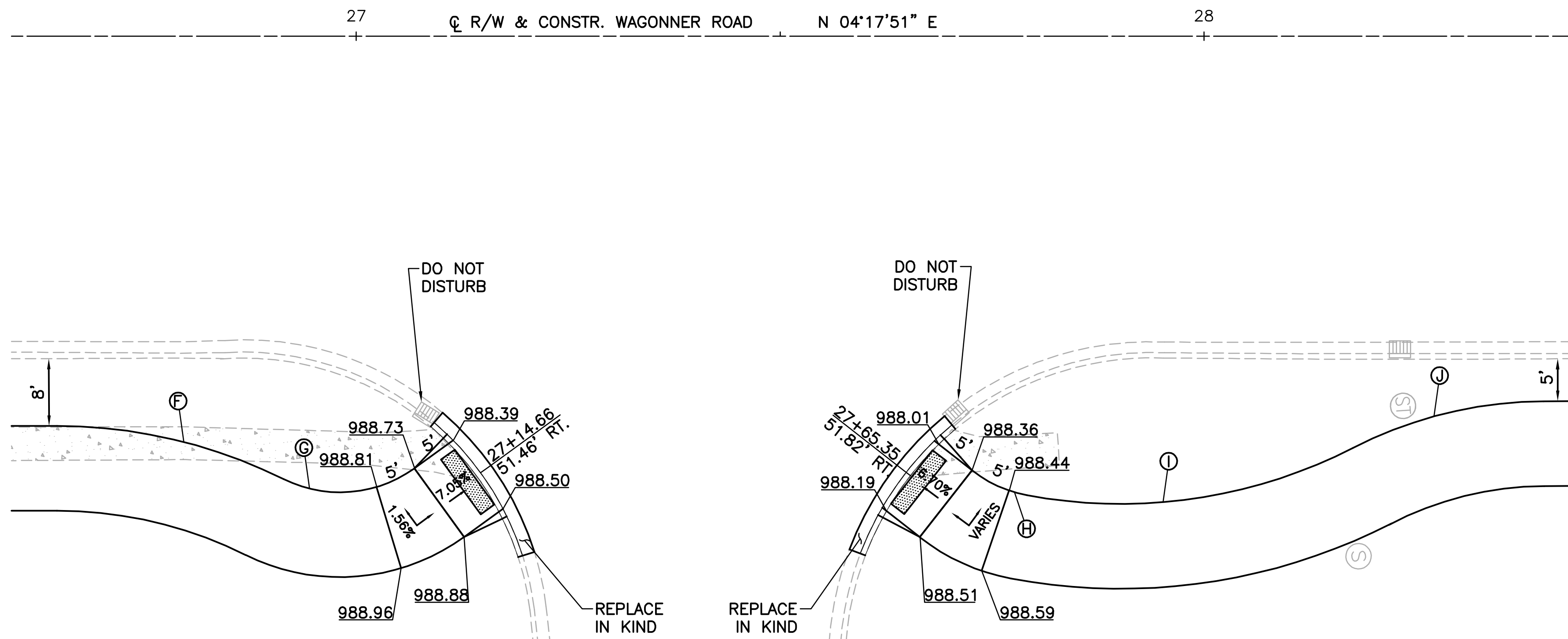


\\CDANIEL-ARCON\US\173608763\Task 2 - Waggoner Road\design\plan\waggoner\173608763\02.dwg INTERSECTION & CURB RAMP DETAILS Last Saved: Apr 24, 2015 3:49 PM Plotted: May 01, 2015 11:56 AM



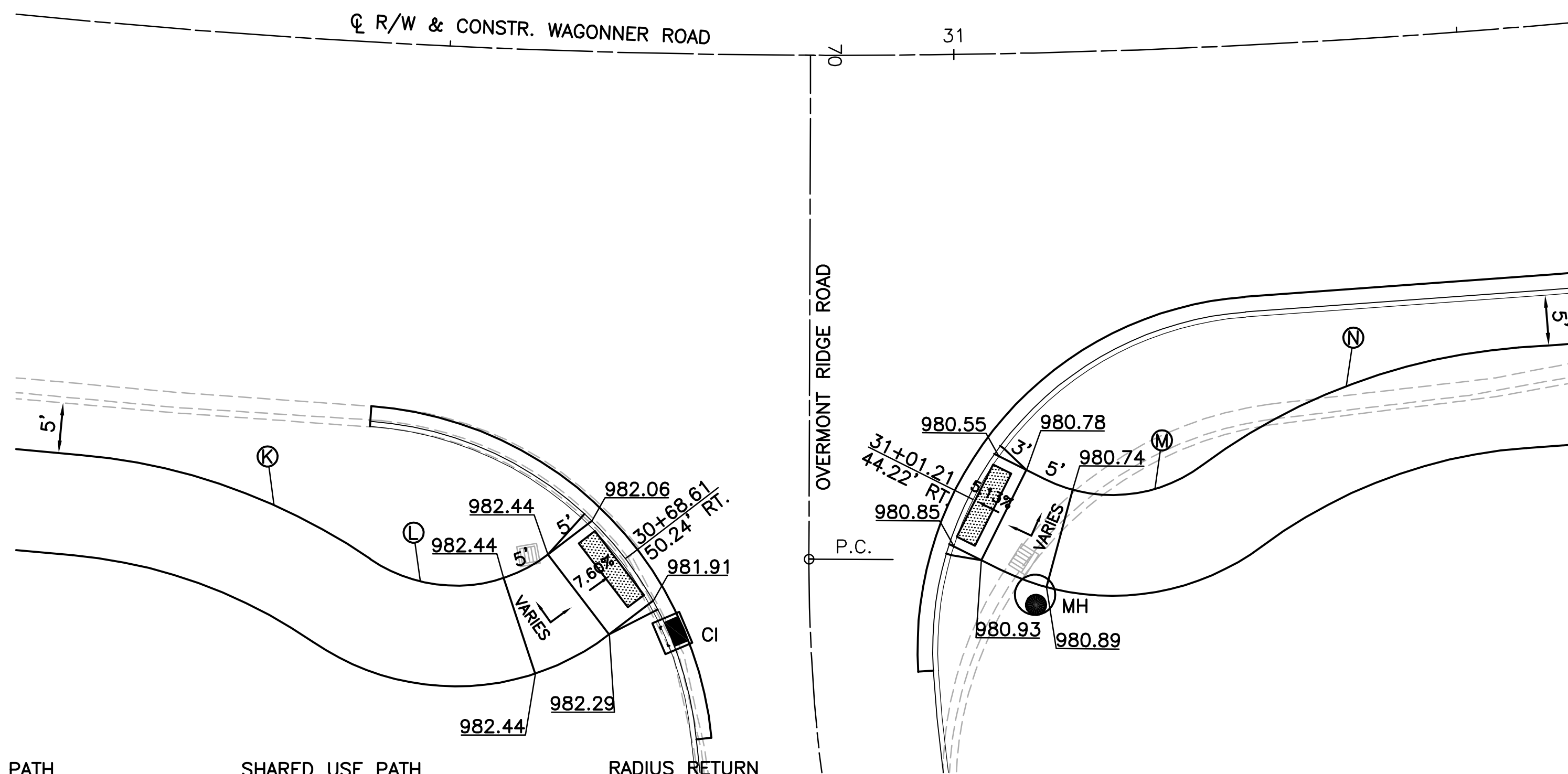
SHARED USE PATH
CURVE F
 $\Delta = 26'25'40''$
 $R = 60'$
 $T = 14.09'$
 $L = 27.68'$
P.C. STA. 26+64.70, 45.96' RT.
R.P. STA. 26+64.73, 105.96' RT.
P.R.C. STA. 26+91.40, 52.22' RT.

SHARED USE PATH
CURVE G
 $\Delta = 62'14'40''$
 $R = 15'$
 $T = 9.06'$
 $L = 16.30'$
P.R.C. STA. 26+91.40, 52.22' RT.
R.P. STA. 26+98.07, 38.78' RT.
P.T. STA. 27+06.86, 50.94' RT.



SHARED USE PATH
CURVE I
 $\Delta = 37'47'50''$
 $R = 60'$
 $T = 20.54'$
 $L = 39.58'$
P.C.C. STA. 27+79.12, 54.11' RT.
R.P. STA. 27+81.89, 39.37' RT.
P.C.C. STA. 27+79.12, 54.11' RT.

SHARED USE PATH
CURVE J
 $\Delta = 26'46'10''$
 $R = 50'$
 $T = 11.90'$
 $L = 23.36'$
P.R.C. STA. 28+17.58, 48.54' RT.
R.P. STA. 28+40.39, 93.04' RT.
P.T. STA. 28+40.07, 43.04' RT.



SHARED USE PATH
CURVE K
 $\Delta = 29'26'10''$
 $R = 60'$
 $T = 15.76'$
 $L = 30.83'$
P.C. STA. 30+17.05, 42.99' RT.
R.P. STA. 30+16.98, 102.99' RT.
P.R.C. STA. 30+44.80, 51.27' RT.

SHARED USE PATH
CURVE L
 $\Delta = 71'58'00''$
 $R = 15'$
 $T = 10.89'$
 $L = 18.84'$
P.R.C. STA. 30+44.80, 51.27' RT.
R.P. STA. 30+52.27, 38.51' RT.
P.T. STA. 30+61.36, 50.06' RT.

RADIUS RETURN
CURVE DATA AT F/C
 $\Delta = 80'28'40''$
 $R = 35'$
 $T = 29.62'$
 $L = 49.16'$
P.C. STA. 30+44.10, 37.62' RT.
R.P. STA. 30+44.15, 72.16' RT.
P.T. STA. 70+66.82, 12.00' RT.

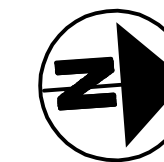
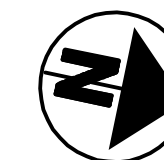
SHARED USE PATH
CURVE M
 $\Delta = 63'14'10''$
 $R = 15'$
 $T = 9.24'$
 $L = 16.56'$
P.C. STA. 31+08.00, 42.33' RT.
R.P. STA. 31+14.79, 29.11' RT.
P.R.C. STA. 31+22.94, 41.47' RT.

SHARED USE PATH
CURVE N
 $\Delta = 32'27'50''$
 $R = 60'$
 $T = 17.47'$
 $L = 34.00'$
P.R.C. STA. 31+22.94, 41.47' RT.
R.P. STA. 31+53.29, 91.71' RT.
P.T. STA. 31+53.66, 31.71' RT.

RADIUS RETURN
CURVE DATA AT F/C
 $\Delta = 89'39'00''$
 $R = 33.5'$
 $T = 33.30'$
 $L = 52.42'$
P.C. STA. 70+61.94, 12.00' LT.
R.P. STA. 70+61.94, 45.50' LT.
P.T. STA. 31+27.71, 26.45' RT.

— DETECTABLE WARNING, TYPE E

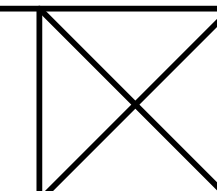
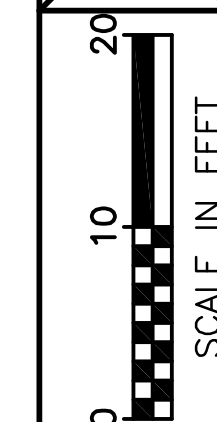
NOTE: ALL ELEVATIONS ARE TOP OF
PAVEMENT UNLESS OTHERWISE NOTED. TOP
OF CURB ELEVATION LABELED AS T/C.



WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

INTERSECTION & CURB RAMP DETAILS

CALCULATED
CNK
CHECKED
TJS



3123-E

57
82

MEDIAN
CURVE U

$\Delta = 16^{\circ}25'35''$
 $R = 100'$
 $T = 14.43'$
 $L = 28.67'$

P.C. STA. 45+30.04, 10.77' LT.
R.P. STA. 45+29.65, 89.23' RT.
P.T. STA. 45+58.30, 6.57' LT.



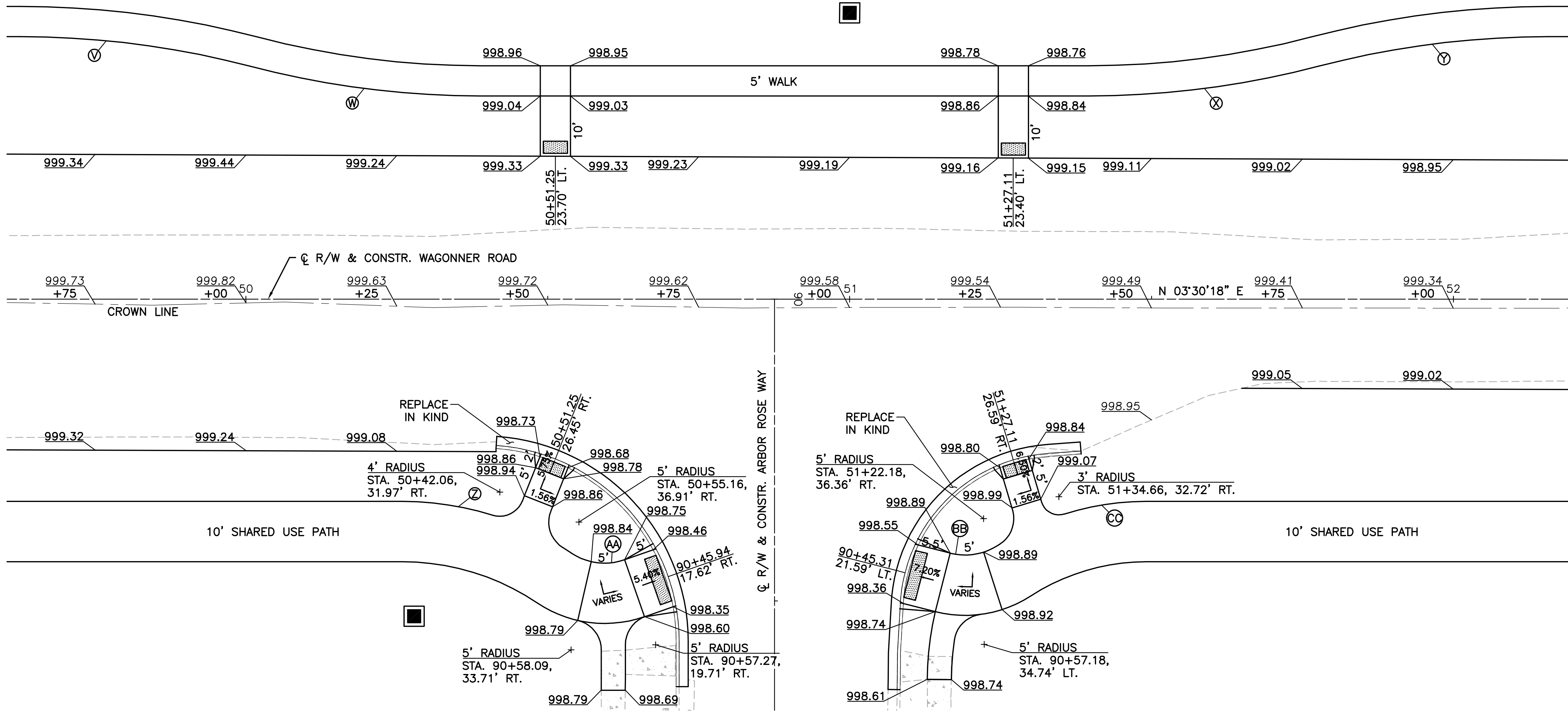
\\CDANIEL-ARCON-USA\173608763\Task 2 - Waggoner Road\design\plan\Intersect\173608763\03a.dwg INTERSECTION & CURB RAMP DETAILS Last Saved: Apr 27, 2015 12:26 PM Plotted: May 01, 2015 11:57 AM

SIDEWALK
CURVE V
 $\Delta = 14^{\circ}41'37''$
 $R = 150'$
 $T = 19.34'$
 $L = 38.47'$
P.C. STA. 49+62.65, 43.50' LT.
R.P. STA. 49+62.65, 106.5' RT.
P.R.C. STA. 50+00.70, 38.59' LT.

SIDEWALK
CURVE W
 $\Delta = 14^{\circ}41'37''$
 $R = 150'$
 $T = 19.34'$
 $L = 38.47'$
P.R.C. STA. 50+00.70, 38.59' LT.
R.P. STA. 50+38.75, 183.69' LT.
P.T. STA. 50+38.75, 33.69' LT.

SIDEWALK
CURVE X
 $\Delta = 14^{\circ}41'37''$
 $R = 150'$
 $T = 19.34'$
 $L = 38.47'$
P.C. STA. 50+39.61, 33.69' LT.
R.P. STA. 51+39.61, 183.69' LT.
P.R.C. STA. 51+77.66, 38.59' LT.

SIDEWALK
CURVE Y
 $\Delta = 14^{\circ}41'37''$
 $R = 150'$
 $T = 19.34'$
 $L = 38.47'$
P.R.C. STA. 51+77.66, 38.59' LT.
R.P. STA. 52+15.70, 106.5' RT.
P.T. STA. 52+15.70, 43.50' LT.



SHARED USE PATH
CURVE Z
 $\Delta = 33^{\circ}56'44''$
 $R = 50'$
 $T = 15.26'$
 $L = 29.62'$
P.C. STA. 50+25.93, 33.50' RT.
R.P. STA. 50+25.93, 83.50' RT.
P.R.C. STA. 50+53.85, 42.02' RT.

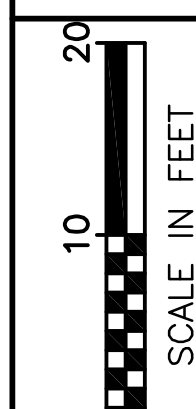
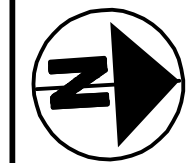
SHARED USE PATH
CURVE AA
 $\Delta = 53^{\circ}11'51''$
 $R = 10'$
 $T = 5.01'$
 $L = 9.29'$
P.R.C. STA. 50+53.85, 42.02' RT.
R.P. STA. 50+59.43, 33.73' RT.
P.T. STA. 50+62.73, 43.17' RT.

SHARED USE PATH
CURVE BB
 $\Delta = 47^{\circ}21'44''$
 $R = 10'$
 $T = 4.39'$
 $L = 8.27'$
P.C. STA. 51+16.65, 42.07' RT.
R.P. STA. 51+19.13, 32.38' RT.
P.R.C. STA. 51+24.58, 40.77' RT.

SHARED USE PATH
CURVE CC
 $\Delta = 33^{\circ}01'02''$
 $R = 45'$
 $T = 13.34'$
 $L = 25.93'$
P.R.C. STA. 51+24.58, 40.77' RT.
R.P. STA. 51+49.10, 78.50' RT.
P.T. STA. 51+49.10, 33.50' RT.

— DETECTABLE WARNING, TYPE E

NOTE: ALL ELEVATIONS ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
TOP OF CURB ELEVATION LABELED AS T/C.



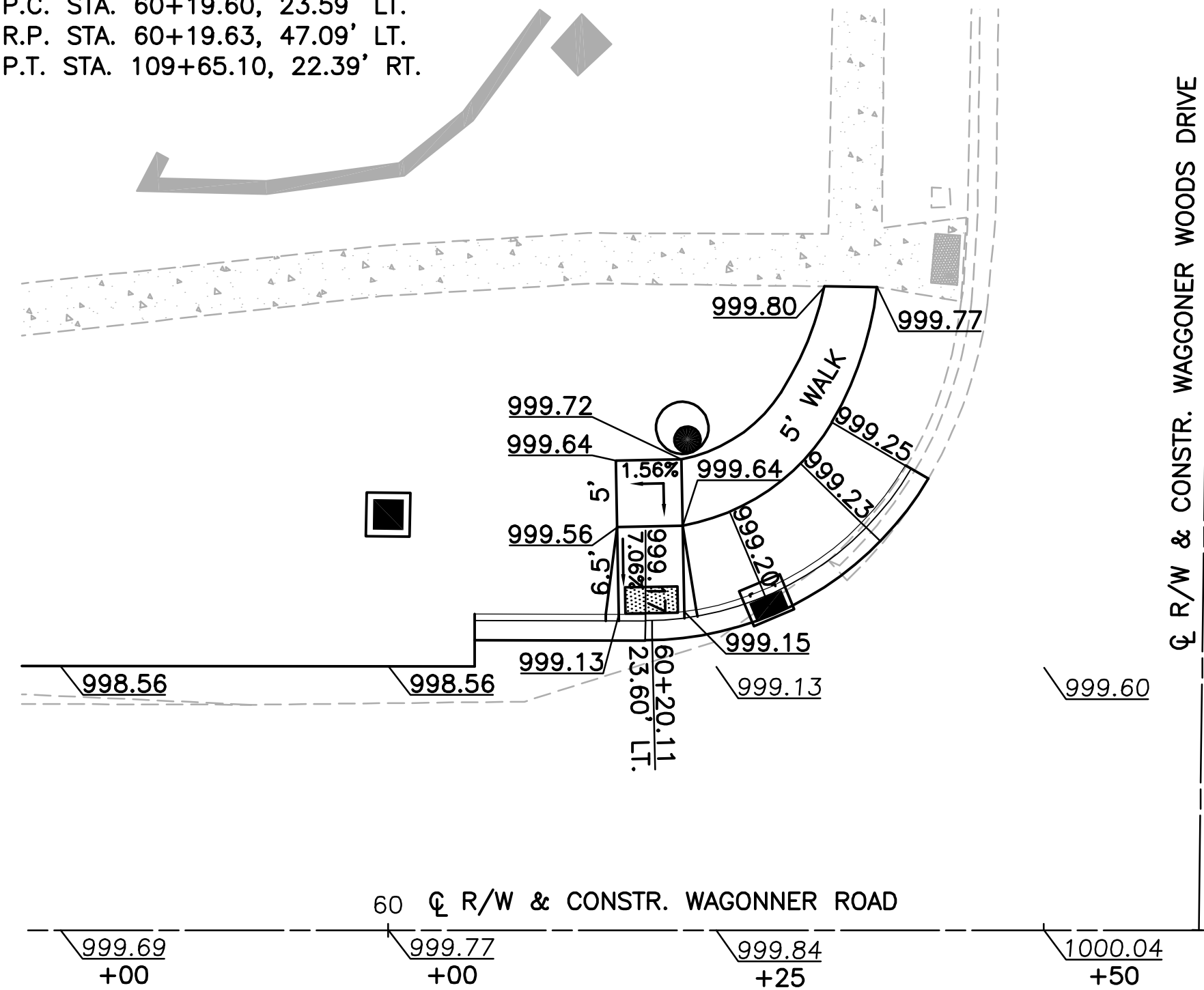
CALCULATED
CNK
CHECKED
TJS

INTERSECTION & CURB RAMP DETAILS

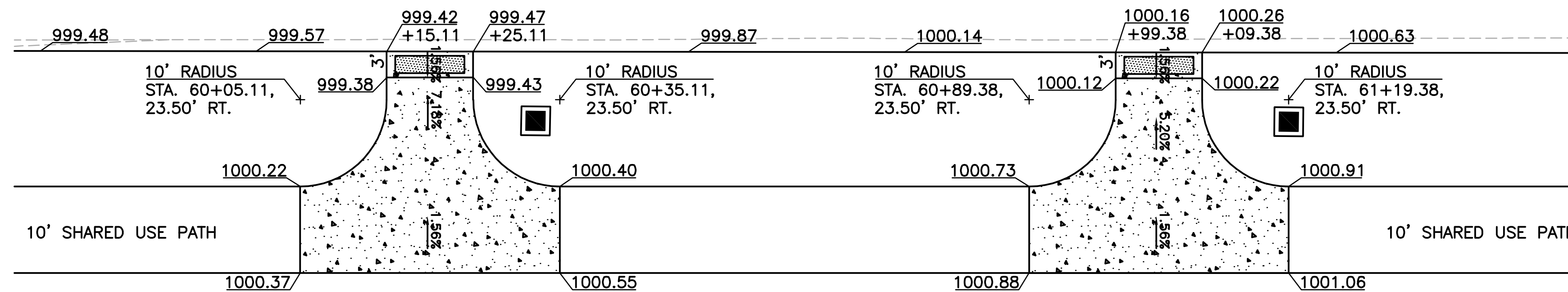
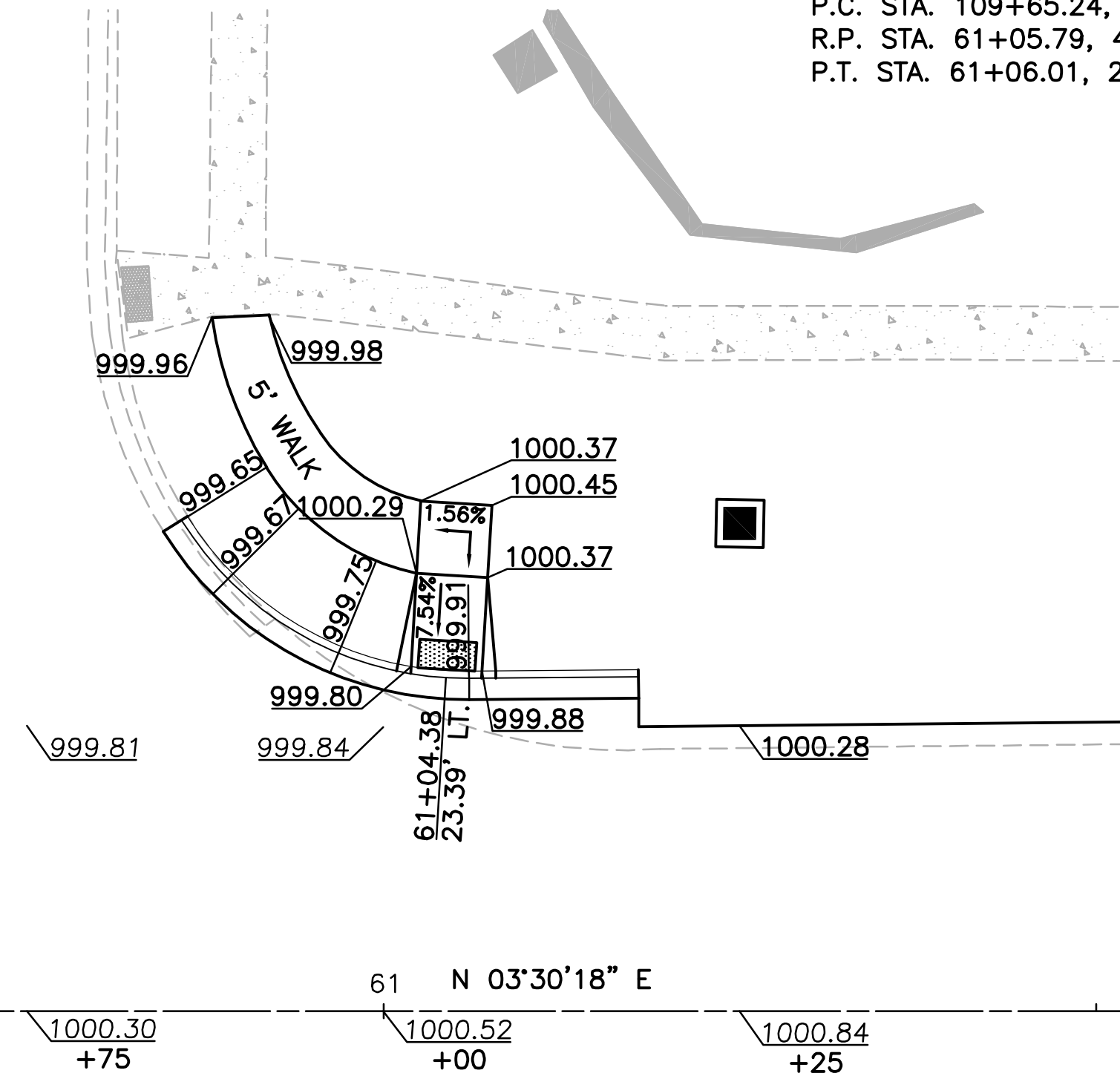
WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

\\CDANIEL-ARON\U\173608763\Task 2 - Waggoner Road\design\plan\173608763\04a.dwg INTERSECTION & CURB RAMP DETAILS Last Saved: Apr 24, 2015 3:55 PM Plotted: May 01, 2015 11:57 AM

RADIUS RETURN
CURVE DATA AT F/C
 $\Delta = 59^{\circ}38'45''$
 $R = 23.5'$
 $T = 13.47'$
 $L = 24.46'$
P.C. STA. 60+19.60, 23.59' LT.
R.P. STA. 60+19.63, 47.09' LT.
P.T. STA. 109+65.10, 22.39' RT.

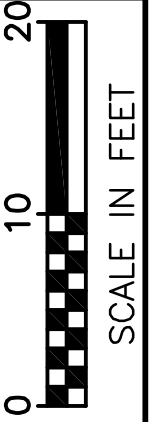
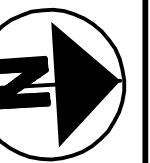


RADIUS RETURN
CURVE DATA AT F/C
 $\Delta = 58^{\circ}41'22''$
 $R = 23.5'$
 $T = 13.21'$
 $L = 24.07'$
P.C. STA. 109+65.24, 23.55' LT.
R.P. STA. 61+05.79, 46.84' LT.
P.T. STA. 61+06.01, 23.35' LT.



— DETECTABLE WARNING, TYPE E

NOTE: ALL ELEVATIONS ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
TOP OF CURB ELEVATION LABELED AS T/C.



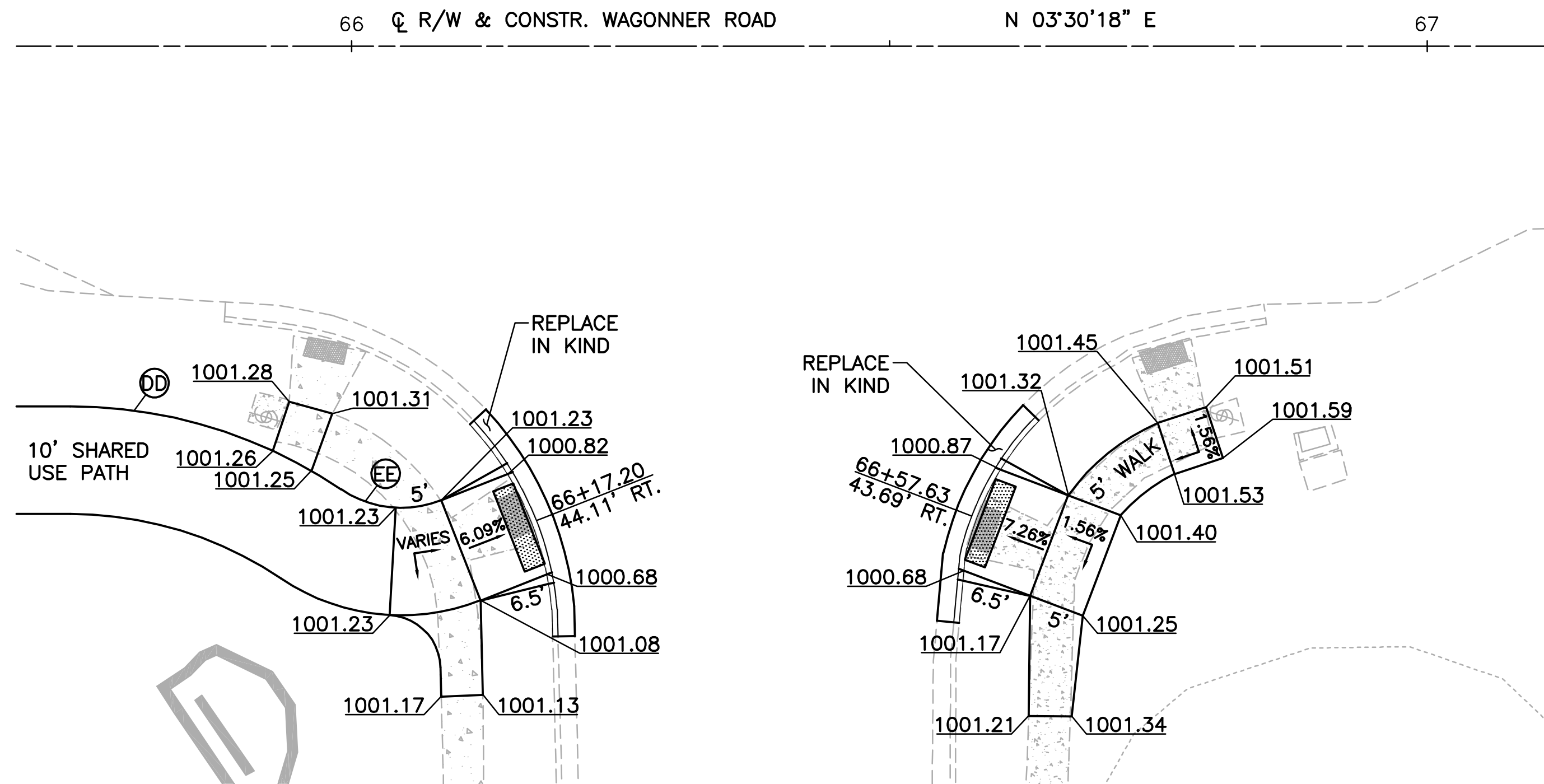
CALCULATED
CNK
CHECKED
TJS

INTERSECTION & CURB RAMP DETAILS

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

SHARED USE PATH
CURVE DD
 $\Delta = 34^{\circ}04'21''$
 $R = 45'$
 $T = 13.79'$
 $L = 26.76'$
P.C. STA. 65+73.82, 33.50' RT.
P.P. STA. 65+73.82, 78.50' RT.
P.R.C. STA. 65+99.03, 41.23' RT.

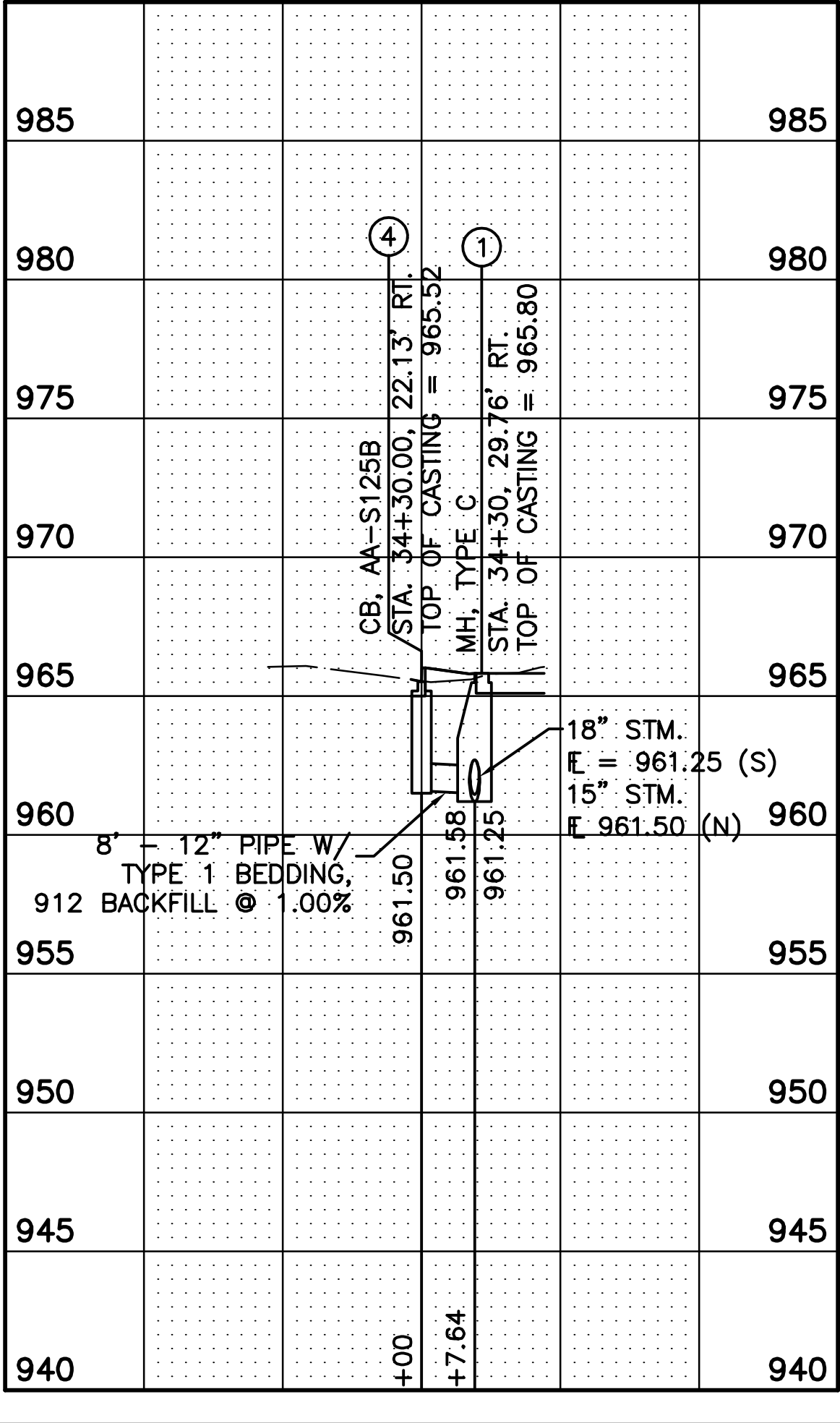
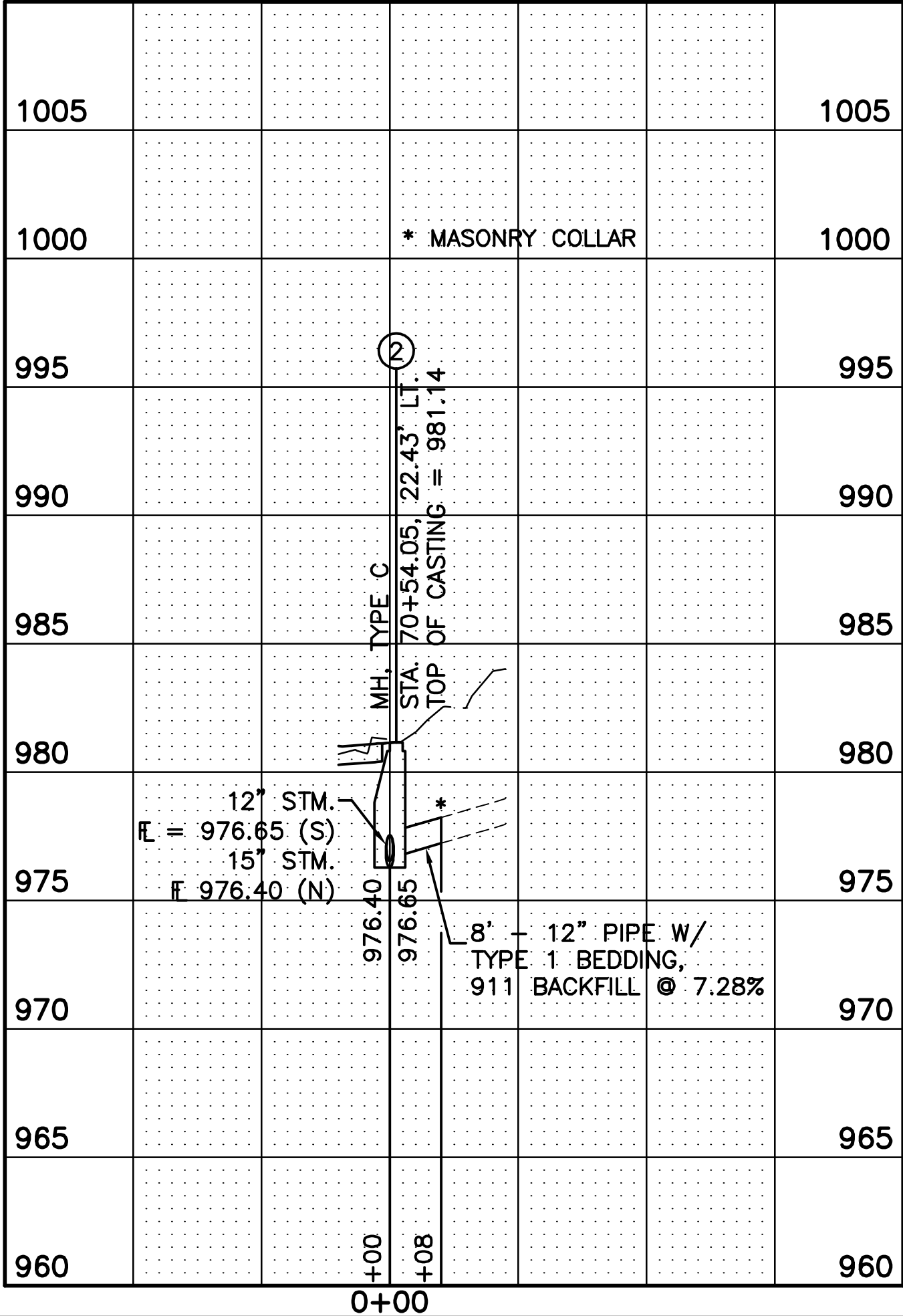
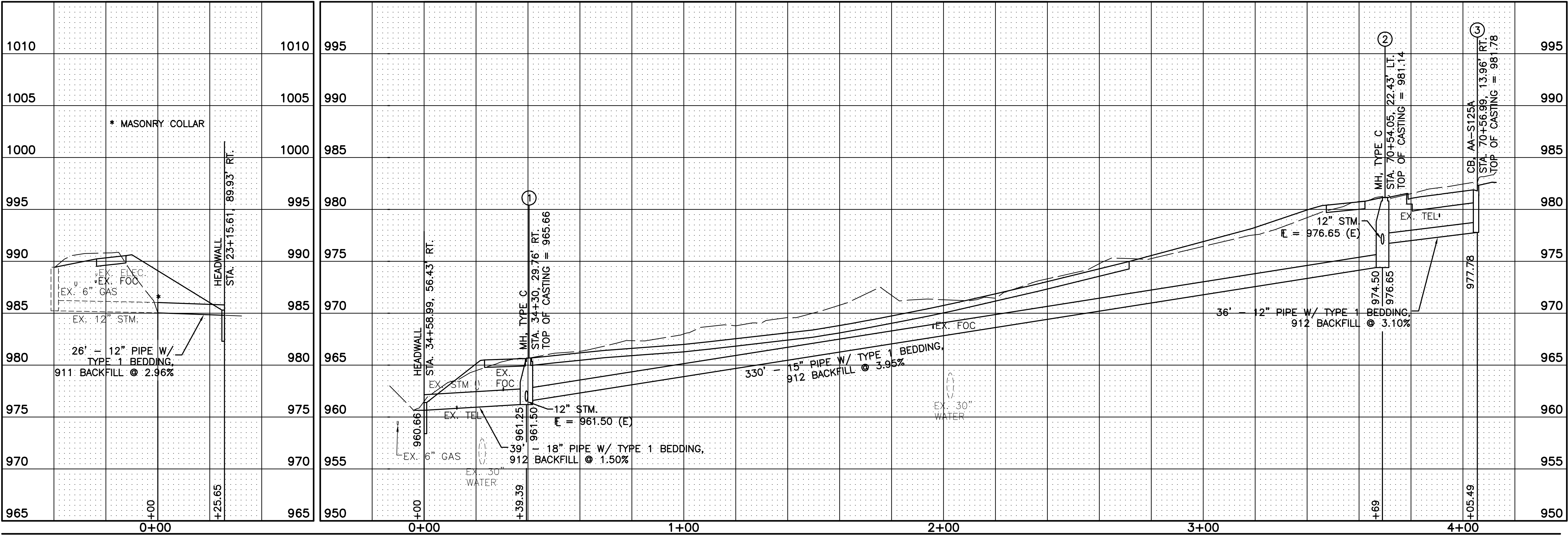
SHARED USE PATH
CURVE EE
 $\Delta = 55^{\circ}36'37''$
 $R = 10'$
 $T = 5.27'$
 $L = 9.71'$
P.R.C. STA. 65+99.03, 41.23' RT.
R.P. STA. 66+04.64, 32.94' RT.
P.T. STA. 66+08.31, 42.24' RT.



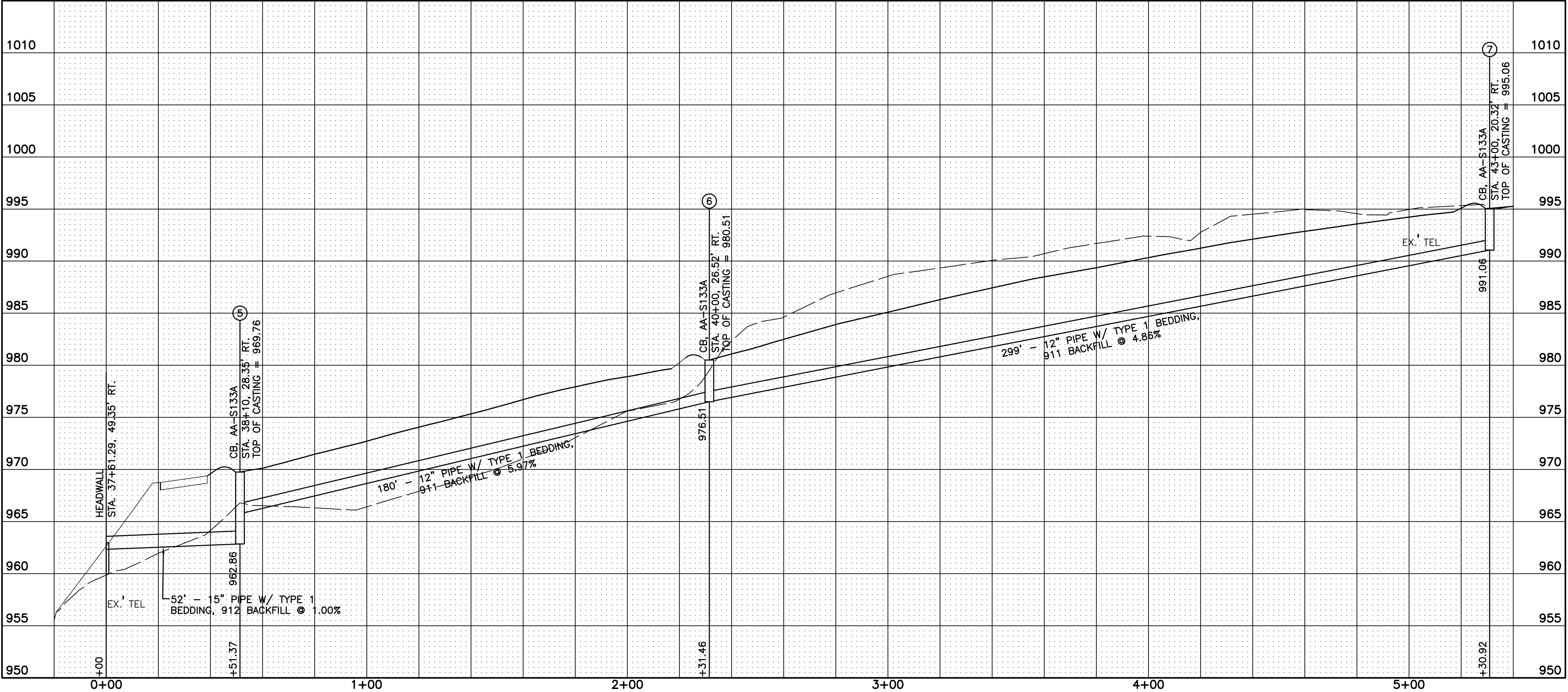
 — DETECTABLE WARNING, TYPE E

NOTE: ALL ELEVATIONS ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
TOP OF CURB ELEVATION LABELED AS T/C.

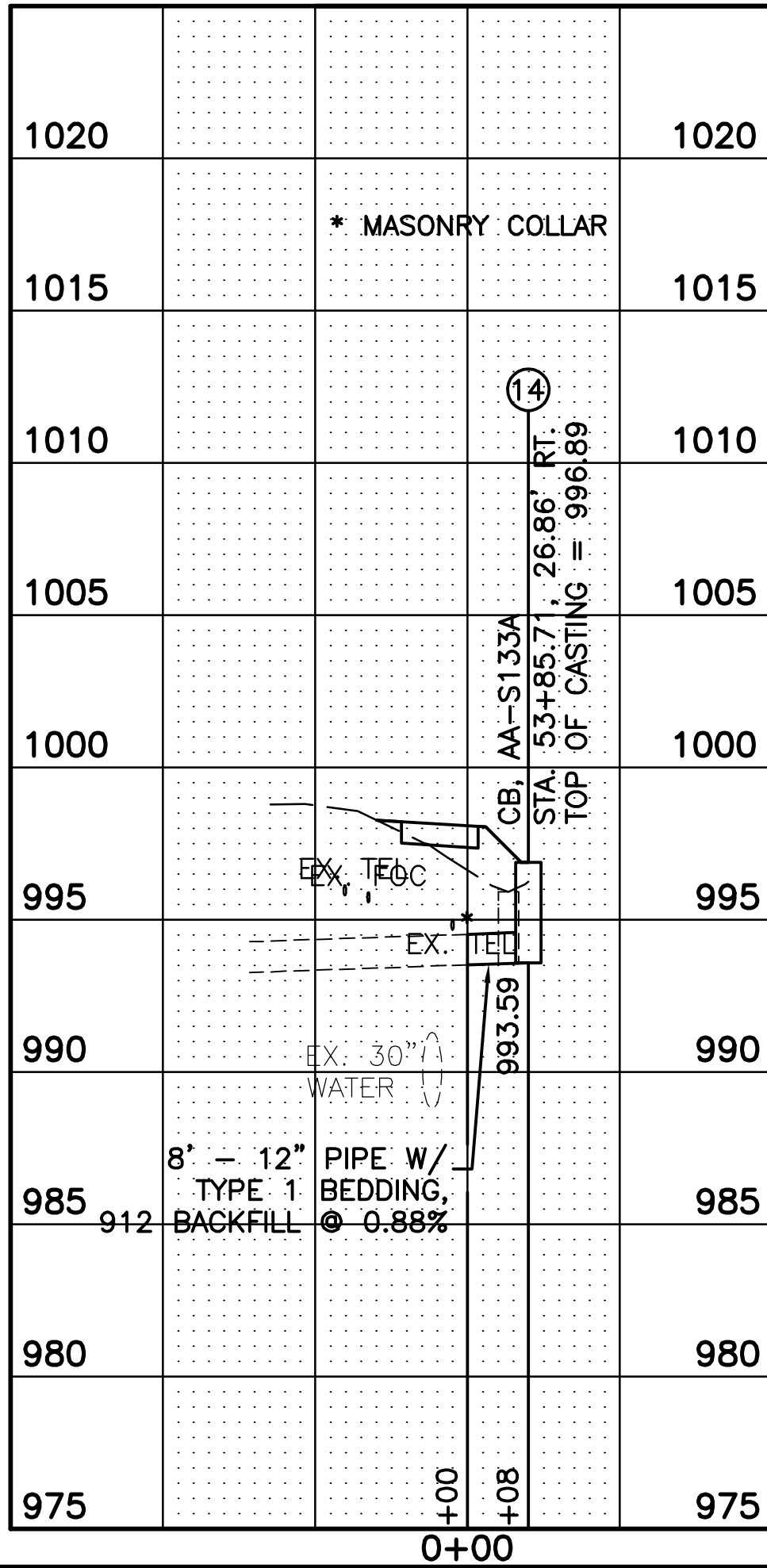
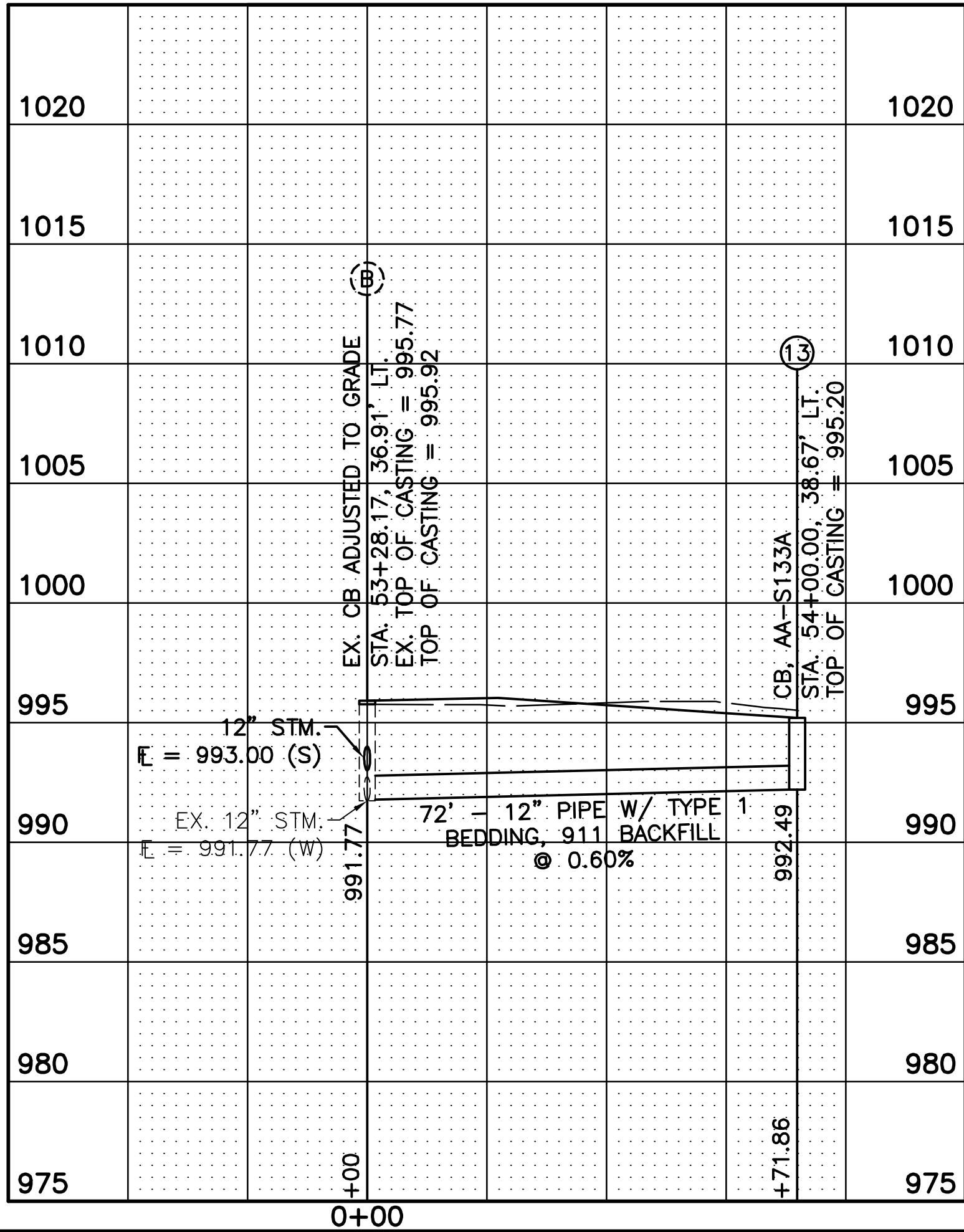
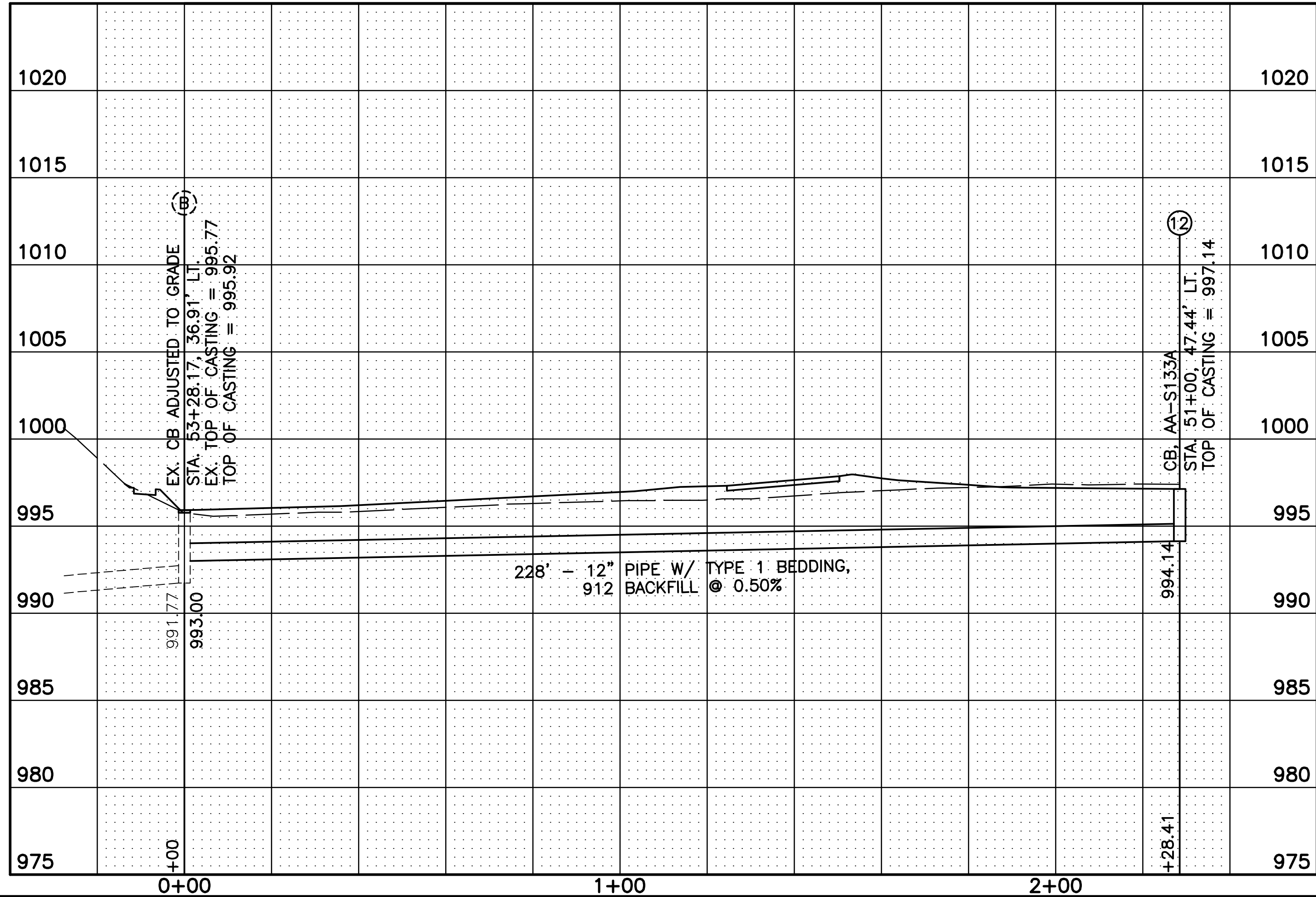
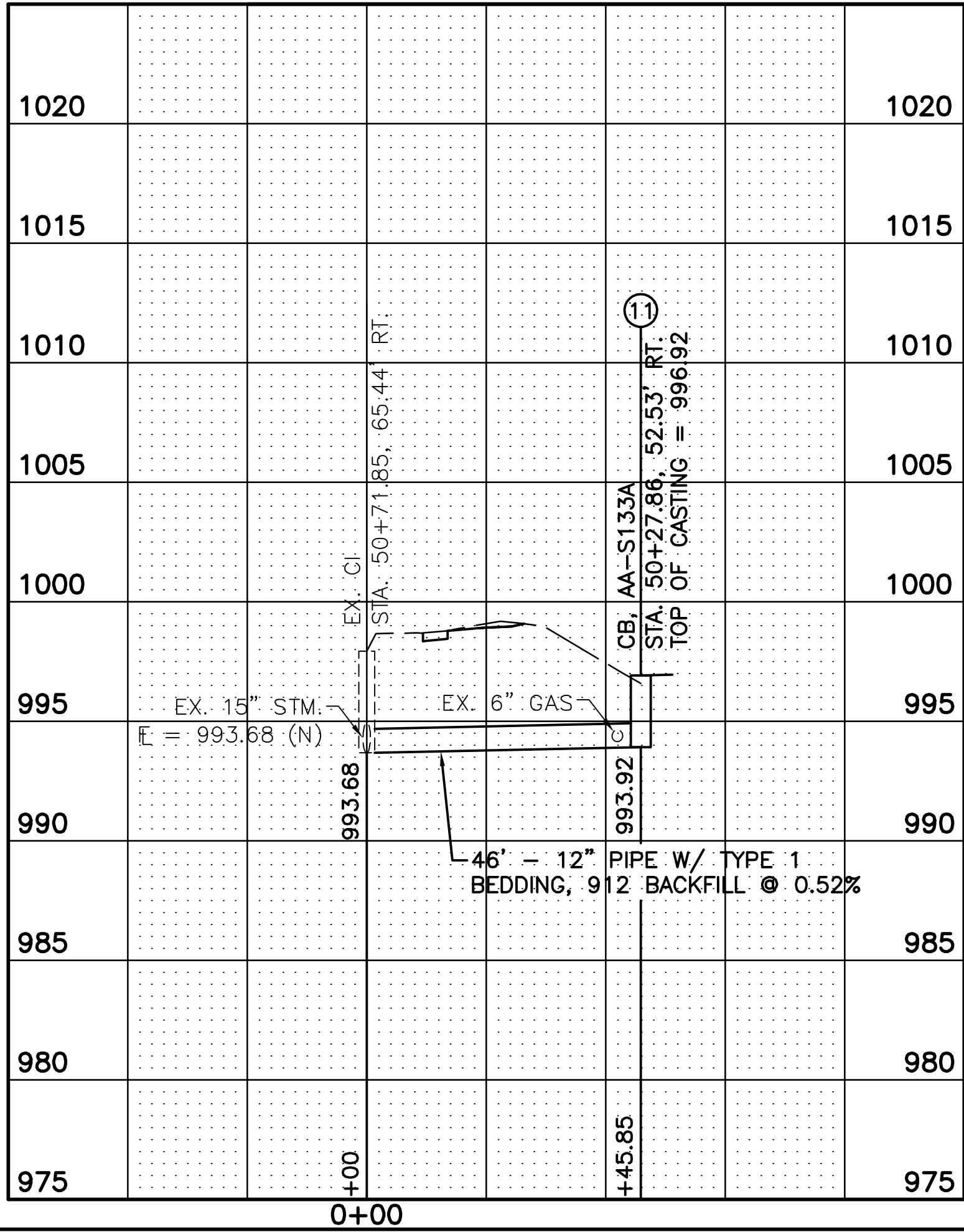
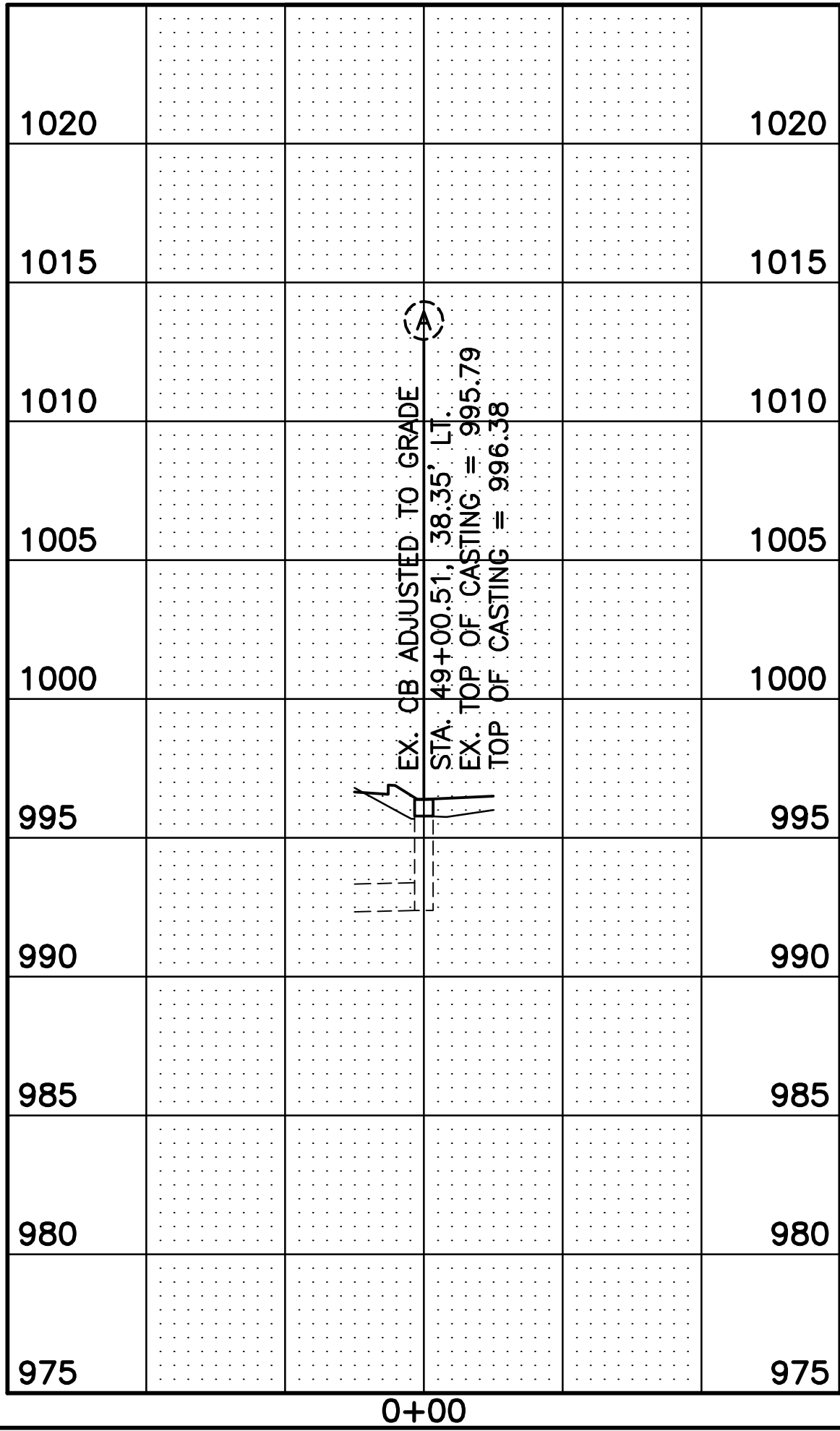
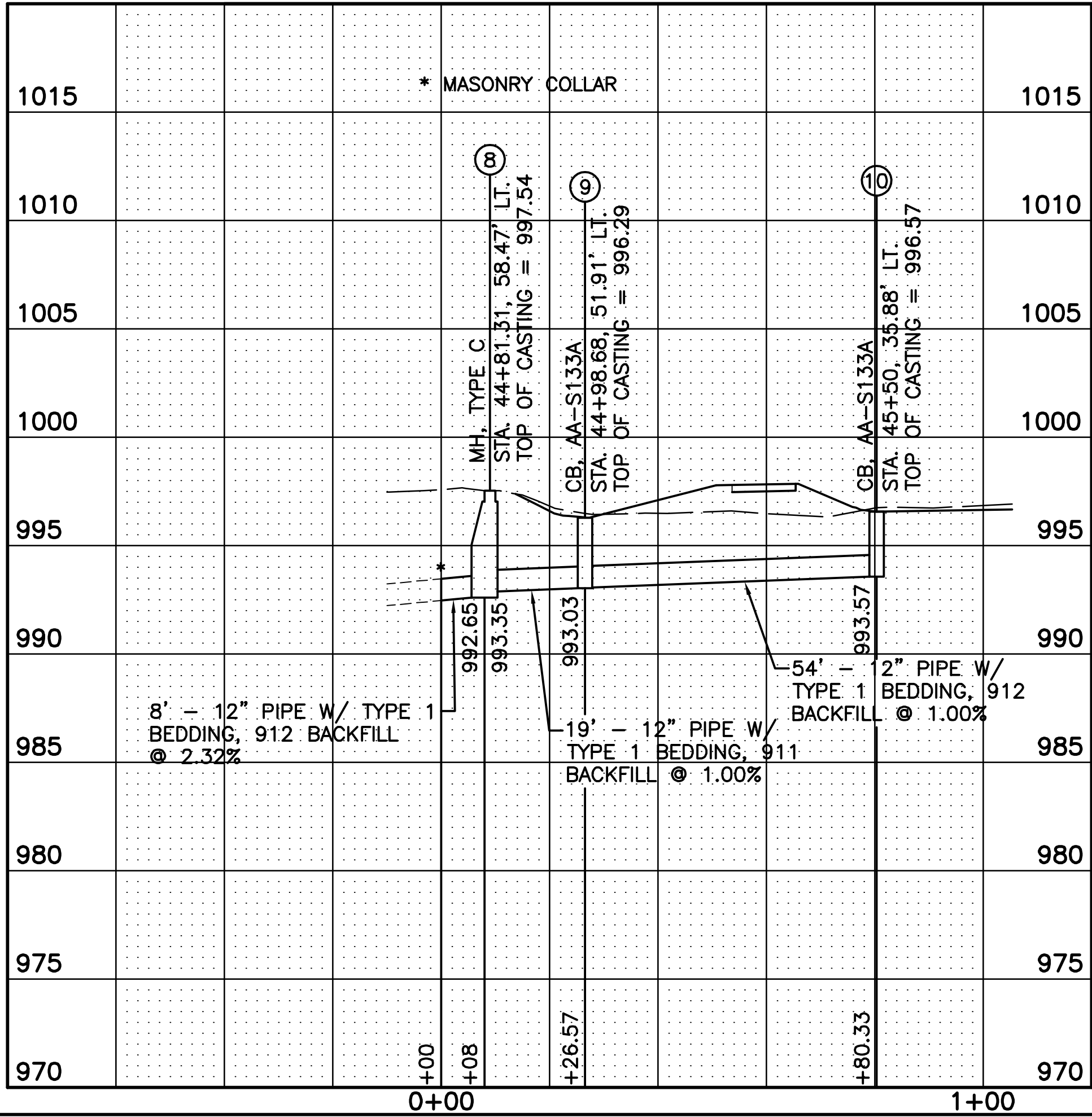
MCDANIEL, ARRON: U:\173608763\Task 2 - Waggoner Road\design\plan\173608763wp01.dwg STORM SEWER PROFILES Last Saved: Apr. 24, 2015 4:56 PM, AMCDANIEL, Printed: May 01, 2015 11:57 AM



\\173608763\Task 2 - Waggoner Road\design\plan\3608763\wp02.dwg STORM SEWER PROFILES Last Saved: Apr. 24, 2015 4:58 PM, AMCDANIEL, Plotted: May 01, 2015 11:57 AM

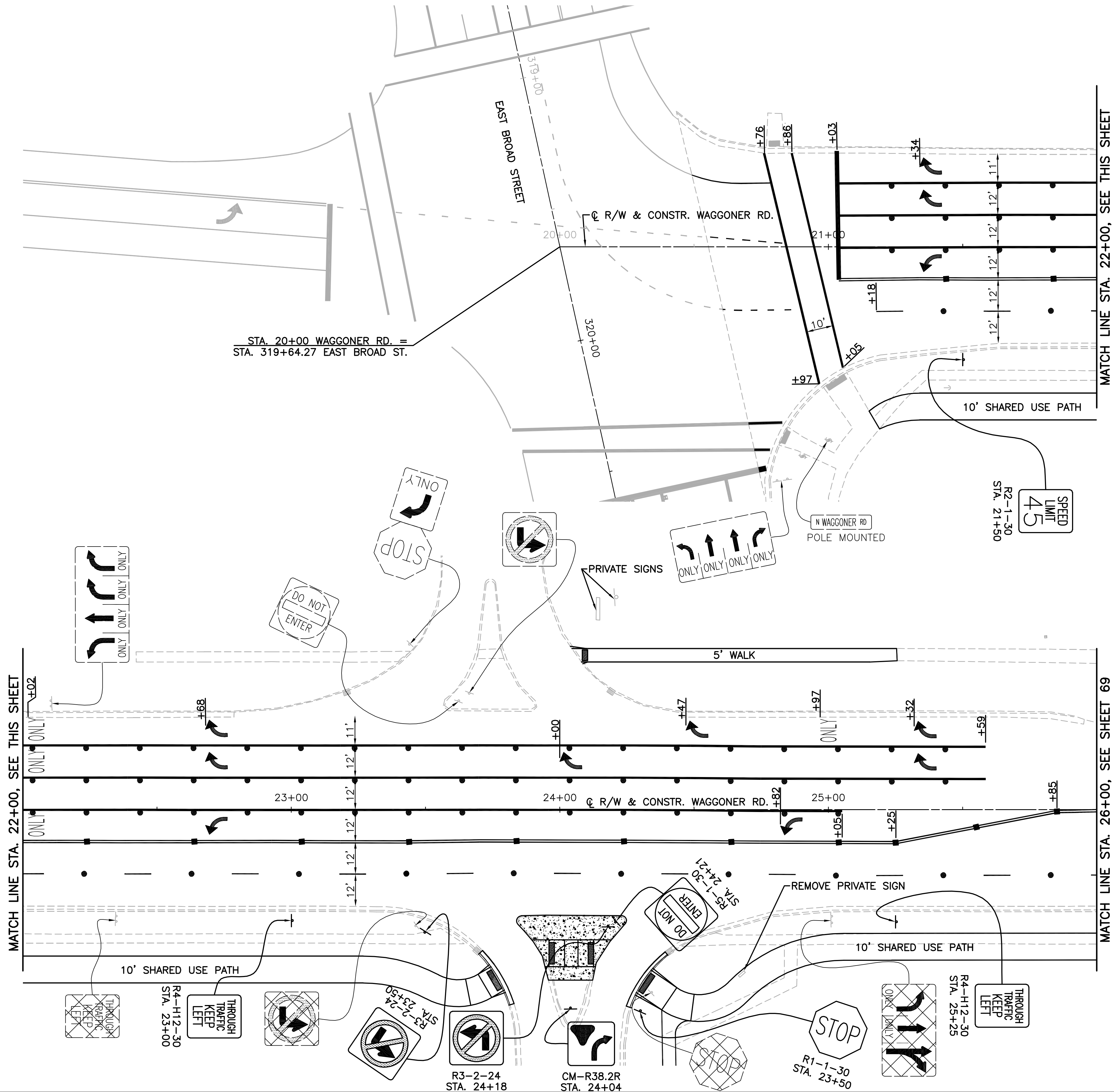


McDANIEL, ARON: U:\173608763\Task 2 - Waggoner Road\design\profiles\173608763wp03.dwg - STORM SEWER PROFILES Last Saved: Apr. 24, 2015 4:57 PM, AMCDANIEL, Printed: May 01, 2015 11:58 AM

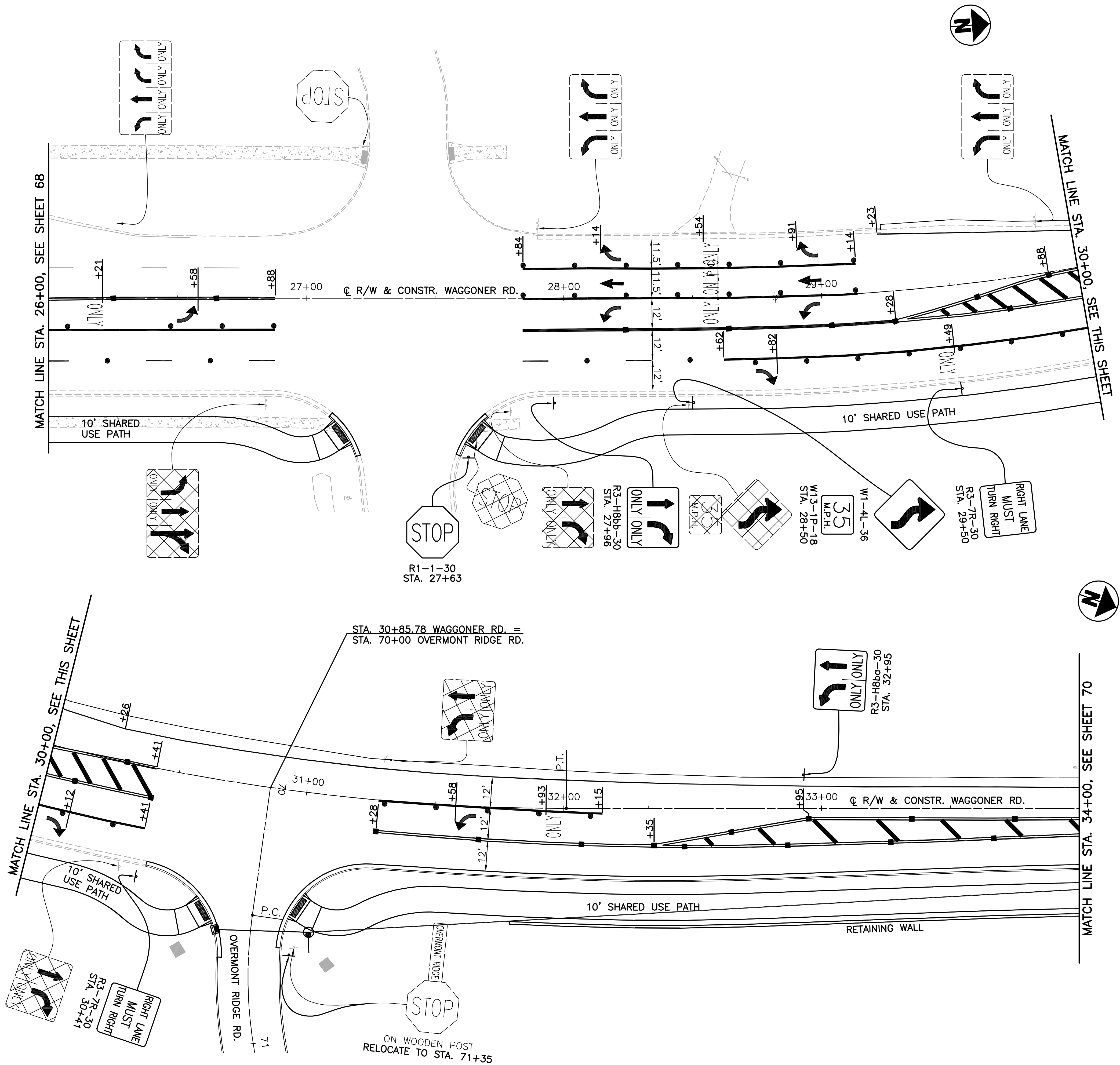


3123-E

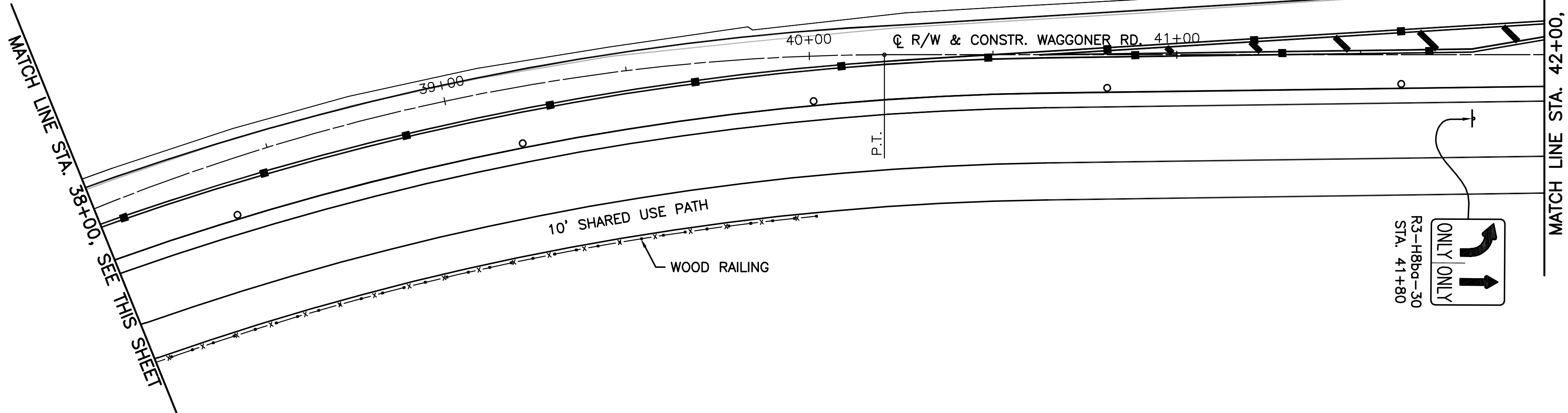




- LEGEND:
- PROPOSED SIGN
 - EXISTING SIGN
 - EXISTING SIGN TO BE DISPOSED OF
 - CENTER LINE, DOUBLE YELLOW
 - LANE LINE, WHITE
 - EDGE LINE, WHITE
 - EDGE LINE, YELLOW
 - STOP LINE, WHITE
 - TRANSVERSE LINE, YELLOW
 - CHANNELIZING LINE, WHITE
 - CROSSWALK LINE, WHITE
 - SHARK TEETH
 - LANE ARROW
 - WORD ON PAVEMENT
 - SIGN REFERENCE NUMBER
 - DOTTED LINE, WHITE (3' WITH 3' SPACING)
 - DOTTED LINE, YELLOW (3' WITH 3' SPACING)
 - RPM, ONE-WAY, WHITE
 - RPM, TWO-WAY, WHITE/RED
 - RPM, TWO-WAY, YELLOW/YELLOW
 - PROPOSED SIGN
 - EXISTING SIGN

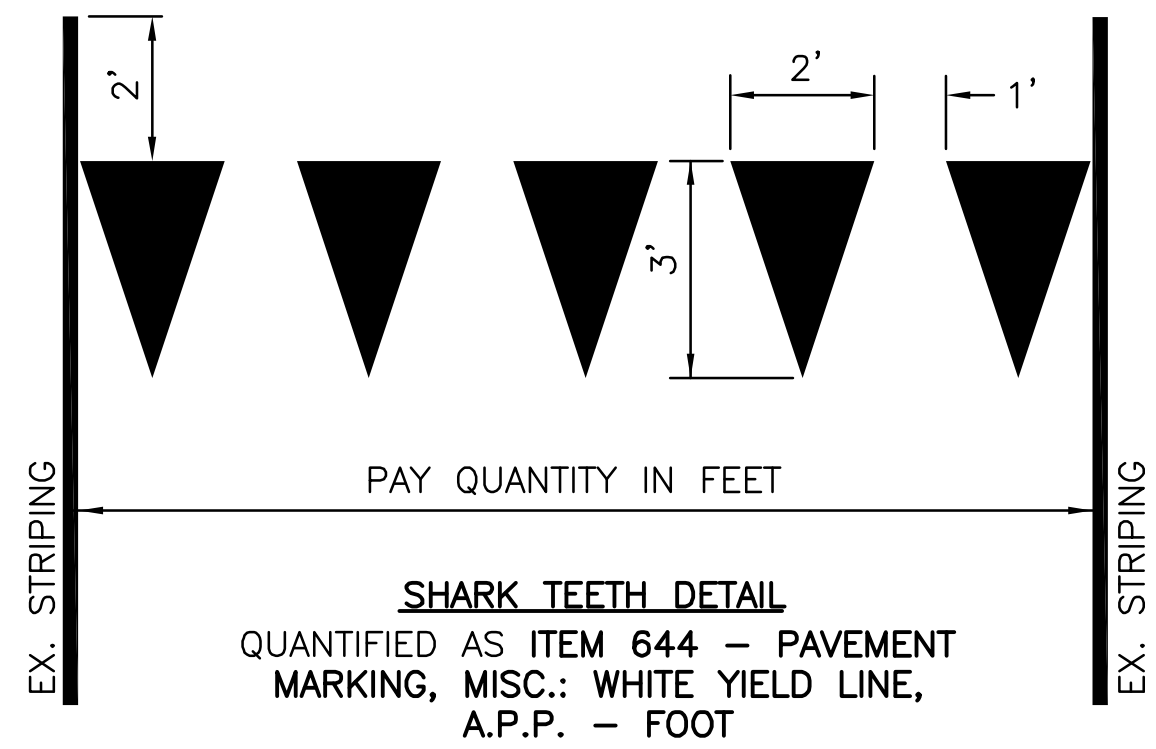
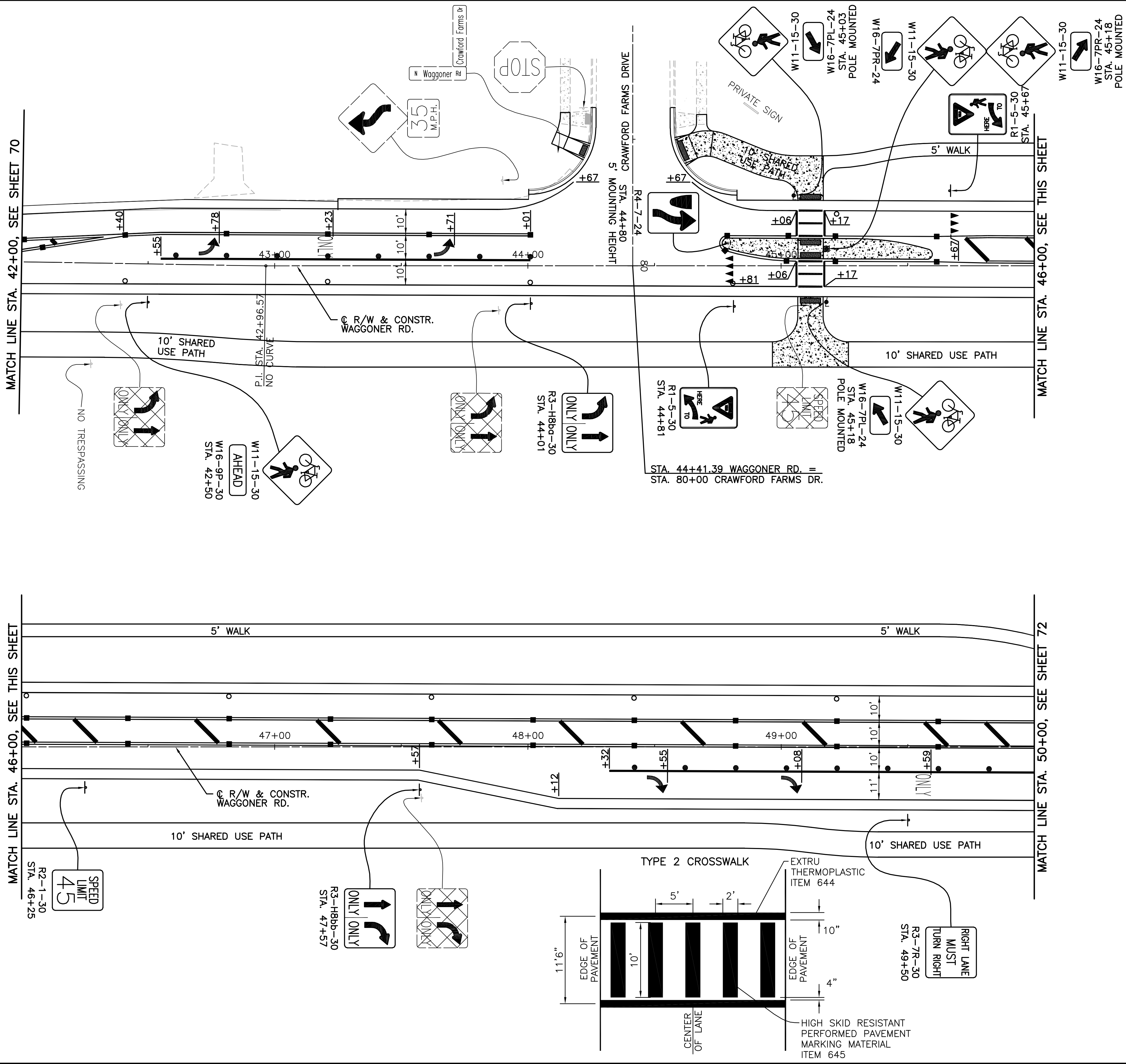


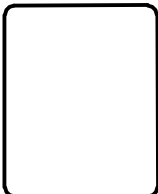
- LEGEND:
- PROPOSED SIGN
 - EXISTING SIGN
 - EXISTING SIGN TO BE DISPOSED OF
 - CENTER LINE, DOUBLE YELLOW
 - LANE LINE, WHITE
 - EDGE LINE, WHITE
 - EDGE LINE, YELLOW
 - STOP LINE, WHITE
 - TRANSVERSE LINE, YELLOW
 - CHANNELIZING LINE, WHITE
 - CROSSWALK LINE, WHITE
 - SHARK TEETH
 - LANE ARROW
 - WORD ON PAVEMENT
 - SIGN REFERENCE NUMBER
 - DOTTED LINE, WHITE (3' WITH 3' SPACING)
 - DOTTED LINE, YELLOW (3' WITH 3' SPACING)
 - RPM, ONE-WAY, WHITE
 - RPM, TWO-WAY, WHITE/RED
 - RPM, TWO-WAY, YELLOW/YELLOW
 - PROPOSED SIGN
 - EXISTING SIGN



LEGEND:

-  — PROPOSED SIGN
 -  — EXISTING SIGN
 -  — EXISTING SIGN TO BE DISPOSED OF
 -  — CENTER LINE, DOUBLE YELLOW
 -  — LANE LINE, WHITE
 -  — EDGE LINE, WHITE
 -  — EDGE LINE, YELLOW
 -  — STOP LINE, WHITE
 -  — TRANSVERSE LINE, YELLOW
 -  — CHANNELIZING LINE, WHITE
 -  — CROSSWALK LINE, WHITE
 -  — SHARK TEETH
 -  — LANE ARROW
 -  — WORD ON PAVEMENT
 -  — SIGN REFERENCE NUMBER
 -  — DOTTED LINE, WHITE (3' WITH 3' SPACING)
 -  — DOTTED LINE, YELLOW (3' WITH 3' SPACING)
 -  — RPM, ONE-WAY, WHITE
 -  — RPM, TWO-WAY, WHITE/RED
 -  — RPM, TWO-WAY, YELLOW/YELLOW
 -  — PROPOSED SIGN
 -  — EXISTING SIGN

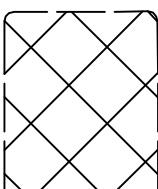


- # LEGEND:
- 

— PROPOSED SIGN



— EXISTING SIGN



— EXISTING SIGN TO BE
DISPOSED OF
- 

— CENTER LINE, DOUBLE YELLOW



— LANE LINE, WHITE



— EDGE LINE, WHITE



— EDGE LINE, YELLOW



— STOP LINE, WHITE



— TRANSVERSE LINE, YELLOW



— CHANNELIZING LINE, WHITE



— CROSSWALK LINE, WHITE



— SHARK TEETH



— LANE ARROW



— WORD ON PAVEMENT



— SIGN REFERENCE NUMBER



— DOTTED LINE, WHITE (3' WITH 3' SPACING)



— DOTTED LINE, YELLOW
(3' WITH 3' SPACING)
- 

— RPM, ONE-WAY, WHITE



— RPM, TWO-WAY, WHITE/RED



— RPM, TWO-WAY, YELLOW/YELLOW



— PROPOSED SIGN



— EXISTING SIGN

LEGEND:

– PROPOSED SIGN

— EXISTING SIGN

- EXISTING SIGN TO BE
DISPOSED OF

 - CENTER LINE, DOUBLE YELLOW

 - LANE LINE, WHITE

 — EDGE LINE, WHITE

 — EDGE LINE, YELLOW

 – STOP LINE, WHITE

 – TRANSVERSE LINE, YELLOW

 - CHANNELIZING LINE, WHITE

 – CROSSWALK LINE, WHITE

$\frac{ST}{X}$ – SHARK TEETH

 — LANE ARROW

 — WORD ON PAVEMENT

$\begin{pmatrix} S \\ Y \end{pmatrix}$ - SIGN REFERENCE NUMBER

 - DOTTED LINE, WHITE (3' WITH 3' SPACING)

 - DOTTED LINE, YELLOW
(3' WITH 3' SPACING)

- – RPM, ONE-WAY, WHITE
- – RPM, TWO-WAY, WHITE/RED

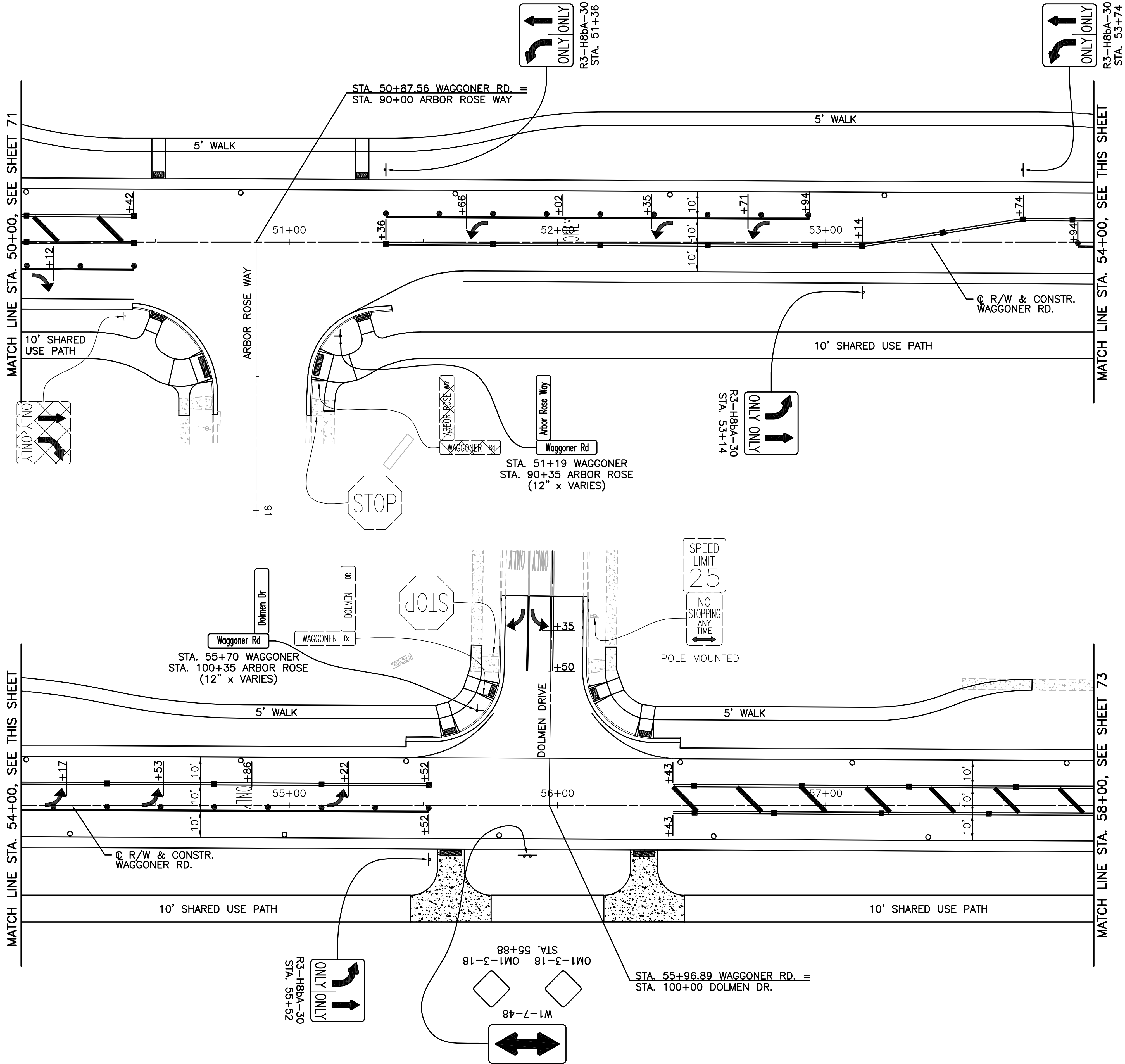
- – RPM, TWO-WAY, YELLOW/YELLOW

 — PROPOSED SIGN

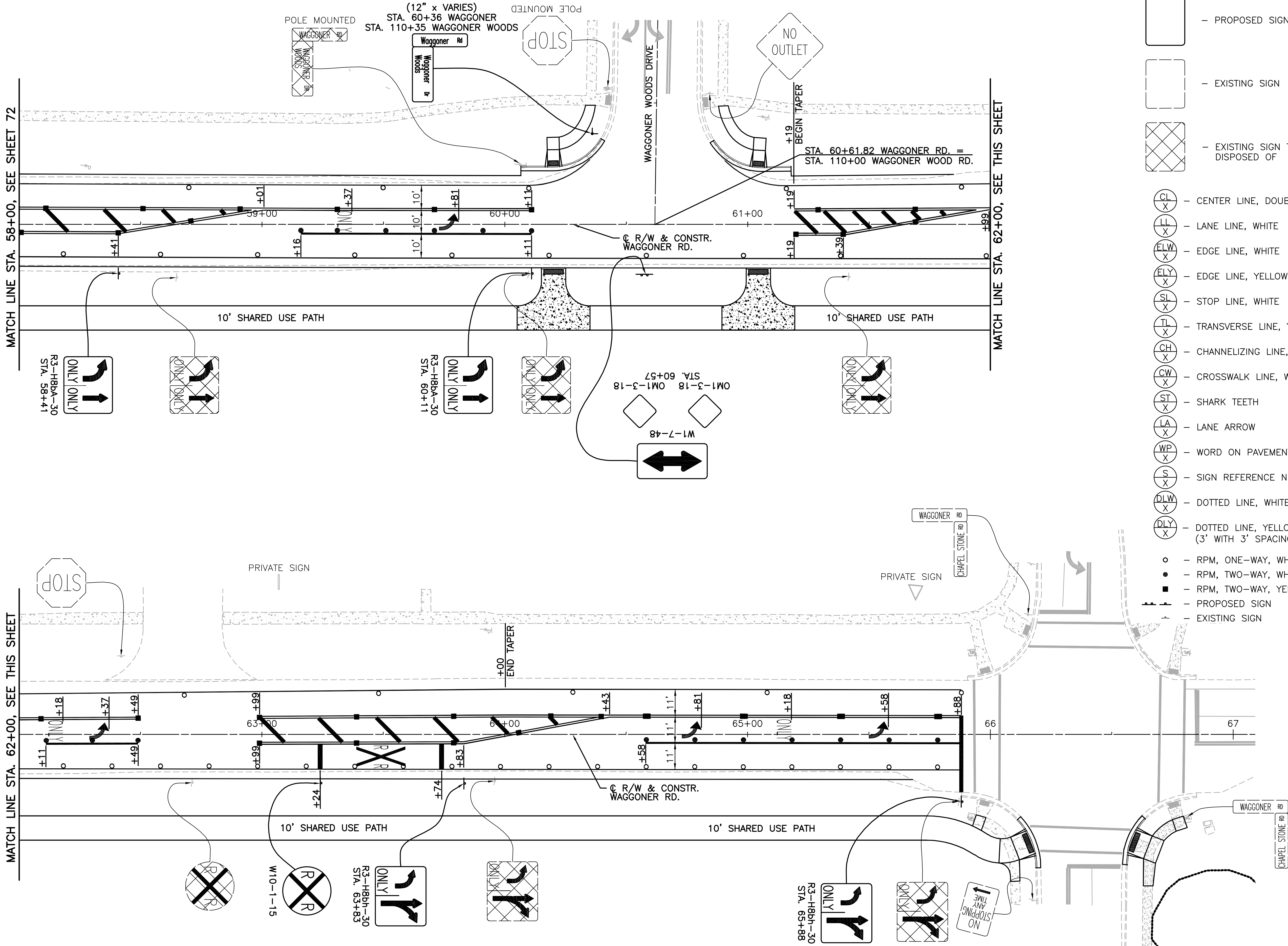
— EXISTING SIGN

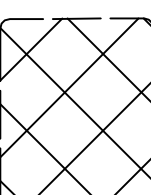
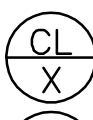
SIGNING & MARKING PLAN

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHARL STONE RD



- LEGEND:
- PROPOSED SIGN
 - EXISTING SIGN
 - EXISTING SIGN TO BE DISPOSED OF
 - CENTER LINE, DOUBLE YELLOW
 - LANE LINE, WHITE
 - EDGE LINE, WHITE
 - EDGE LINE, YELLOW
 - STOP LINE, WHITE
 - TRANSVERSE LINE, YELLOW
 - CHANNELIZING LINE, WHITE
 - CROSSWALK LINE, WHITE
 - SHARK TEETH
 - LANE ARROW
 - WORD ON PAVEMENT
 - SIGN REFERENCE NUMBER
 - DOTTED LINE, WHITE (3' WITH 3' SPACING)
 - DOTTED LINE, YELLOW (3' WITH 3' SPACING)
 - RPM, ONE-WAY, WHITE
 - RPM, TWO-WAY, WHITE/RED
 - RPM, TWO-WAY, YELLOW/YELLOW
 - PROPOSED SIGN
 - EXISTING SIGN



- # LEGEND:
- | | |
|---|--|
|  | — PROPOSED SIGN |
|  | — EXISTING SIGN |
|  | — EXISTING SIGN TO BE DISPOSED OF |
|  | — CENTER LINE, DOUBLE YELLOW |
|  | — LANE LINE, WHITE |
|  | — EDGE LINE, WHITE |
|  | — EDGE LINE, YELLOW |
|  | — STOP LINE, WHITE |
|  | — TRANSVERSE LINE, YELLOW |
|  | — CHANNELIZING LINE, WHITE |
|  | — CROSSWALK LINE, WHITE |
|  | — SHARK TEETH |
|  | — LANE ARROW |
|  | — WORD ON PAVEMENT |
|  | — SIGN REFERENCE NUMBER |
|  | — DOTTED LINE, WHITE (3' WITH 3' SPACING) |
|  | — DOTTED LINE, YELLOW (3' WITH 3' SPACING) |
| ○ | — RPM, ONE-WAY, WHITE |
| ● | — RPM, TWO-WAY, WHITE/RED |
| ■ | — RPM, TWO-WAY, YELLOW/YELLOW |
|  | — PROPOSED SIGN |
|  | — EXISTING SIGN |

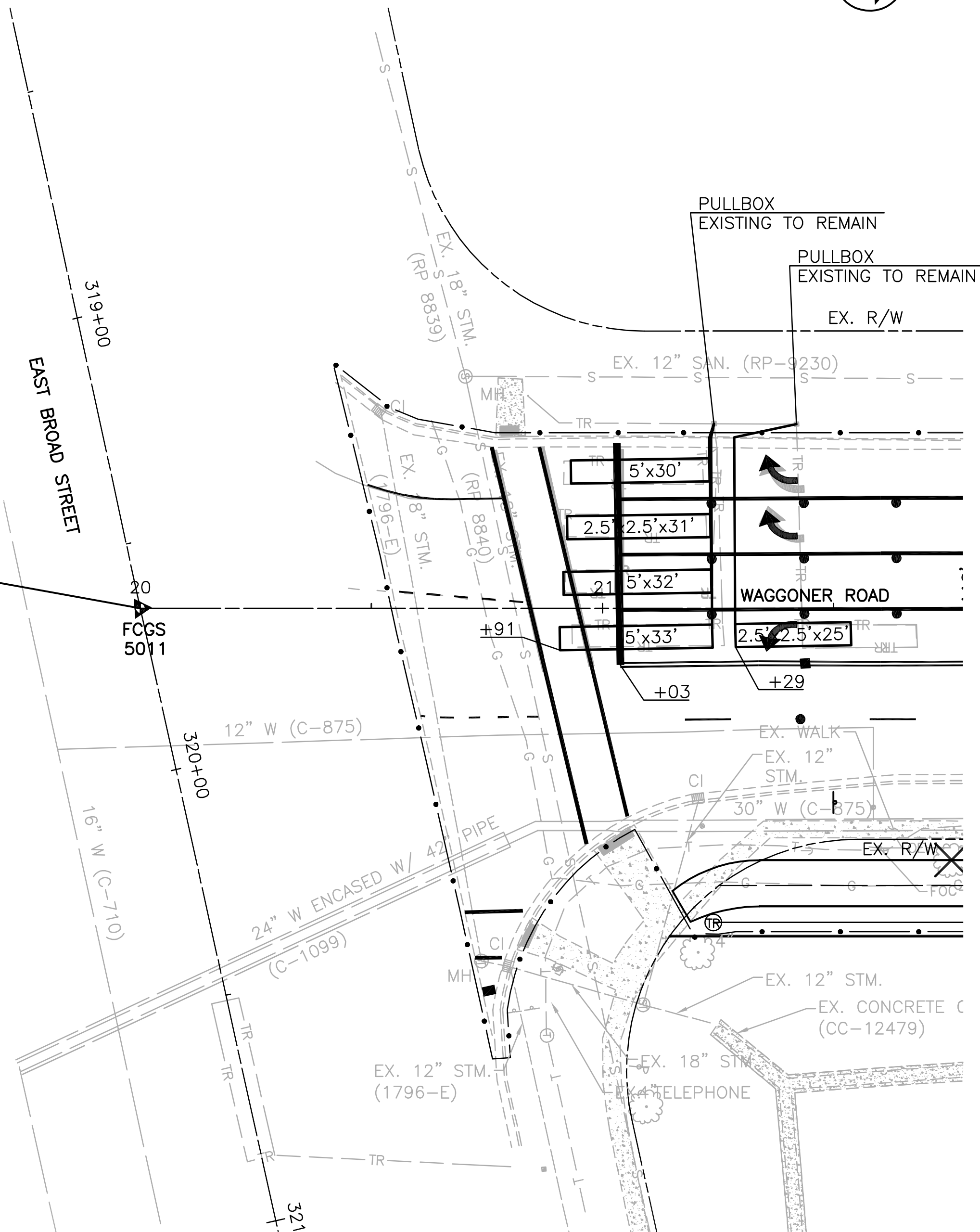
ALL WIRES SHALL BE SOLDERED AT ALL LOOP WIRE SPLICES AND AT ALL LEAD-IN CABLE TERMINAL CONNECTORS. THE LOOP SEALANT USED SHALL BE 3M DETECTOR LOOP SEALANT 5000 OR 3M BONDO P-606 FLEXIBLE LOOP SEALER. THE CONTRACTOR SHALL TAKE CARE IN THE PLACEMENT OF LOOP SEALANT TO ENSURE THAT ALL SEALANT IS PLACED IN THE SAW SLOT.

74
82

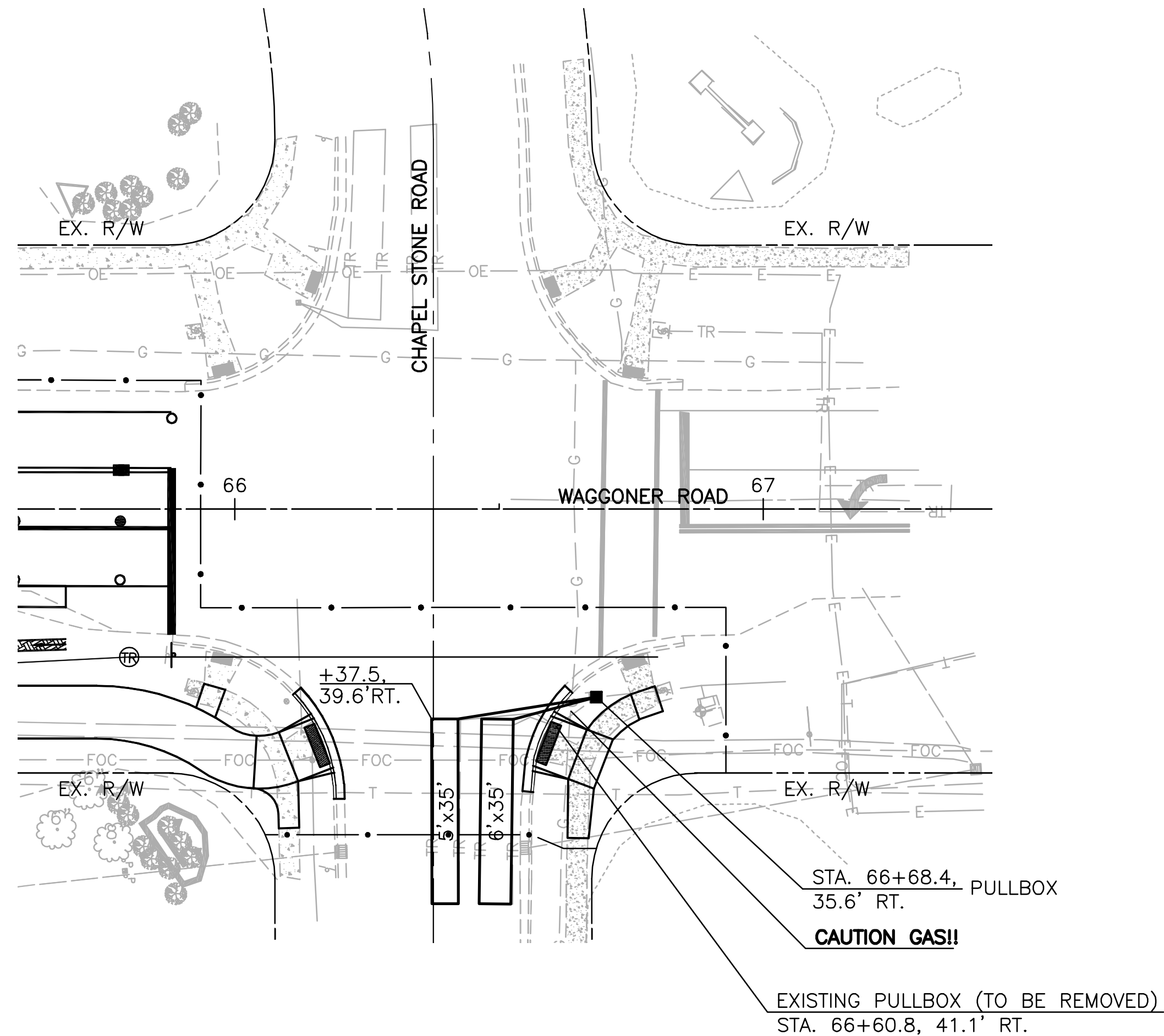
LEGEND:

- | | | |
|----------------------------|-------------------------------|-----------------------------------|
| — R/W — | — RIGHT OF WAY | — PROPOSED PED POLE W/PED SIGNAL |
| — W — | — WATER LINE | — PROPOSED PED POLE W/PUSH BUTTON |
| — G — | — GAS LINE | |
| — T — | — UNDERGROUND TELEPHONE CABLE | |
| — E — | — UNDERGROUND ELECTRIC CABLE | |
| — OHD — | — OVERHEAD UTILITY CABLE | |
| — STM — | — STORM SEWER | |
| — SAN — | — SANITARY SEWER | |
| — TR — | — TRAFFIC CONDUIT | |
| — C.B. — | — CATCH BASIN | |
| — M.H. — | — MANHOLE | |
| — POWER POLE | | |
| — TELEPHONE POLE | | |
| — LIGHT POLE | | |
| — PULL BOX | | |
| — SIGNAL SUPPORT | | |
| — 3 SECTION SIGNAL HEAD | | |
| — 5 SECTION SIGNAL HEAD | | |
| — CONTROLLER | | |
| — PROPOSED TRAFFIC CONDUIT | | |
| — VIDEO DETECTION CAMERA | | |

STA. 20+00 WAGGONER RD. =
STA. 319+64.27 EAST BROAD ST.



NOTE: REPLACE EXISTING TRAFFIC LOOPS. RE-USE EXISTING WIRING AND PULLBOXES. LOOPS SHALL BE SIZE SHOWN, 20' BEHIND STOP BAR.



NOTE: REPLACE EXISTING TRAFFIC LOOPS. INSTALL NEW PULLBOX AS SHOWN. LOOPS SHALL BE SIZE SHOWN, 20' BEHIND STOP BAR.

NOTE: 1. THE CONTRACTOR SHALL ENSURE THAT ALL SIDEWALKS/PATHWAYS MEET ADA GUIDELINES PER CITY SPECIFICATIONS.
2. FOR SIGNING AND PAVEMENT MARKINGS, SEE SHEETS 68 & 73.
3. CENTER ALL LOOPS IN THE CENTER OF THEIR LANE UNLESS SPECIFIED OTHERWISE. INSTALL LOOPS AFTER THE ASPHALT SURFACE COURSE IS LAID.

TRAFFIC SIGNAL
WAGGONER ROAD AT EAST BROAD STREET

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

75
82

3123 E

MCDANIEL, AERON U:\173608763\Task 2 - Waggoner Road\design\plan\Lighting Plans\173608763\lgn01.dwg LIGHTING GENERAL NOTES Last Saved: Apr 27, 2015 10:38 AM Plotted: May 01, 2015 12:01 PM

GENERAL NOTES:

1.

STREET LIGHTING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS", INCLUDING ALL SUPPLEMENTS THERETO, IN FORCE ON THE DATE OF CONTRACT. THESE SPECIFICATIONS SHALL GOVERN ALL MATERIALS AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THESE PLANS, EXCEPT AS SUCH SPECIFICATIONS ARE MODIFIED BY THE FOLLOWING OR BY THE SPECIFICATIONS DETAILS SET FORTH HEREIN.
2.

STREET LIGHT POLE FOUNDATIONS SHALL CONFORM TO CITY OF COLUMBUS SPECIFICATION MIS-081 - FOUNDATIONS, REINFORCED, 8'.
3.

STREET LIGHTING POLES SHALL BE AS PER PLAN, KIM LIGHTING MODEL NUMBER PRA25-6188A/DB/HB-X1.
4.

NOT USED.
5.

LUMINAIRES SHALL BE KIM LIGHTING MODEL NUMBER 1SA/SAR3P70/40L4K120/DB/A-30. LUMINAIRES SHALL HAVE AN IES TYPE III DISTRIBUTION.
6.

GROUNDING OF ALL POLES AND STREET LIGHTING SYSTEM COMPONENTS SHALL BE IN COMPLIANCE WITH CITY OF COLUMBUS SPECIFICATION MIS-111 - GROUND - UNDERGROUND STREET LIGHTING SYSTEM.
7.

ANY REQUIRED RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S STREET LIGHTING SYSTEM IN THE CONSTRUCTION AREA IS TO BE PERFORMED BY THE CONTRACTOR UNDER THE DIRECTION OF DOP PERSONNEL AND AT THE EXPENSE OF THE PROJECT. AMERICAN ELECTRIC POWER SHALL MAKE ALL FINAL CONNECTIONS OF THE STREET LIGHTING SYSTEM TO THEIR ELECTRICAL SYSTEM. THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FOLLOWING DOP'S "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMSC). ANY NEW OR RE-INSTALLED UNDERGROUND STREETLIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1001.18 OF THE CMSC MANUAL. THE CONTRACTOR SHALL CONFORM TO DOP'S EXISTING CONDUCTOR SAFETY POLICY AND HOLD CARD SYSTEM, MIS-95, COPIES OF WHICH ARE AVAILABLE FROM DOP. IF YOU HAVE ANY QUESTIONS, CALL SCOTT WOLFE (614) 724-4351 OR CHRIS VOGEL AT (614) 645-6963.
8.

IF ANY ELECTRIC FACILITY BELONGING TO DOP IS DAMAGED IN ANY MANNER BY THE CONTRACTOR, ITS AGENTS, SERVANTS OR EMPLOYEES, AND REQUIRES EMERGENCY REPAIRS, DOP SHALL MAKE ALL NECESSARY REPAIRS, AND THE EXPENSE OF SUCH REPAIRS AND OTHER RELATED COSTS SHALL BE PAID BY THE CONTRACTOR TO THE DIVISION OF POWER, CITY OF COLUMBUS, OHIO.
9.

THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL LOCAL CODES AND ORDINANCES PERTINENT TO THE PROGRESSION OF THE WORK DESCRIBED WITHIN THE PROJECT PLANS. ANY REQUIRED PERMIT SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO AN EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO CONSTRUCTION.
10.

THE PLAN DETAILS SHALL BE CONSIDERED SUPPLEMENTAL TO DOP MATERIAL AND INSTALLATION SPECIFICATIONS.
11.

ALL EXISTING UNDERGROUND UTILITIES MAY NOT BE SHOWN ON THE PLANS. INDIVIDUAL SERVICE LINES ARE NOT SHOWN AND SHOULD BE LOCATED BY THE CONTRACTOR PRIOR TO COMMENCING WITH WORK. FIELD VERIFICATION MAY BE NECESSARY AND THE CONTRACTOR SHALL INCLUDE HIS COST FOR THIS WORK IN THE VARIOUS UNIT PRICES. LOCATION, SUPPORT, PROTECTION OR RESTORATION OF ALL UTILITY LINES, SERVICES AND APPURTENANCES IS THE RESPONSIBILITY OF THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE REPAIRS OR OVERSEE THE REPAIR BY THE APPROPRIATE UTILITY PROVIDOR AT THE CONTRACTOR'S EXPENSE.

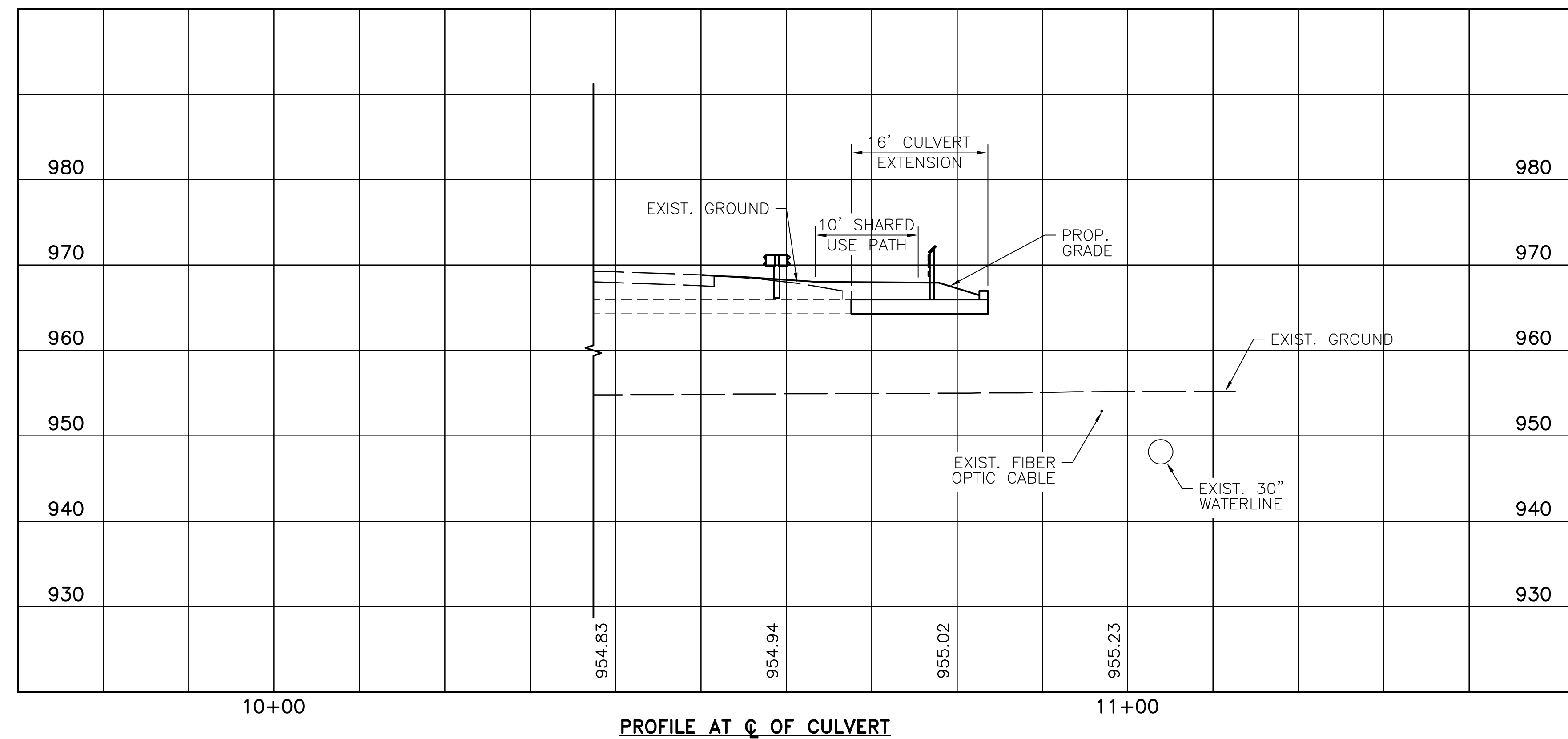
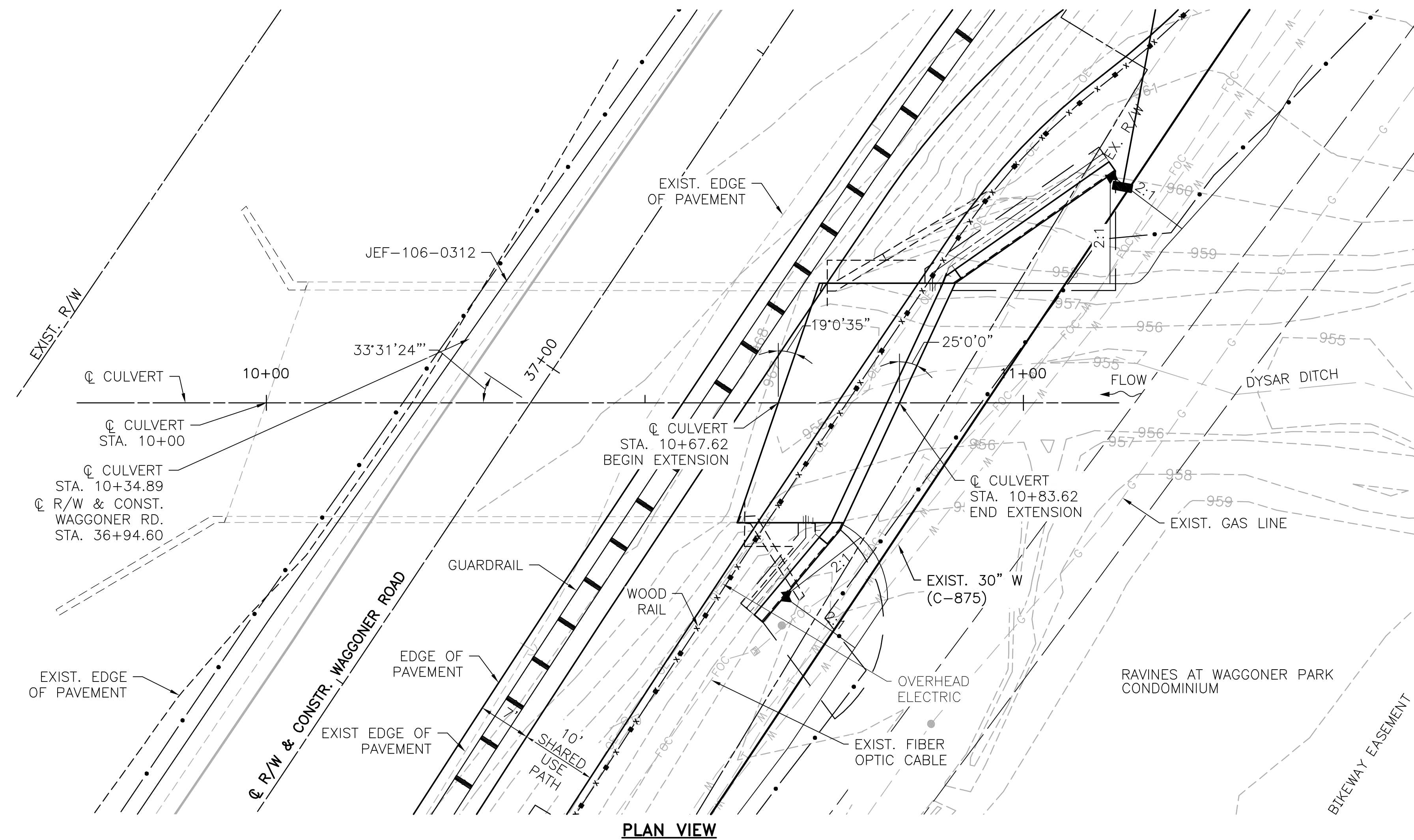
THE LOCATION OF UTILITIES AND STRUCTURES, BOTH SURFACE AND SUBSURFACE AS SHOWN ON THE PROJECT PLANS ARE COMPILED FROM DATA AVAILABLE AT THE TIME OF SURVEY AND ARE NOT NECESSARILY COMPLETE. OBTAINING THE EXACT LOCATION AND PROTECTION OF UTILITIES AND STRUCTURES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL USE DUE DILIGENCE IN PROTECTING ALL EXISTING UTILITIES AND STRUCTURES FROM DAMAGE, WHETHER SHOWN ON THE PROJECT PLANS OR NOT. THE CONTRACTOR SHALL COORDINATE WITH AND NOTIFY ALL UTILITIES A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO ANY WORK PERFORMED TO ESTABLISH EXACT LOCATIONS OF MAIN LINES, SERVICE LINES OR ANY OTHER EQUIPMENT WORK IN AREAS UNMARKED BY UTILITIES. IF DAMAGE IS CAUSED BY THE CONTRACTOR'S WORK, THE CONTRACTOR IS RESPONSIBLE TO IMMEDIATELY NOTIFY THE RESPECTIVE UTILITY AND PROPERTY OWNER OF INTERRUPTED SERVICE AND OVERSEE REPAIR AND RESTORATION OF SERVICE TO THE SATISFACTION OF THE CITY AT THE CONTRACTOR'S EXPENSE.
12.

CONDUIT LOCATION MAY BE DEFLECTED AND LIGHT POLE FOUNDATION MAY BE RELOCATED AROUND OBSTACLES OR UTILITIES AS APPROVED BY THE ENGINEER.
13.

PULL BOXES SHALL BE LOCATED APPROXIMATELY WHERE SHOWN ON PLANS WITH EXACT LOCATIONS TO BE DETERMINED IN THE FIELD AFTER CONSIDERATION IS GIVEN TO THE LOCATION OF UTILITIES, PAVEMENT AND GRADES.



77
82



EXISTING STRUCTURE:

TYPE: 30 FEET BY 12 FEET RISE THREE SIDED
FLAT-TOPPED REINFORCED CONCRETE
CULVERT.

SKEW: 34° RIGHT FORWARD

LOADING: HS20-44 AND THE ALTERNATE MILITARY
LOADING.

ROADWAY: 32'-0" F/F GUARDRAIL

ALIGNMENT: TANGENT

WEARING SURFACE: ASPHALT CONCRETE

CROWN: NORMAL CROWN/SUPERELEVATION

PROPOSED STRUCTURE:

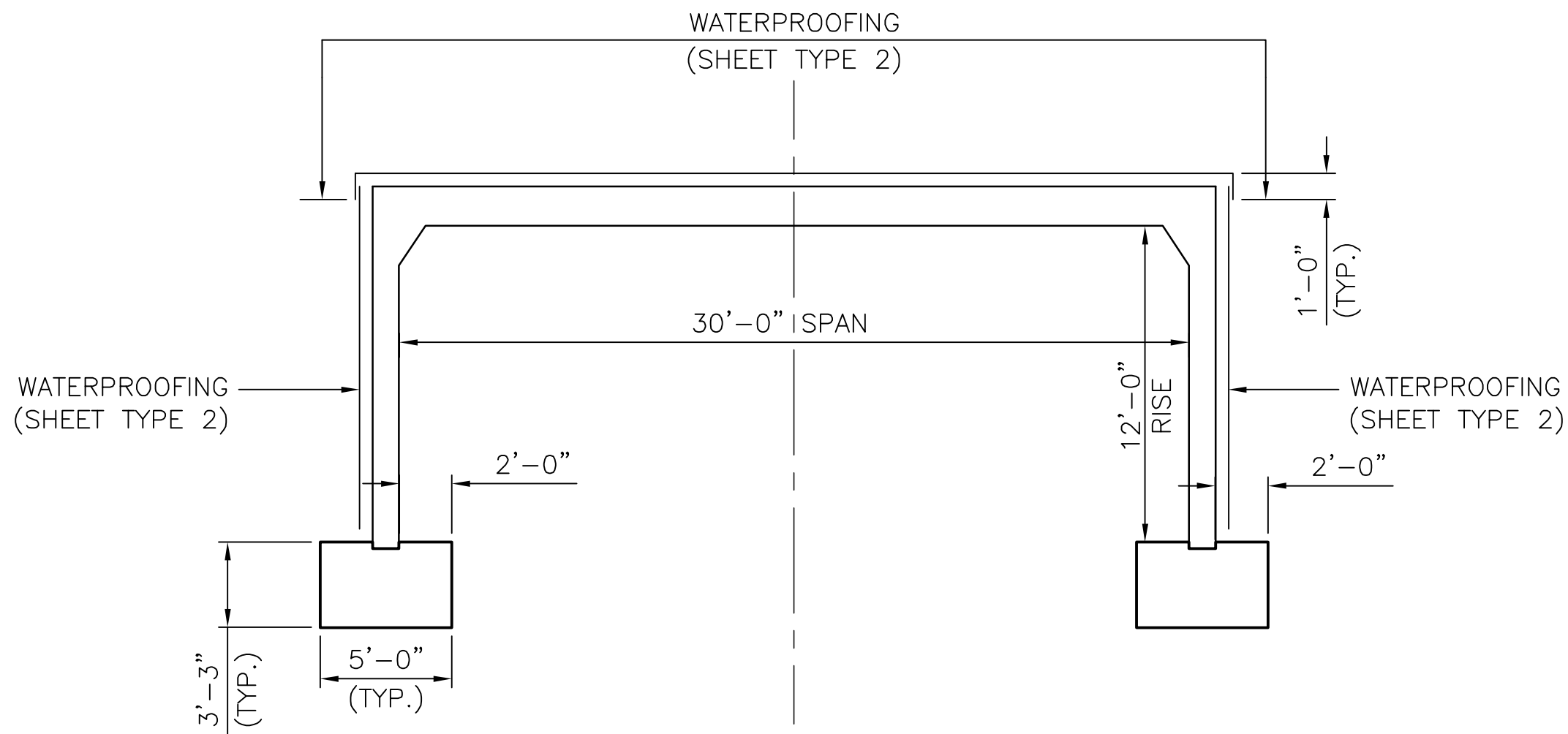
TYPE: 16 FEET EXTENSION OF A 30 FEET SPAN BY
12 FEET RISE THREE SIDED FLAT-TOPPED
REINFORCED CONCRETE CULVERT.

SKEW: 34° RIGHT FORWARD

LOADING: HL-93

ALIGNMENT: TANGENT

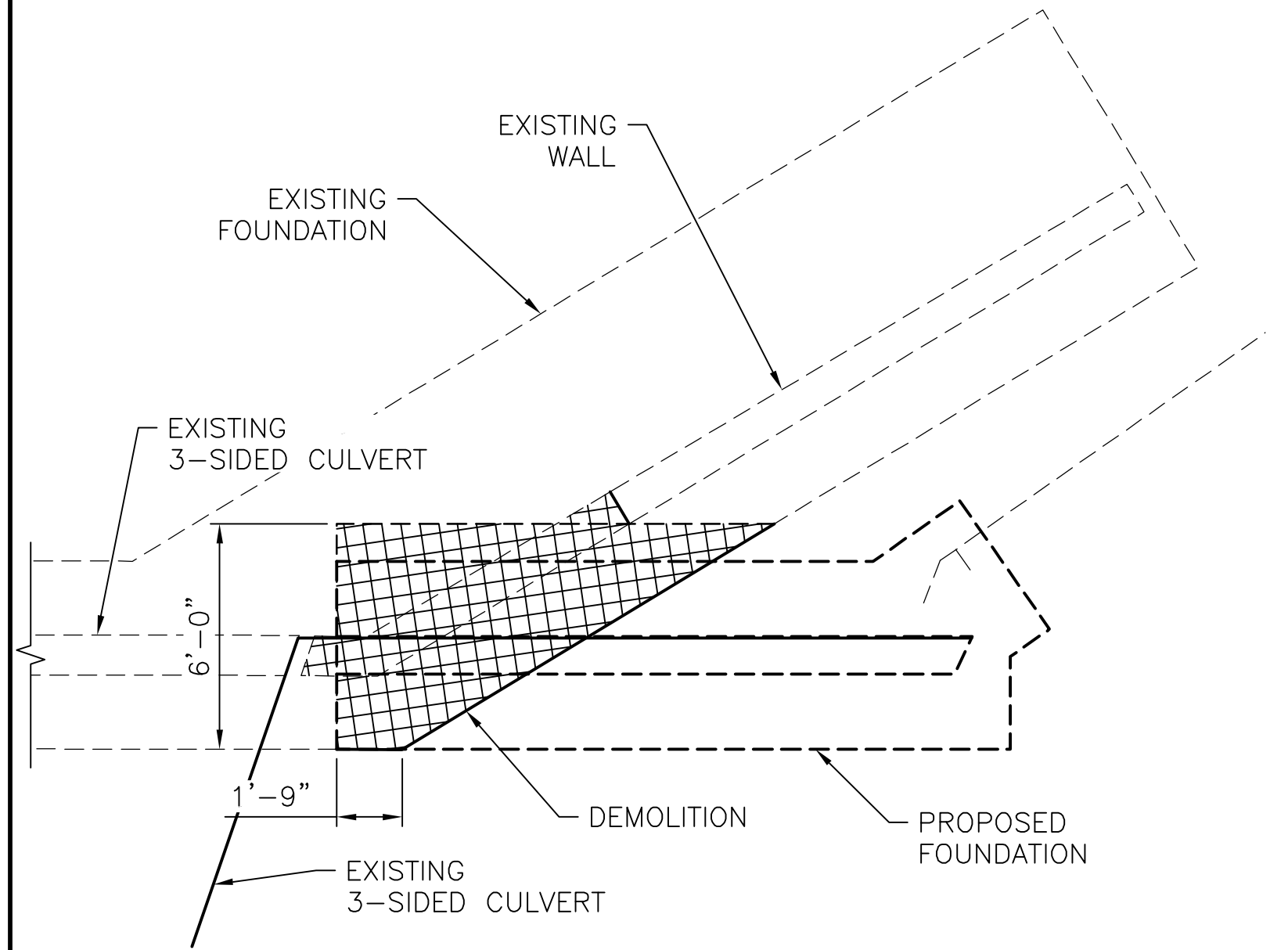
S:\AIR_JASON_U\173608763\Task 2 - Waggoner Road\design\plan\set\structures\173608763\GN01.dwg GENERAL NOTES AND QUANTITIES Last Saved: Apr 28, 2015 10:25 AM, JSNMR Plotted: May 01, 2015 11:25 AM



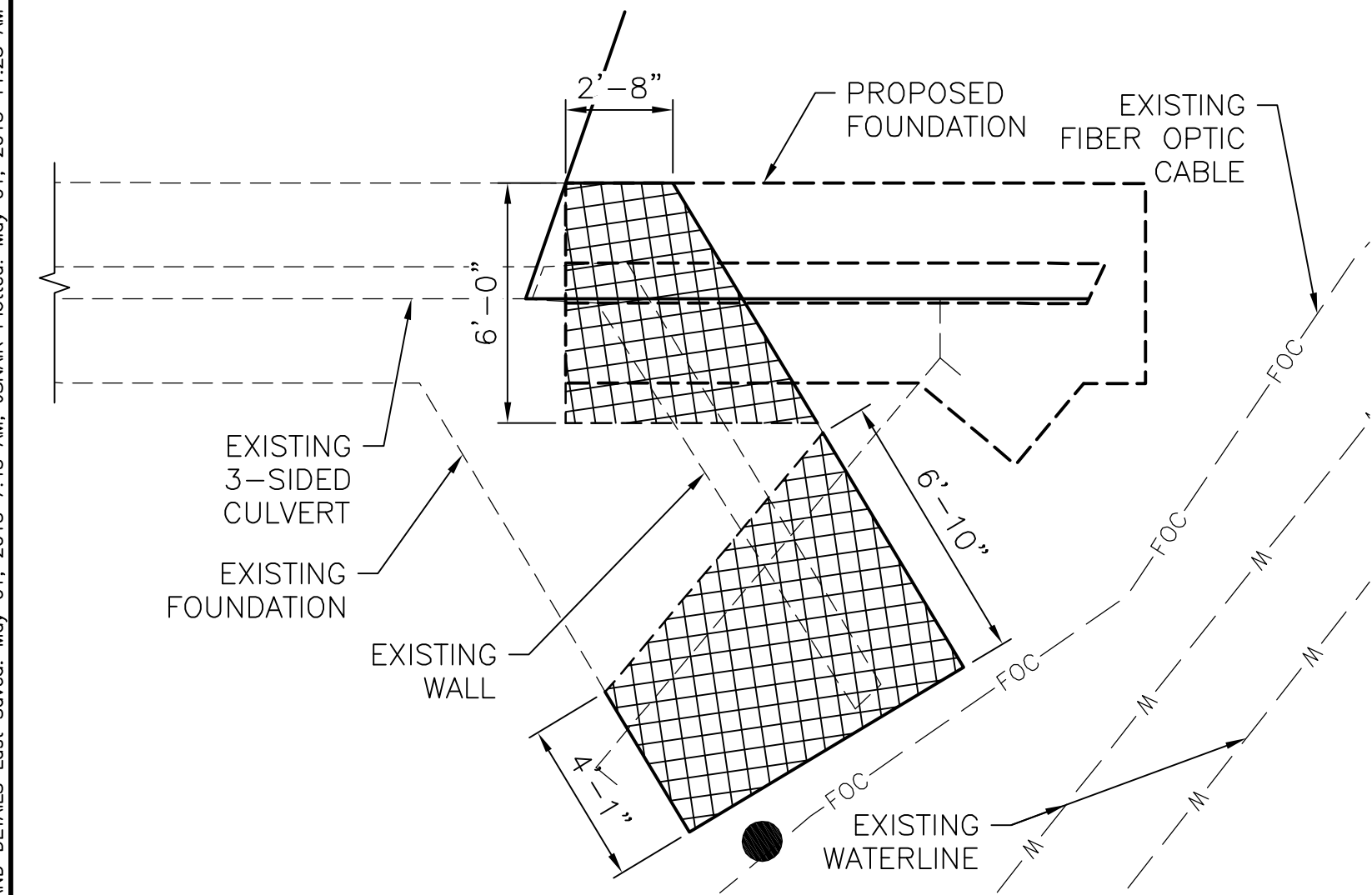
WATERPROOFING DETAIL

ESTIMATE QUANTITIES			
ITEM	TOTAL	UNIT	DESCRIPTION
202		LUMP SUM	PORTIONS OF STRUCTURE REMOVED
203		CU. YD.	EMBANKMENT
503		LUMP SUM	COFFERDAMS AND EXCAVATION BRACING
503		LUMP SUM	UNCLASSIFIED EXCAVATION
504		SQ. FT.	STEEL SHEET PILING LEFT IN PLACE (MINIMUM SECTION MODULOUS OF XXX CUBIC INCHES PER FOOT OF WALL)
505		LUMP SUM	PILE DRIVING EQUIPMENT MOBILIZATION
509		POUNDS	EPOXY COATED REINFORCING
510		EACH	DOWEL HOLES WITH CEMENT GROUT
511		CU. YD.	CLASS C CONCRETE, FOOTINGS
511		CU. YD.	CLASS C CONCRETE, HEADWALL
511		CU. YD.	CLASS C CONCRETE, COVERING
512		SQ. YD.	SEALING OF CONCRETE SURFACES
512		SQ. YD.	TYPE 2 MEMBRANE WATER-PROOFING
513		EACH	WELDED STUD SHEAR CONNECTORS, AS PER PLAN
516		SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER
518		CU. YD.	POROUS BACKFILL WITH FILTER FABRIC
518		L.F.	6" PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN
601		CU. YD.	ROCK CHANNEL PROTECTION, TYP B WITH FILTER
603		L.F.	TYPE A PRECAST REINFORCED CONCRETE FLAT TOPPED THREE-SIDED CULVERT, 30 FT. SPAN X 12 FT. RISE.

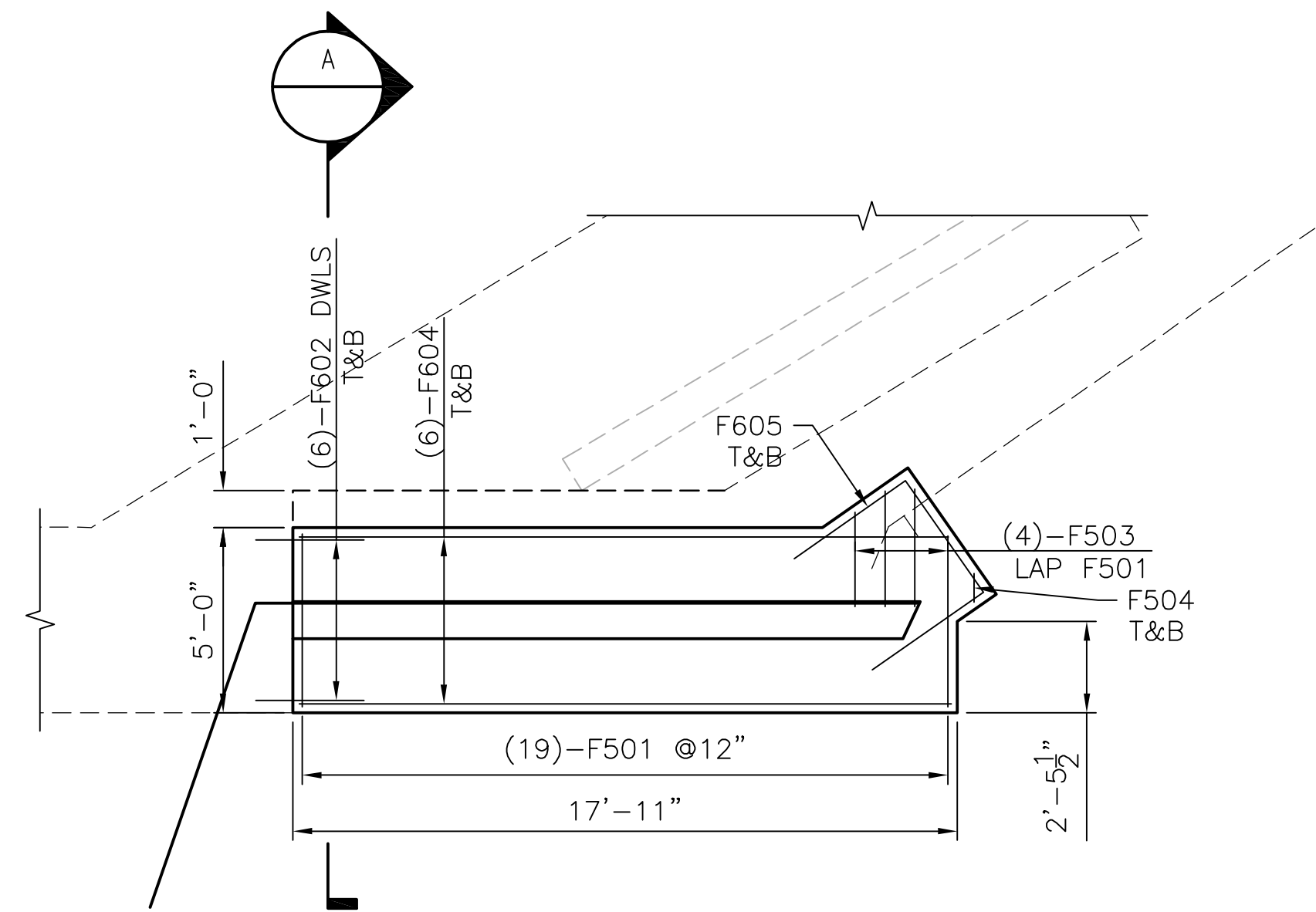
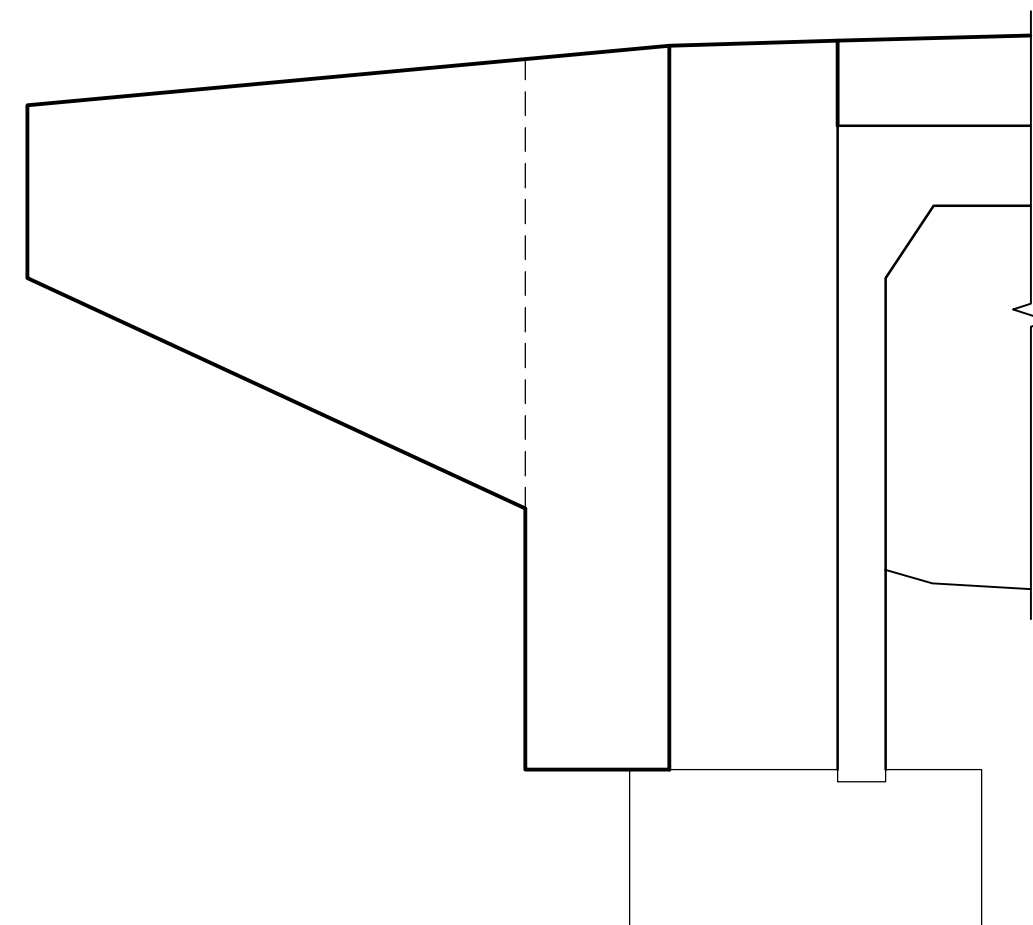
SNAR_JASON_U:\173608763\Task 2 - Waggoner Road\design\plan\sheet\structures\173608763.dwg CULVERT PLANS AND DETAILS Last Saved: May 01, 2015 7:45 AM USNAR Plotted: May 01, 2015 11:25 AM



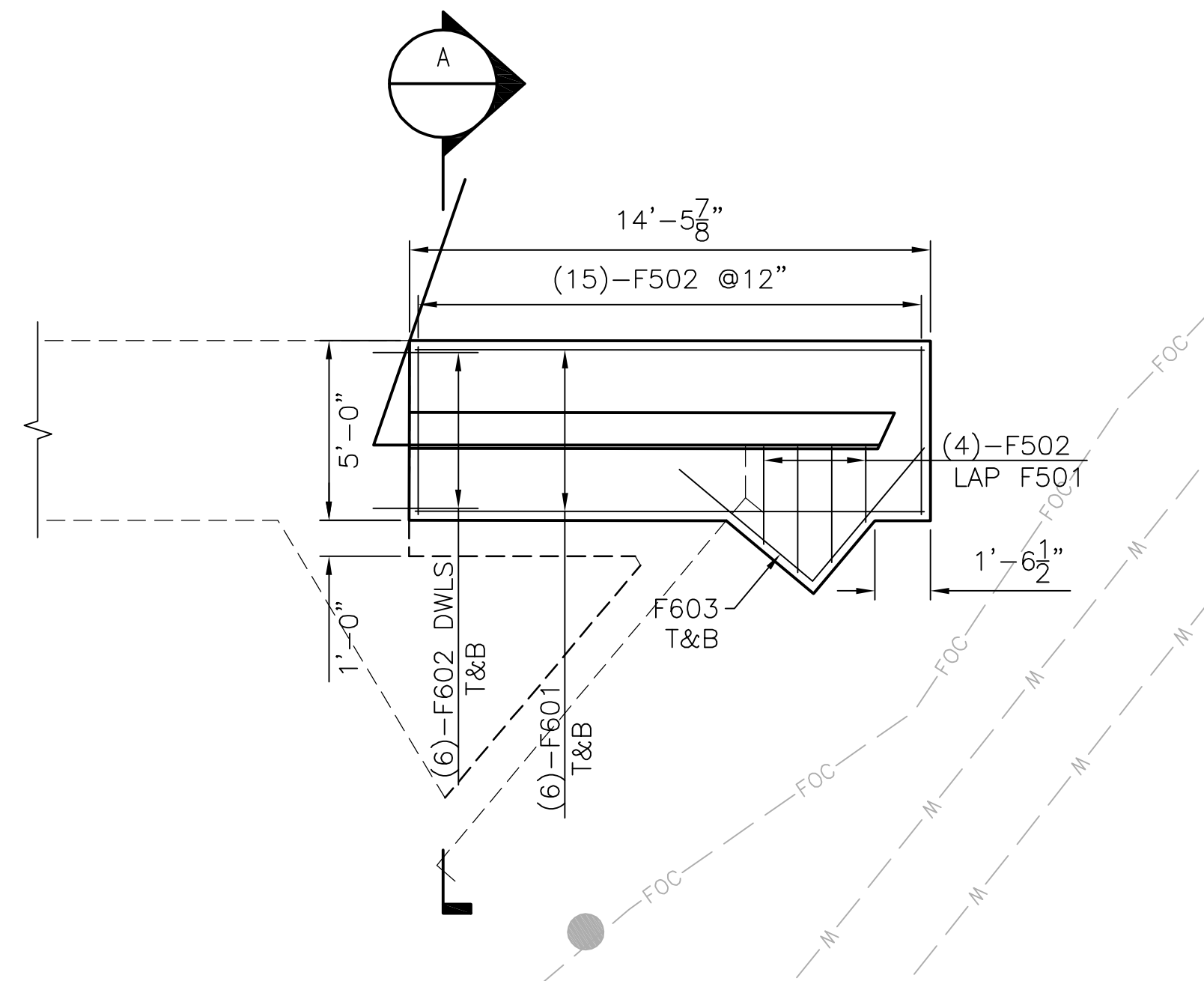
NORTH DEMOLITION PLAN



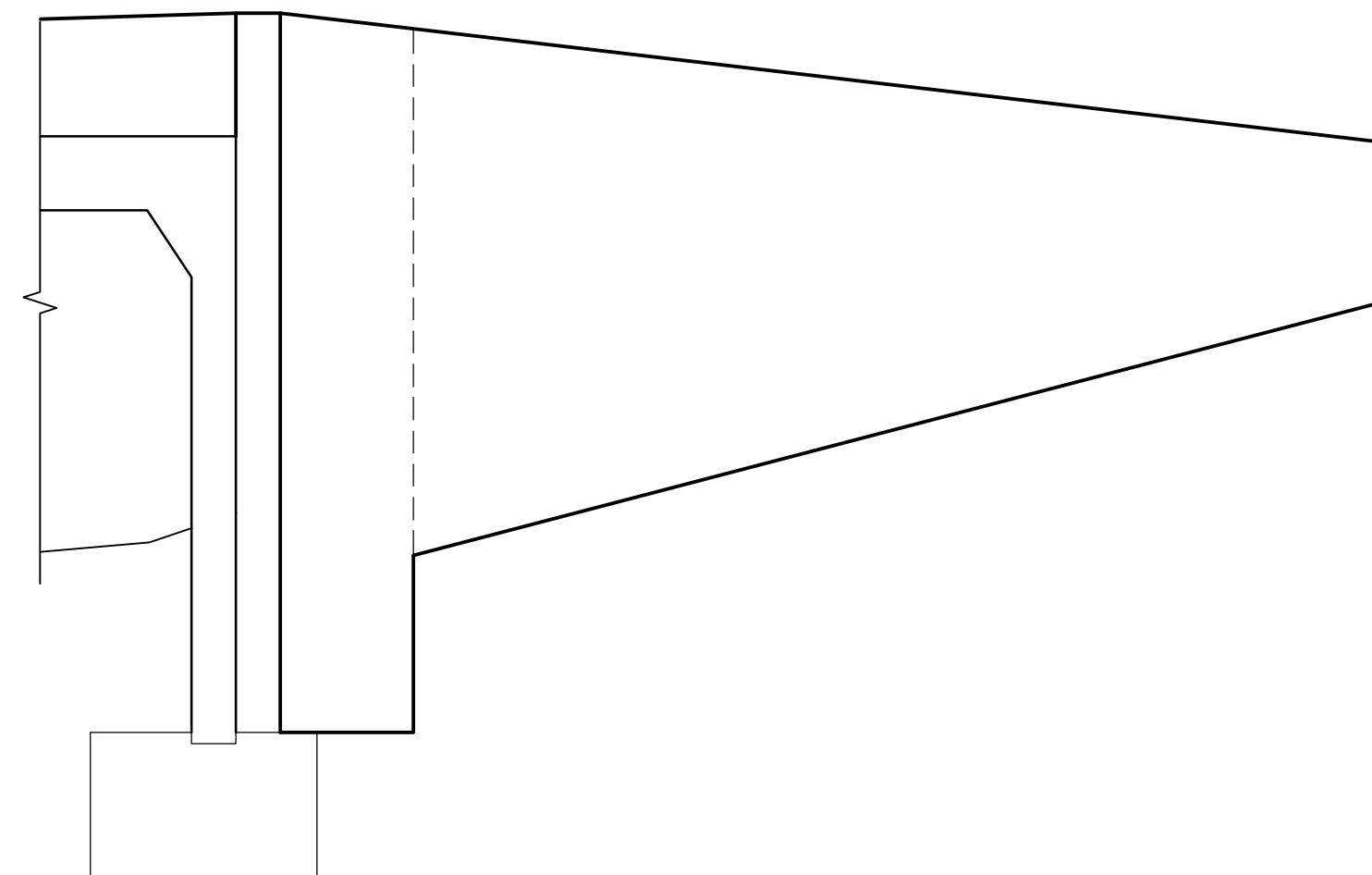
SOUTH DEMOLITION PLAN



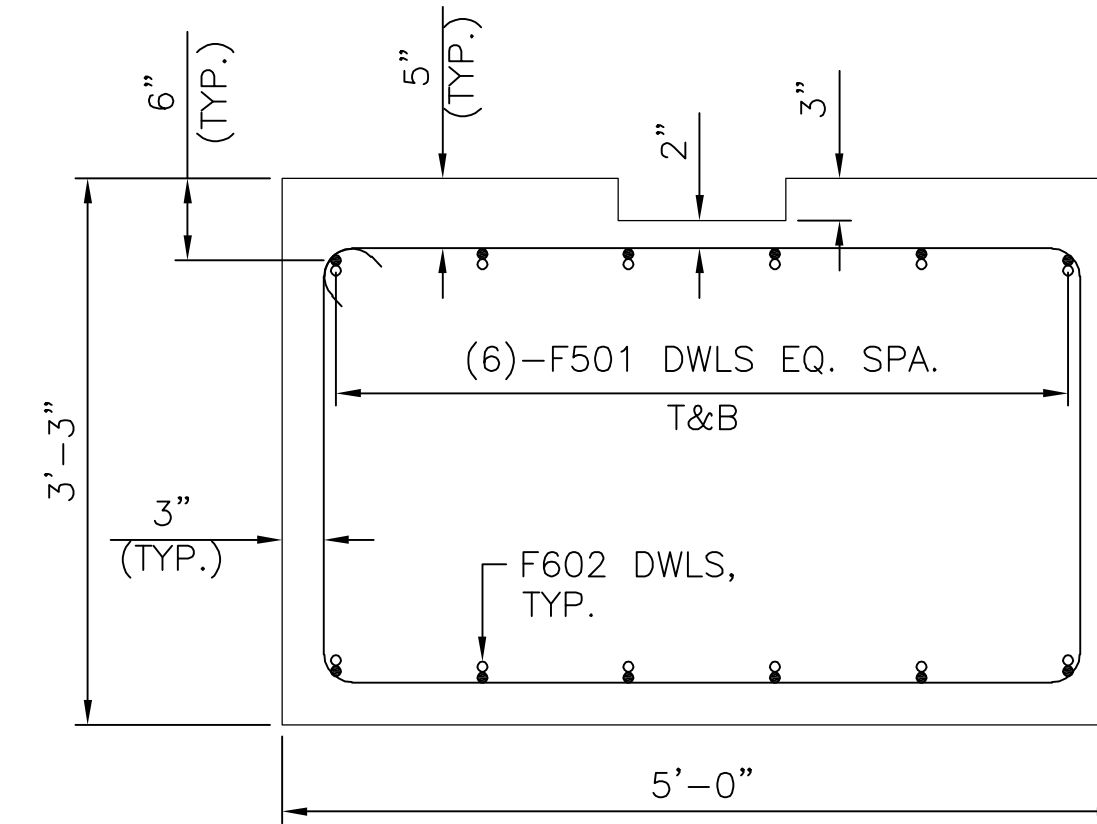
NORTH FOUNDATION PLAN



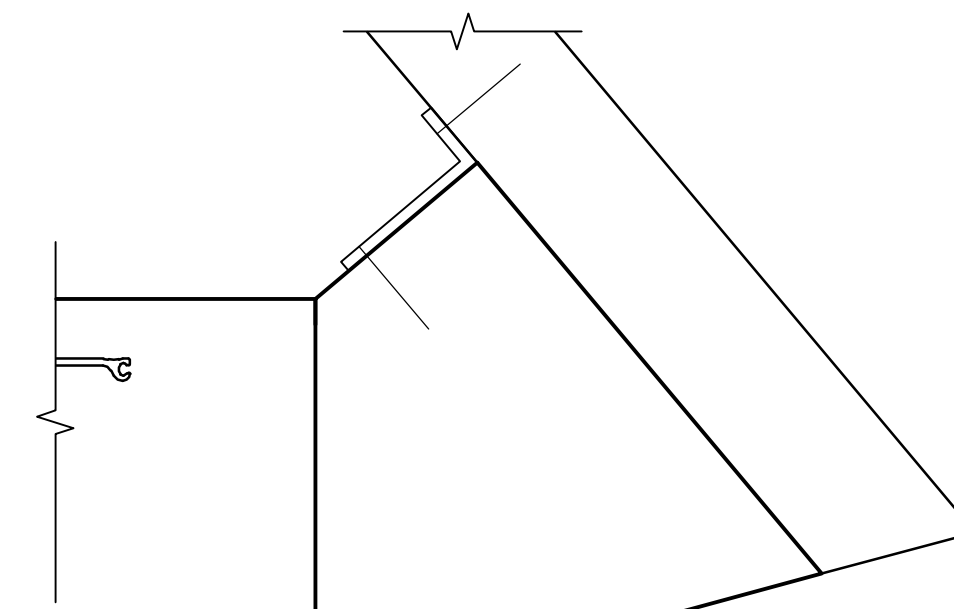
SOUTH FOUNDATION PLAN



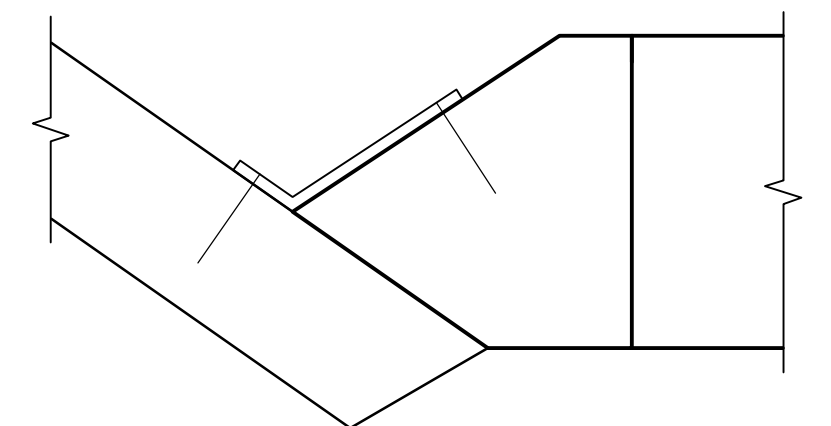
BENT PLATE PLAN LOCATIONS



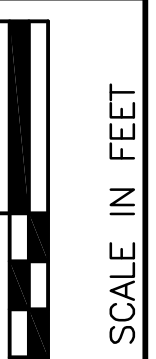
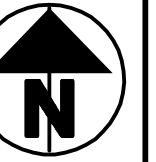
SECTION A



SOUTH CONNECTION



NORTH CONNECTION

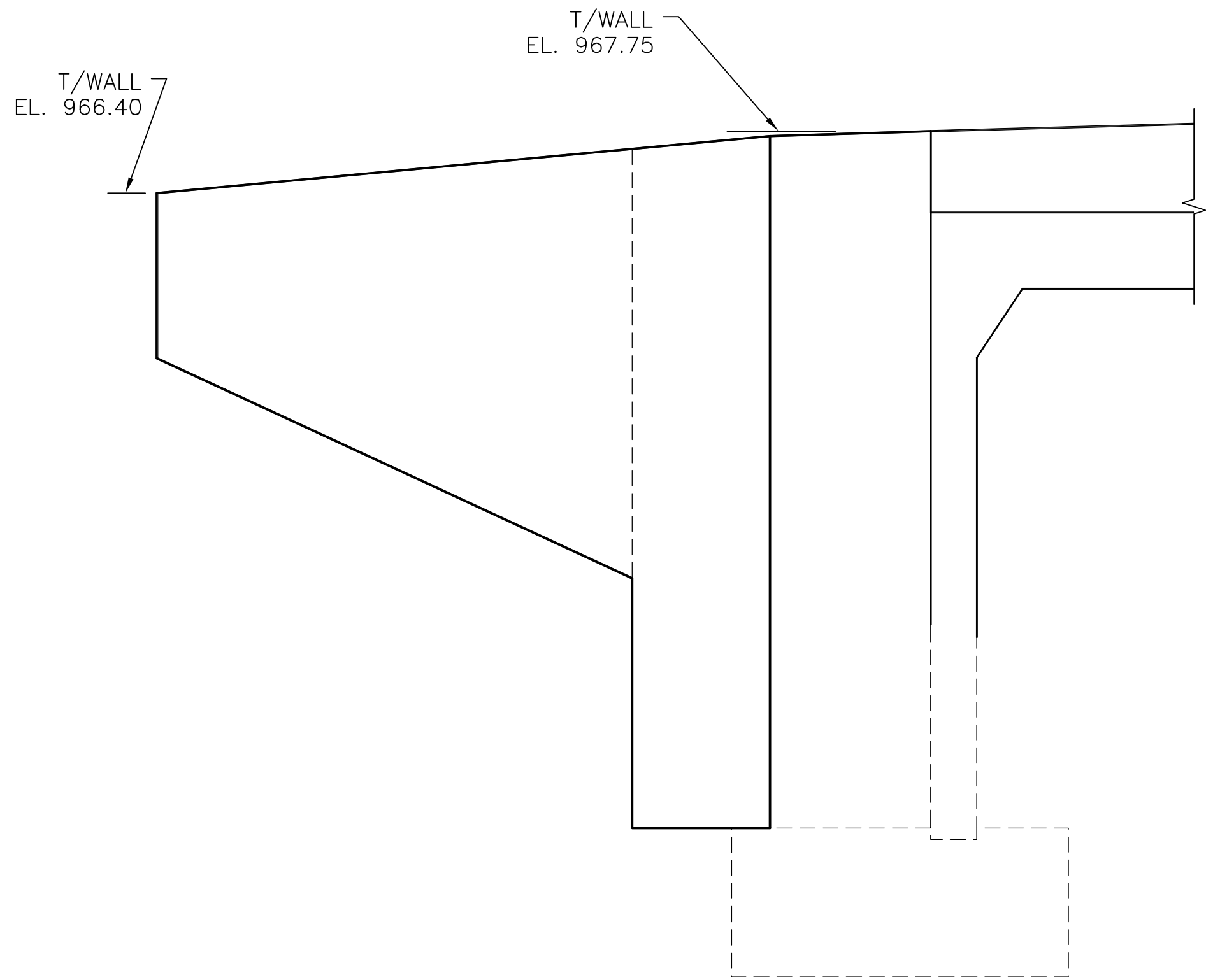


CALCULATED
CHECKED

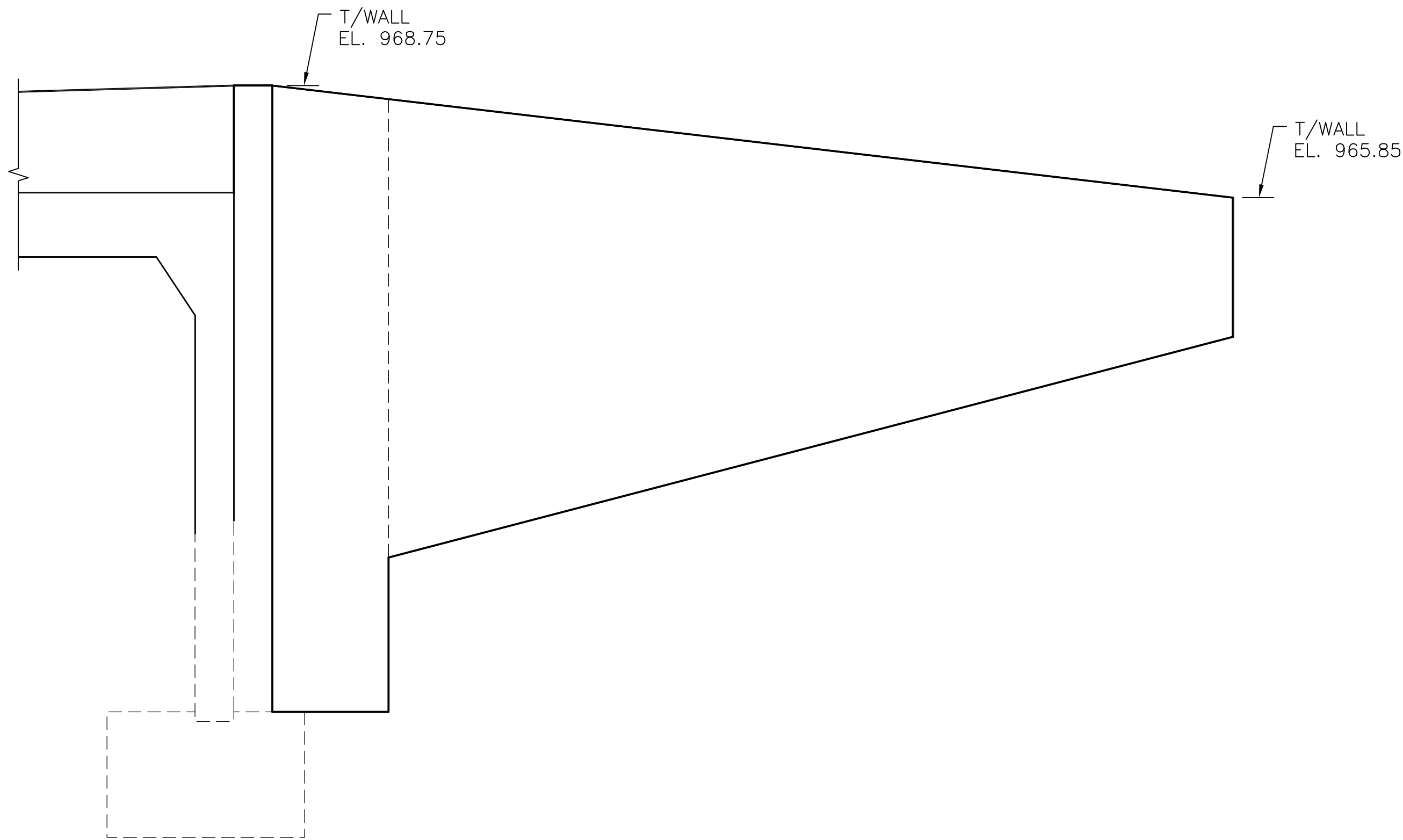
CULVERT PLANS AND DETAILS
FOUNDATION DEMO & REINF.

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD

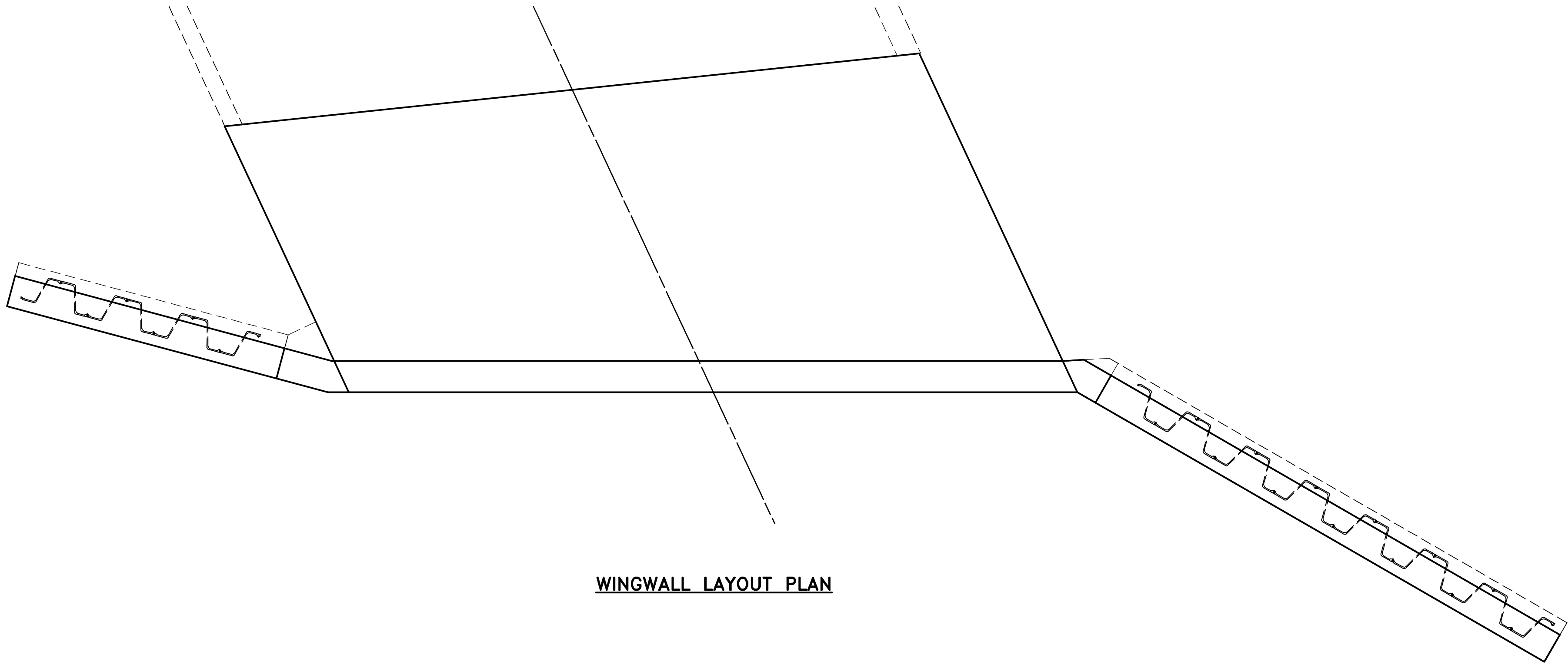
SNAR_JASON_U:\173608763\Task 2 - Waggoner Road\design\plan\set\structures\173608763\H03.dwg CULVERT PLANS AND DETAILS Last Saved: May 01, 2015 11:33 AM, JSNAR Plotted: May 01, 2015 11:34 AM



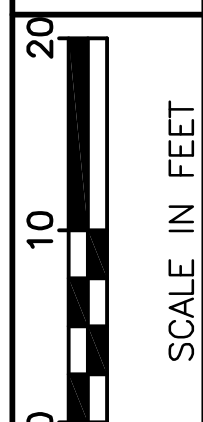
SOUTH WINGWALL
INLET LOOKING WEST



NORTH WINGWALL
INLET LOOKING WEST



WINGWALL LAYOUT PLAN



CALCULATED	-
CHECKED	-

CULVERT PLANS AND DETAILS
WINGWALL REINF. WALLS & HEADWALL

WAGGONER ROAD
SHARED USE PATH & WIDENING
FROM EAST BROAD ST
TO CHAPEL STONE RD