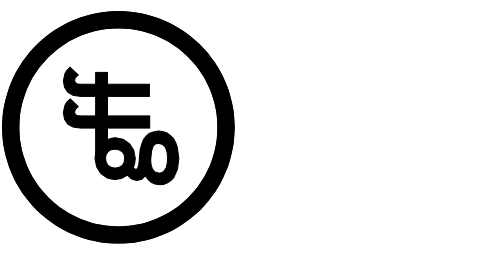


**WARNING**  
 CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47  
 SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY  
 BM #2 REF. ELEVATION = 547.84  
 SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

**Good Fulton & Farrell Architects**  
 214.303.1500/Tel  
 214.303.1512/Fax  
 www.gff.com  
 2908 Fairmount Street  
 Suite 300  
 Dallas, Texas 75201



**icon**  
 Consulting Engineers, Inc.  
 Civil Engineers - Designers - Planners  
 Bicentennial Financial Center  
 250 W. Southlake Blvd., Suite 117  
 Southlake, TX 76092  
 Phone: (817) 552-8210  
 Fax: (817) 552-3128



**FIORI**  
**ON VITRUVIAN PARK**  
 3990 VITRUVIAN WAY  
 ADDISON, TX 75001

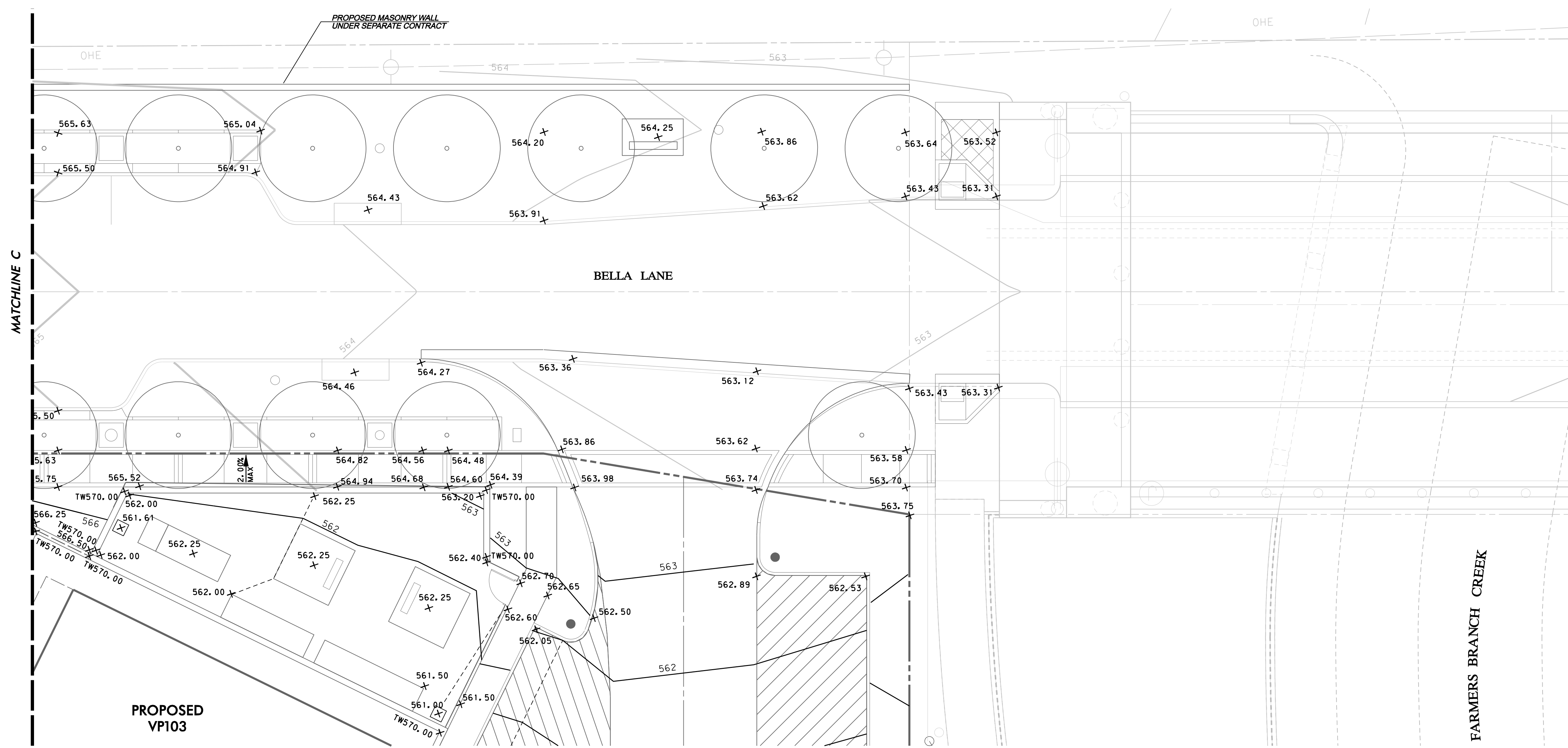
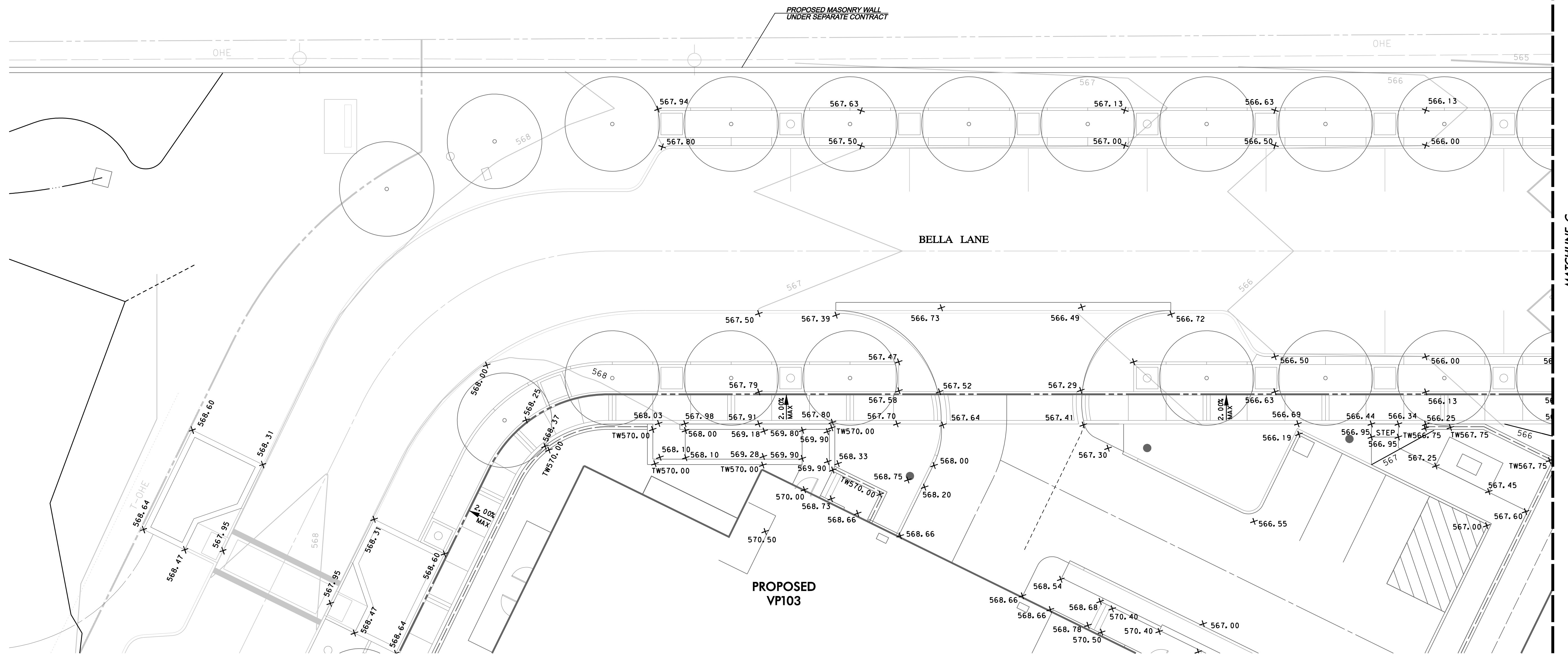
No.	Date	Item
1	11.02.2012	BELLA CURB RETURN
2	10.31.2012	STREETSCAPE CONST
3	05.23.2012	PR #6
4	11.18.2011	PR #1

ICE  
 Drawn  
 JAM  
 Checked  
 BFD  
 Approved

**STREETSCAPE GRADING PLAN**

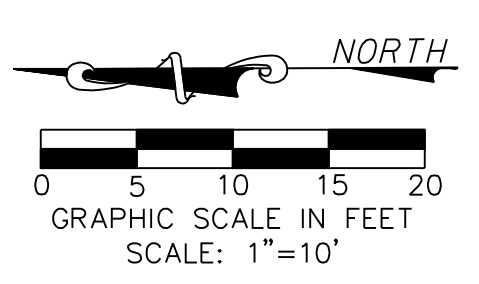
Project No. 10061.00  
 Date 08.25.11  
 Last Revision

**C0-3.02**  
 RECORD DRAWINGS 11/04/13

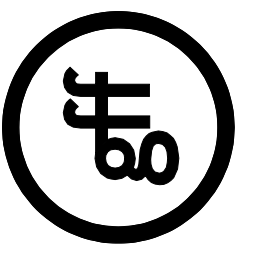


**WARNING**  
 CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-246-4443) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47  
 SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE  
 1127' NORTH OF VITRUVIAN WAY  
 BM #2 REF. ELEVATION = 547.84  
 SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.



**Good Fulton & Farrell Architects**  
 214.303.1500/Tel  
 214.303.1512/Fax  
 www.gff.com



**icon**  
 Consulting Engineers, Inc.  
 Civil Engineers - Designers - Planners  
 Biennial Financial Center  
 250 W. Southlake Blvd., Suite 117  
 Southlake, TX 76092  
 Phone: (817) 552-8210  
 Fax: (817) 552-3128



**FIORI**  
**ON VITRUVIAN PARK**  
 3990 VITRUVIAN WAY  
 ADDISON, TX 75001

No.	Date	Item	REVISIONS
1	11.18.2011	PR #1	
2	05.23.2012	PR #6	
3	10.31.2012	STREETSCAPE CONST	

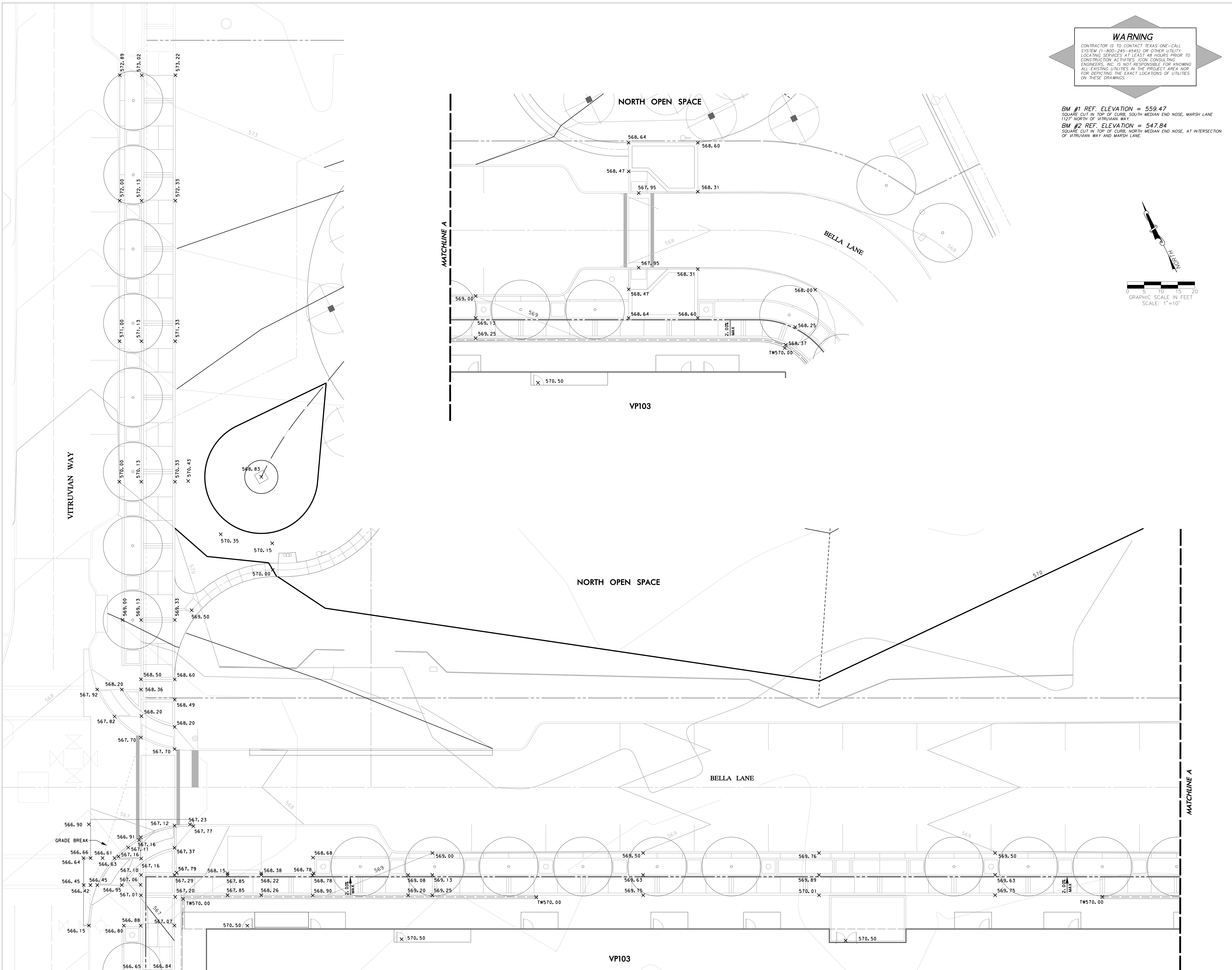
ICE  
 Drawn  
 JAM  
 Checked  
 BFD  
 Approved



**STREETSCAPE GRADING PLAN**

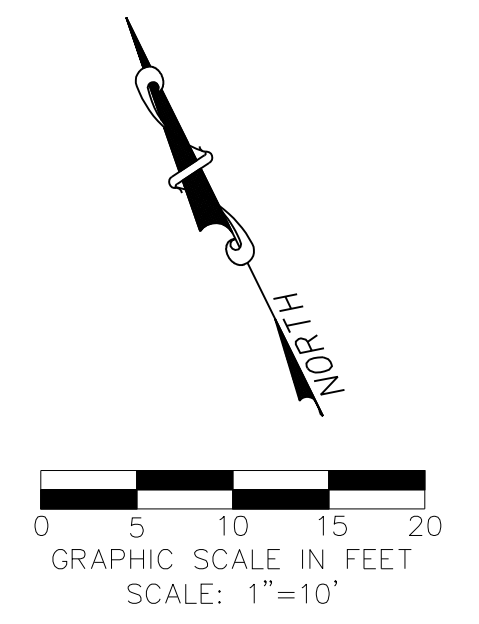
Project No. 10061.00  
 Date 08.25.11  
 Last Revision

**C0-3.03**  
 RECORD DRAWINGS 11/04/13

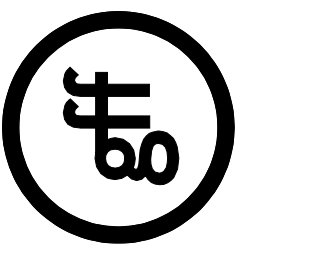


**WARNING**  
 CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-345-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47  
 SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.  
 BM #2 REF. ELEVATION = 547.84  
 SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.



**Good Fulton & Farrell Architects**  
 214.303.1500/Tel  
 214.303.1512/Fax  
 www.gff.com



**icon**  
 Consulting Engineers, Inc.  
 Civil Engineers - Designers - Planners  
 BiCentennial Financial Center  
 250 W. Southlake Blvd., Suite 117  
 Southlake, TX 76092  
 Phone: (817) 552-8210  
 Fax: (817) 552-3128



**FIORI**  
 ON VITRUVIAN PARK  
 3990 VITRUVIAN WAY  
 ADDISON, TX 75001

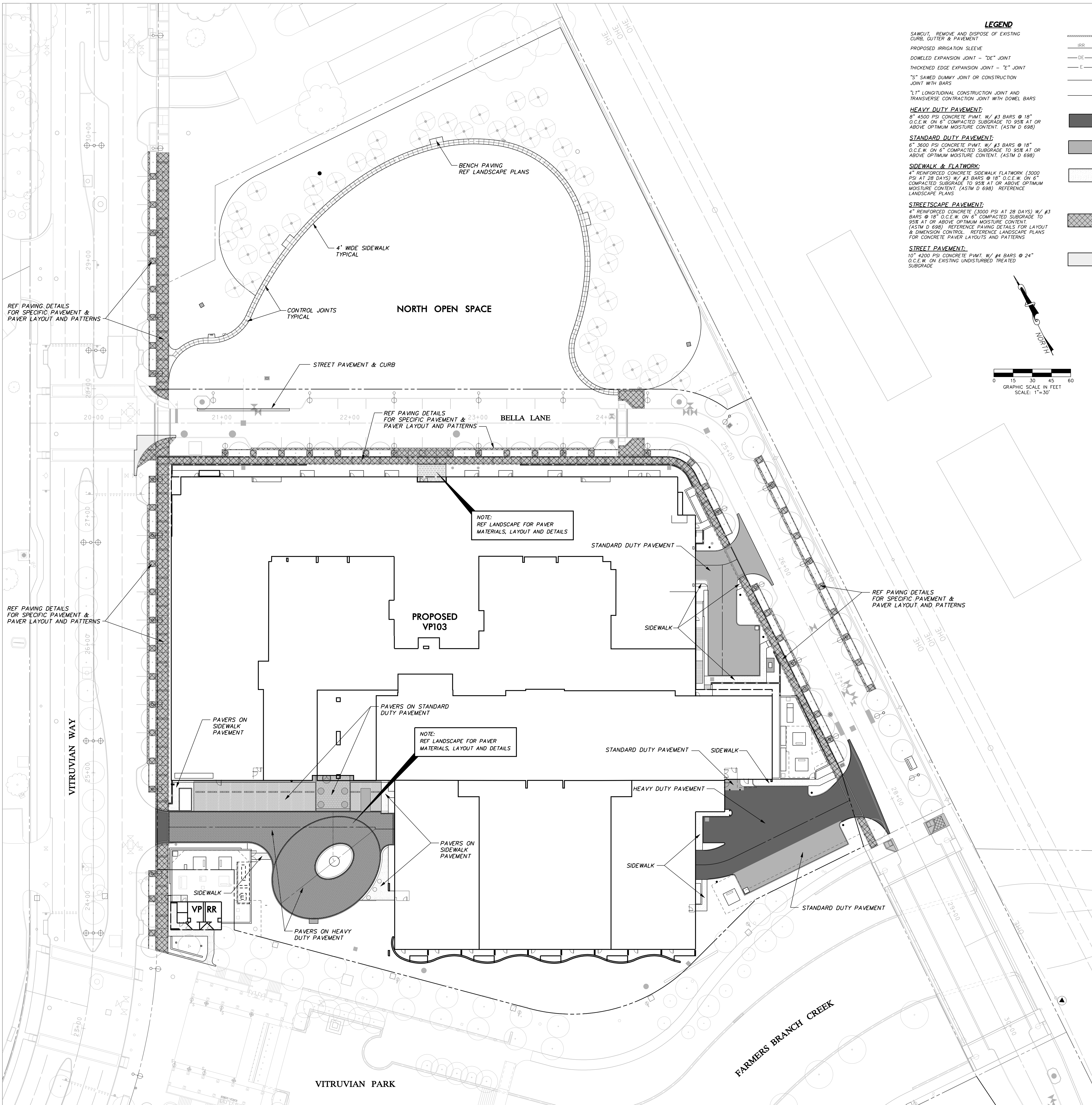
No.	Date	Item
01.18.2013		NORTH OPEN SPACE
REVISIONS		

ICE  
 Drawn  
 JAM  
 Checked  
 BFD  
 Approved

**STREETSCAPE GRADING PLAN**

Project No. 10061.00  
 Date 08.25.11  
 Last Revision

**C0-3.04**  
 RECORD DRAWINGS 11/04/13



**LEGEND**

- SAWCUT, REMOVE AND DISPOSE OF EXISTING CURB, GUTTER & PAVEMENT
- PROPOSED IRRIGATION SLEEVE
- DOWELED EXPANSION JOINT - "DE" JOINT
- THICKENED EDGE EXPANSION JOINT - "E" JOINT
- "S" SAWED DUMMY JOINT OR CONSTRUCTION JOINT WITH BARS
- 1" LONGITUDINAL CONSTRUCTION JOINT AND TRANSVERSE CONSTRUCTION JOINT WITH BARS
- HEAVY DUTY PAVEMENT:**  
8" 4500 PSI CONCRETE PAVT. W/ #3 BARS @ 18" O.C.E.W. ON 6" COMPACTED SUBGRADE TO 95% AT OR ABOVE OPTIMUM MOISTURE CONTENT. (ASTM D 698)
- STANDARD DUTY PAVEMENT:**  
6" 3600 PSI CONCRETE PAVT. W/ #3 BARS @ 18" O.C.E.W. ON 6" COMPACTED SUBGRADE TO 95% AT OR ABOVE OPTIMUM MOISTURE CONTENT. (ASTM D 698)
- SIDEWALK & FLATWORK:**  
4" REINFORCED CONCRETE SIDEWALK FLATWORK (3000 PSI AT 28 DAYS) W/ #3 BARS @ 18" O.C.E.W. ON 6" COMPACTED SUBGRADE TO 95% AT OR ABOVE OPTIMUM MOISTURE CONTENT. (ASTM D 698) REFERENCE LANDSCAPE PLANS FOR CONCRETE PAVT. LAYOUTS AND PATTERNS
- STREETSCAPE PAVEMENT:**  
4" REINFORCED CONCRETE (3000 PSI AT 28 DAYS) W/ #3 BARS @ 18" O.C.E.W. ON 6" COMPACTED SUBGRADE TO 95% AT OR ABOVE OPTIMUM MOISTURE CONTENT. (ASTM D 698) REFERENCE PAVING DETAILS FOR LAYOUT & DIMENSION CONTROL. REFERENCE LANDSCAPE PLANS FOR CONCRETE PAVT. LAYOUTS AND PATTERNS
- STREET PAVEMENT:**  
10" 4200 PSI CONCRETE PAVT. W/ #4 BARS @ 24" O.C.E.W. ON EXISTING UNDISTURBED TREATED SUBGRADE

**WARNING**

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4543) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

**PAVING NOTES**

1. **GENERAL CONSTRUCTION NOTES:** REFER TO SHEET CO-1.00 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.
2. **PROTECTION OF EXISTING IMPROVEMENTS:** THE CONTRACTOR SHALL TAKE CARE NOT TO DISTURB EXISTING UTILITIES, BUILDING FOUNDATION OR OTHER SITE STRUCTURES DURING PAVEMENT OPERATIONS.
3. **SUBGRADE PREPARATION:** PREPARATION OF SUBGRADE UNDER PAVED AREAS SHALL BE PERFORMED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' SPECIFICATIONS OR THE GEOTECHNICAL REPORT. THE MORE RESTRICTIVE REQUIREMENTS SHALL APPLY.  
PREPARATION OF THE SUBGRADE FOR PAVING WITHIN RIGHT-OF-WAY, ACCESS EASEMENTS AND/OR FIRE LANES SHALL NOT BE INITIATED UNTIL ALL TESTING OF UNDERGROUND UTILITIES HAS BEEN COMPLETED AND VERIFIED TO MEET THE GOVERNING AUTHORITIES' SPECIFICATIONS AND AUTHORIZATION TO PROCEED HAS BEEN RECEIVED FROM THE INSPECTOR.  
PAVEMENT SUBGRADE SHALL NOT BE ALLOWED TO RETAIN WATER. WET MATERIAL SHALL BE REMOVED TO DRY, SOUND MATERIAL AND APPROPRIATE DENSITY ACHIEVED PRIOR TO PAVING OPERATIONS.
4. **PROOF-ROLL SUBGRADE:** THE SUBGRADE SHALL BE PROOF-ROLLED WITH HEAVY PNEUMATIC EQUIPMENT. ANY SOFT OR PUMPING AREAS SHALL BE EXCAVATED TO FIRM SUBGRADE AND BACKFILLED AND RE-COMPACTED IN CONFORMANCE WITH THE GEOTECHNICAL REPORT.
5. **HYDRATED LIME:** HYDRATED LIME (IF REQUIRED) SHALL MEET THE REQUIREMENTS OF TxDOT ITEM 260. LIME TREATMENT USED AS SUBGRADE. LIME SHALL BE APPLIED AT THE RATE OF 6% BY WEIGHT, THOROUGHLY MIXED AND BLENDED WITH THE TOP 6" OF SUBGRADE AND UNIFORMLY COMPACTED TO A MINIMUM OF 100 PERCENT OF STANDARD PROCTOR (ASTM D698) DETERMINED BY THAT TEST. LIME STABILIZATION SHALL EXTEND ONE (1) FOOT OUTSIDE THE LIMITS OF THE PAVED AREA. IT SHOULD BE PROTECTED AND MAINTAINED IN A MOST CONDITION UNTIL THE PAVEMENT IS PLACED.
6. **SAND CUSHION PROHIBITED:** THE USE OF SAND CUSHION UNDER PAVEMENT, INCLUDING SIDEWALKS, IS STRICTLY PROHIBITED.
7. **REINFORCING BARS:** ALL REINFORCING BARS SHALL BE GRADE 40 KSI DEFORMED REINFORCING STEEL. SIZE AND SPACING SHALL BE IN ACCORDANCE WITH THE DETAILS.
8. **BAR CHAIRS:** ALL REINFORCING STEEL AND DOWEL BARS IN PAVEMENT SHALL BE SUPPORTED AND MAINTAINED AT THE CORRECT CLEARANCES BY THE USE OF BAR CHAIRS OR OTHER APPROVED SUPPORT.
9. **CONNECTION TO EXISTING REINFORCED PAVEMENT:** WHERE PROPOSED PAVEMENT TO EXISTING PAVEMENT IS TO BE CONSTRUCTED BY THE CONTRACTOR, AT LEAST 15" OF REINFORCING STEEL SHALL BE EXPOSED FROM THE EXISTING PAVEMENT, OR THE CONTRACTOR SHALL PROVIDE HORIZONTAL DOWEL BARS PER THE DETAILS.
10. **TEMPERATURE CONDITIONS FOR CONCRETE PLACEMENT:** CONCRETE SHALL NOT BE PLACED WHEN THE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT BUT MAY BE PLACED WHEN TEMPERATURE IS ABOVE 35 DEGREES FAHRENHEIT AND RISING. THE TEMPERATURE READING SHALL BE TAKEN IN THE SHADE AND AWAY FROM ARTIFICIAL HEAT.
11. **CONCRETE PAVEMENT CURING:** MEMBRANE CURING TYPE 2, WHITE PIGMENTED, SHALL BE USED FOR CURING ALL CONCRETE SURFACES IMMEDIATELY AFTER FINISHING OF SURFACES AND SHALL BE IN ACCORDANCE WITH THE TEXAS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS ITEM #526.
12. **TESTING:** SAMPLES FOR STRENGTH TESTS OF THE CONCRETE PAVEMENT WILL BE TAKEN BY THE GEOTECHNICAL ENGINEER TO VERIFY DESIGN STRENGTH. PAVEMENT AREAS FOUND TO BE DEFICIENT IN STRENGTH SHALL BE REMOVED AND REPLACED SOLELY AT THE EXPENSE OF THE CONTRACTOR. THE GEOTECHNICAL ENGINEER SHALL ALSO RANDOMLY CORE THE PAVEMENT TO VERIFY THE THICKNESS OF CONCRETE. ANY AREA FOUND TO BE DEFICIENT IN THICKNESS SHALL BE REMOVED AND REPLACED SOLELY AT THE EXPENSE OF THE CONTRACTOR.
13. **SIDEWALKS AND RAMPS:** CONSTRUCTION OF SIDEWALKS, WHEELCHAIR RAMPS AND ACCESSIBLE ROUTES SHALL BE IN ACCORDANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE AMERICANS DISABILITY ACT (ADA).
14. **PAVEMENT MARKINGS:** PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE TEXAS "UNIFORM TRAFFIC MANUAL FOR PAVEMENT MARKINGS". FIRE LANES SHALL BE STRIPPED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' REQUIREMENTS. ALL HANDICAP SYMBOLS, SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH TAS AND ADA STANDARDS.

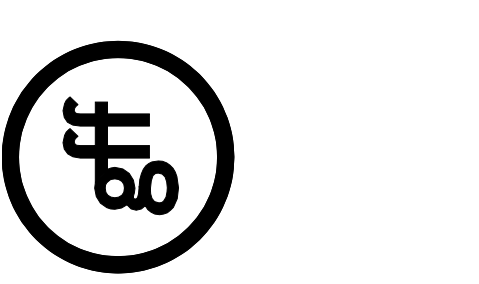
**CONDUIT AND SLEEVING NOTES**

1. **GENERAL CONSTRUCTION NOTES:** REFER TO SHEET CO-1.00 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.
2. **PLACEMENT OF CONDUIT AND SLEEVES:** ALL UNDERGROUND CONDUIT AND SLEEVES ARE TO BE PLACED BEFORE SITE PAVING CONSTRUCTION COMMENCES AND SHALL BE BURIED A MINIMUM OF 24" BELOW THE BOTTOM OF PAVEMENT, EXCEPT ELECTRICAL CONDUIT WHICH REQUIRED A MINIMUM COVER OF 36". ALL CONDUIT AND SLEEVES SHALL EXTEND TWO (2) FEET BEYOND THE BACK OF CURB OR EDGE OF SIDEWALK. TURN CONDUIT UPWARD AND CAP EACH CONDUIT 6" ABOVE FINISH GRADE. THE CONTRACTOR SHALL FURNISH DETAILED AS-BUILT LOCATION INFORMATION FOR ALL CONDUIT AND SLEEVES TO THE DEVELOPER.
3. **TELEPHONE CONDUIT:** FURNISH AND INSTALL TWO (2) 4" DIAMETER SCHEDULE 40 PVC TELEPHONE CONDUIT WITH PULL WIRES FROM THE SITE PROPERTY LINE TO 5' OUTSIDE THE BUILDING WALL AT THE TELEPHONE ROOM IN THE BUILDING. CONDUIT SHALL BE CAPPED AT BOTH ENDS. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL TELEPHONE COMPANY TO VERIFY THE EXACT LOCATION OF CONDUIT TO BE INSTALLED FOR THEIR USE. MARK LOCATION OF CONDUIT WITH #3 X 36" REBAR INSTALLED 2' 2" INTO THE GROUND AT EACH END LOCATION.
4. **ELECTRIC AND GAS CONDUIT:** THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL ELECTRIC AND GAS PROVIDED TO VERIFY THE EXACT SIZE, TYPE, NUMBER AND LOCATION OF CONDUIT AND/OR SLEEVING REQUIRED TO BE PROVIDED BY THE CONTRACTOR FOR GAS AND ELECTRIC FACILITIES TO SERVE THIS SITE. MARK LOCATIONS OF CONDUIT WITH #3 X 36" REBAR INSTALLED 2" INTO THE GROUND AT EACH END LOCATION.
5. **SITE LIGHTING CONDUIT:** REFERENCE MEP PLANS FOR SITE LIGHTING AND ALL RELATED CONDUIT, WIRING PULL BOXES, POLE BASES AND ASSOCIATED ELECTRICAL WORK TO BE COORDINATED AND/OR PROVIDED FOR BY THE CONTRACTOR PRIOR TO PAVING OPERATIONS.
6. **IRRIGATION CONDUIT:** ALL IRRIGATION CONDUIT AND SLEEVES SHALL BE SCHEDULE 40 PVC, INSTALLED WITH A MINIMUM OF 24" COVER. REFERENCE THE PAVING PLAN AND/OR LANDSCAPE PLANS FOR NUMBER OF CONDUIT, SIZE AND LOCATIONS OF PER PROPOSED IRRIGATION CONDUITS AND SLEEVES.
7. **PULL LINE:** ALL UNDERGROUND CONDUIT AND SLEEVES SHALL BE INSTALLED WITH PULL LINE.
8. **CONFLICTS:** IN THE EVENT OF A CONFLICT BETWEEN CONDUIT AND STORM DRAIN AND/OR UTILITY PIPING, THE CONTRACTOR SHALL ADJUST CONDUIT DOWNWARD FOR CLEARANCE.

**PAVEMENT JOINTING NOTES**

1. **PAVEMENT JOINT LAYOUT:** IF A PROPOSED PAVEMENT JOINT LAYOUT PLAN HAS BEEN PROVIDED BY THE ENGINEER, THE CONTRACTOR SHALL IMPLEMENT THAT PLAN OR PROVIDE AN ALTERNATE JOINT LAYOUT TO THE ENGINEER FOR REVIEW. IF A PAVEMENT JOINT LAYOUT PLAN HAS NOT BEEN PROVIDED, THE CONTRACTOR WILL BE RESPONSIBLE FOR PREPARATION OF THE PLAN AND SUBMITTAL TO THE ENGINEER FOR REVIEW. THE CONTRACTORS' JOINT LAYOUT PLAN SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW A MINIMUM OF 2 WEEKS PRIOR TO BEGINNING PAVING CONSTRUCTION.
2. **SAW CUTTING:** SAW CUTTING SHALL BE DONE WITHIN EIGHT (8) HOURS OF POUR OR AS SOON AS CONCRETE CAN SUPPORT WEIGHT. THE CONTRACTOR SHALL MARK JOINT LOCATIONS AT THE CENTERLINE OF THE DOWEL LENGTH DURING HIS PAVING OPERATIONS. ALL SAWED JOINTS ARE TO BE TRUE IN ALIGNMENT AND SHALL CONTINUE THROUGH THE CURB. RADIAL JOINTS SHALL BE NO SHORTER THAN EIGHTEEN (18) INCHES.
3. **JOINT SEALING:** ALL CONSTRUCTION JOINTS SHALL BE SAWN, CLEANED OF DEBRIS, DIRT, DUST, SCALE, CURING COMPOUND AND CONCRETE, BLOWN DRY AND IMMEDIATELY SEALED. JOINT SEALING MATERIAL SHALL BE SONNEBERG SL 2 OR AN APPROVED EQUAL.
4. **ODD SHAPED PANELS:** ODD SHAPED PANELS SHALL BE REINFORCED WITH #3 BARS AT 18" EACH WAY. AN ODD SHAPE PANEL IS CONSIDERED TO BE REINFORCED IN WHICH THE SLAB TENDS TO A SHARP ANGLE WHEN THE LENGTH TO WIDTH RATIO EXCEEDS 3 TO 1 OR WHEN A SLAB IS NEITHER SQUARE NOR RECTANGULAR.
5. **EXPANSION JOINTS:** THE CONTRACTOR SHALL PROVIDE AN EXPANSION JOINT AROUND THE PERIMETER OF ANY BLOCKOUT IN THE CONCRETE PAVING.

**Good Fulton & Farrell Architects**  
214.303.1500/Tel  
214.303.1512/Fax  
www.gff.com  
2908 Fairmount Street  
Suite 300  
Dallas, Texas 75201



**icon**  
Consulting Engineers, Inc.  
Civil Engineers - Designers - Planners

Bicentennial Financial Center  
250 W. Southlake Blvd., Suite 117  
Southlake, TX 76092  
Phone: (817) 552-8210  
Fax: (817) 552-3128



**FIORI**  
**ON VITRUVIAN PARK**  
3990 VITRUVIAN WAY  
ADDISON, TX 75001

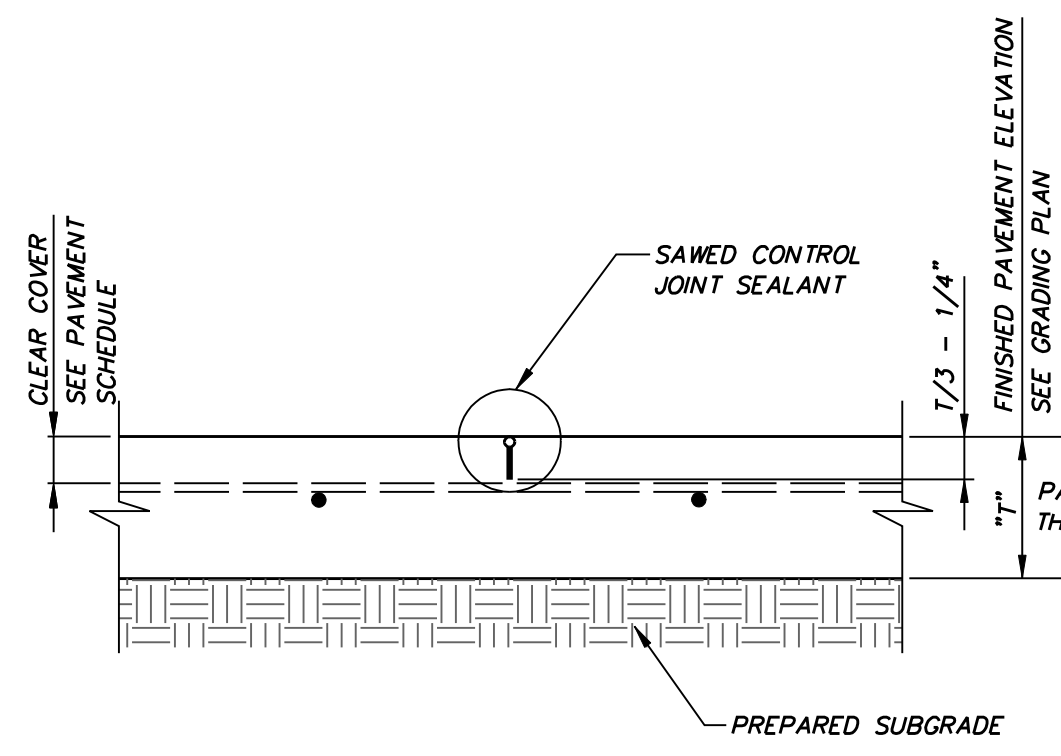
No.	Date	Item	REVISIONS
1	01.18.2013	NORTH OPEN SPACE	
2	11.02.2012	BELLA CURB RETURN	
3	10.31.2012	STREETSCAPE CONST	
4	05.23.2012	PR #6	
5	11.18.2011	PR #1	

ICE  
Drawn  
JAM  
Checked  
BFD  
Approved

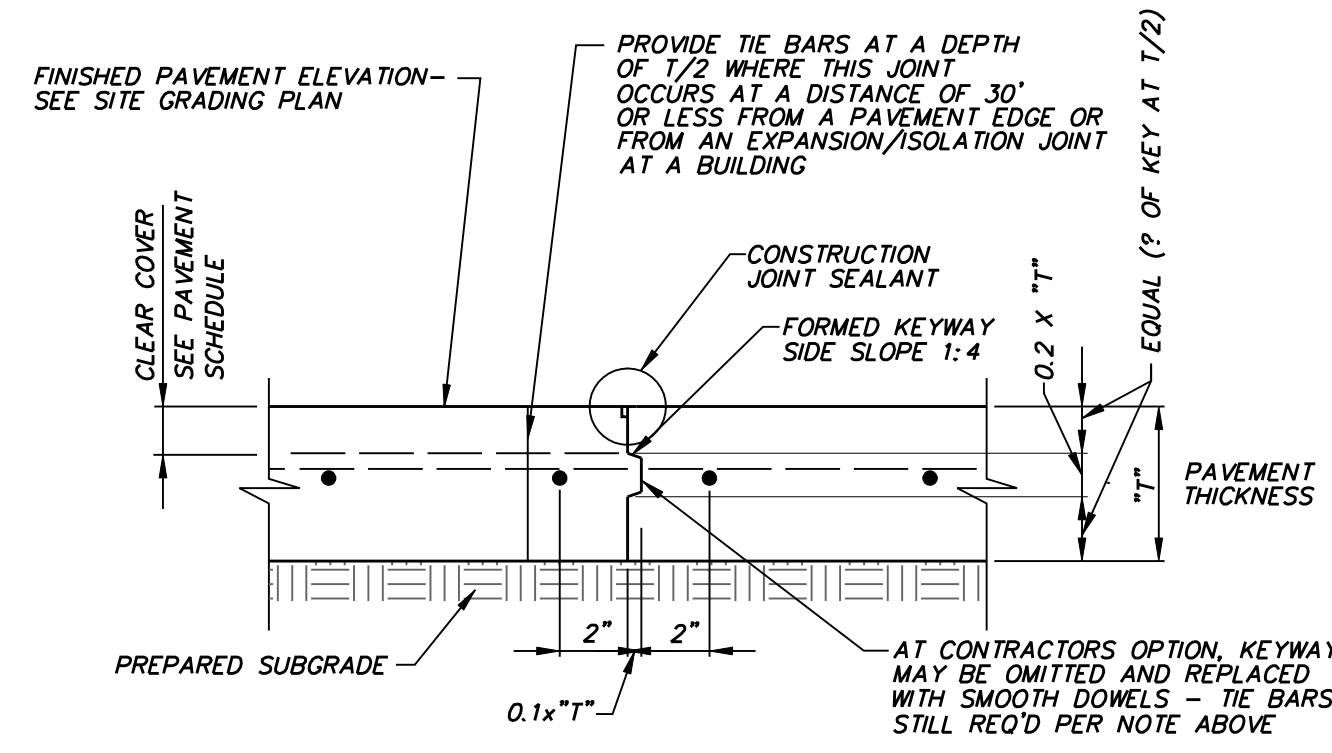
**PAVING PLAN**

Project No. 10061.00  
Date 08.25.11  
Last Revision

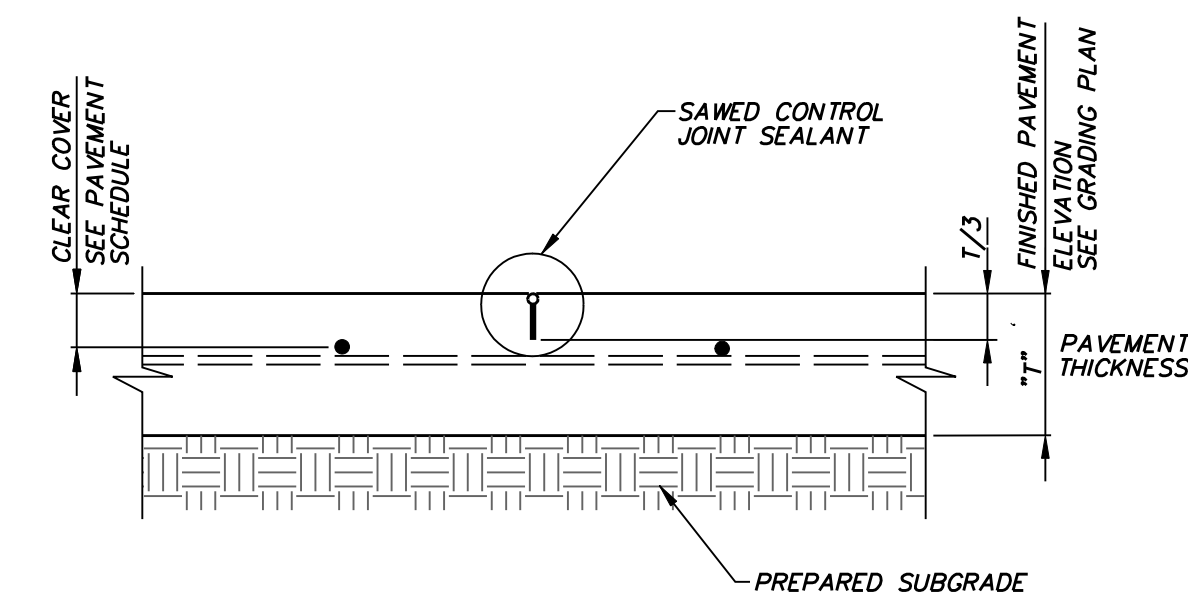
**C0-6.01**  
RECORD DRAWINGS 11/04/13



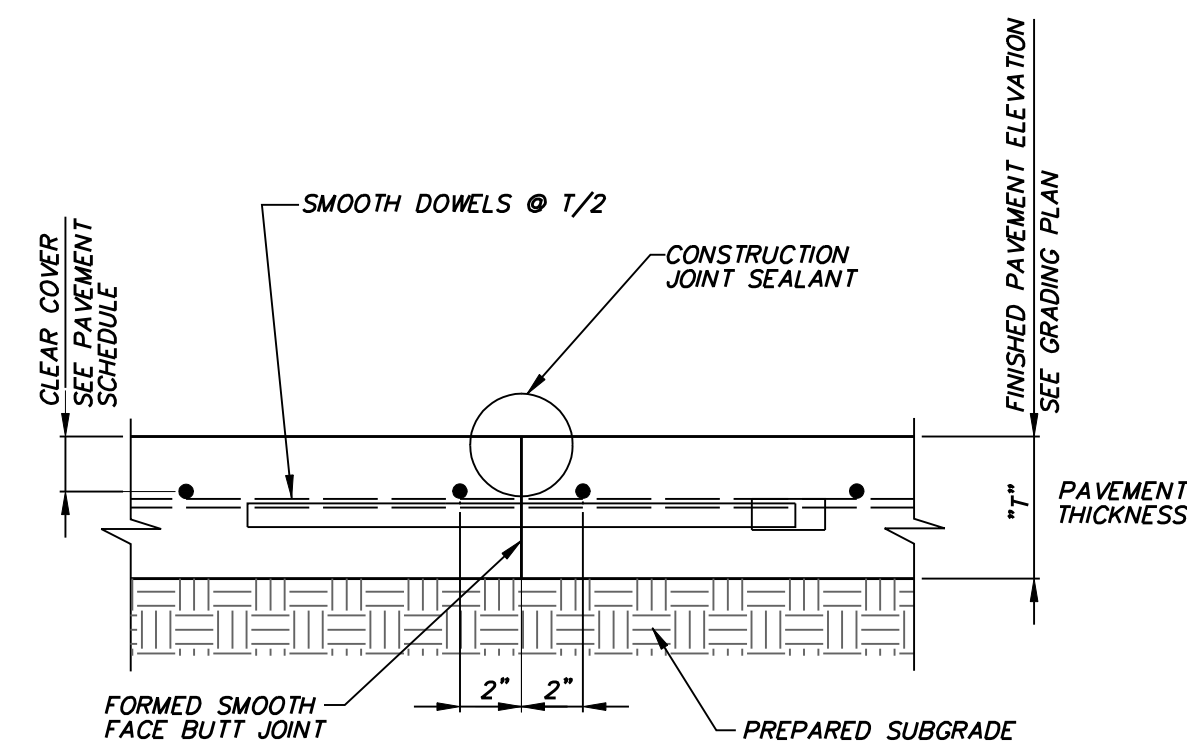
**LONGITUDINAL CONTROL JOINT**  
NOT TO SCALE



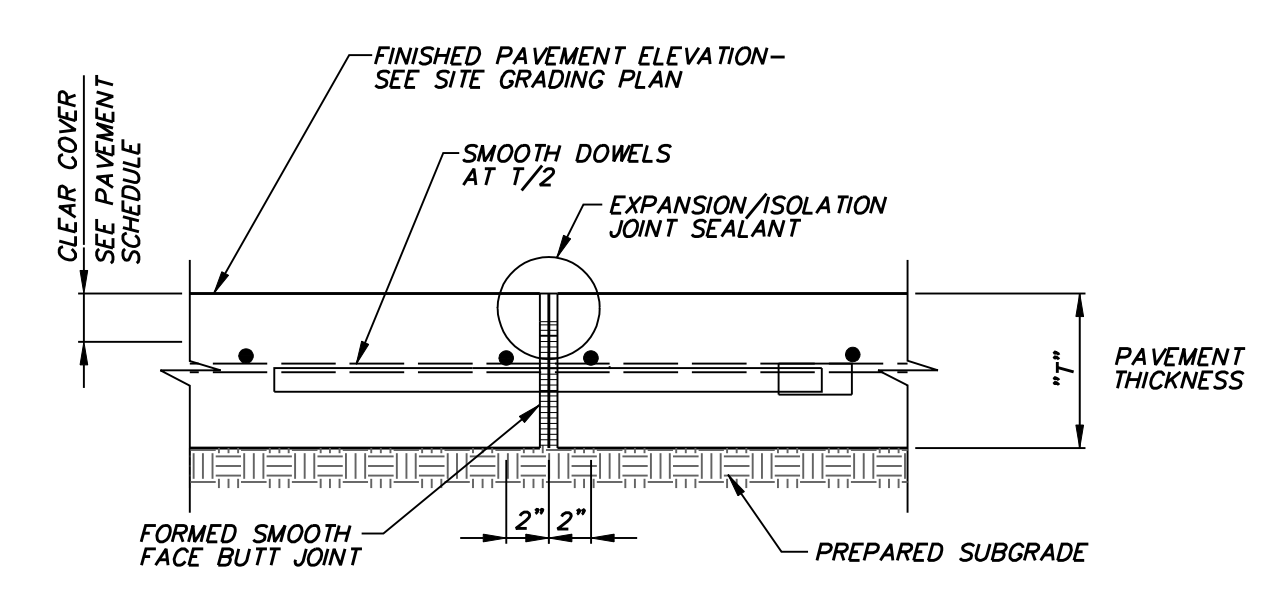
**KEYED LONGITUDINAL CONSTRUCTION JOINT**  
NOT TO SCALE



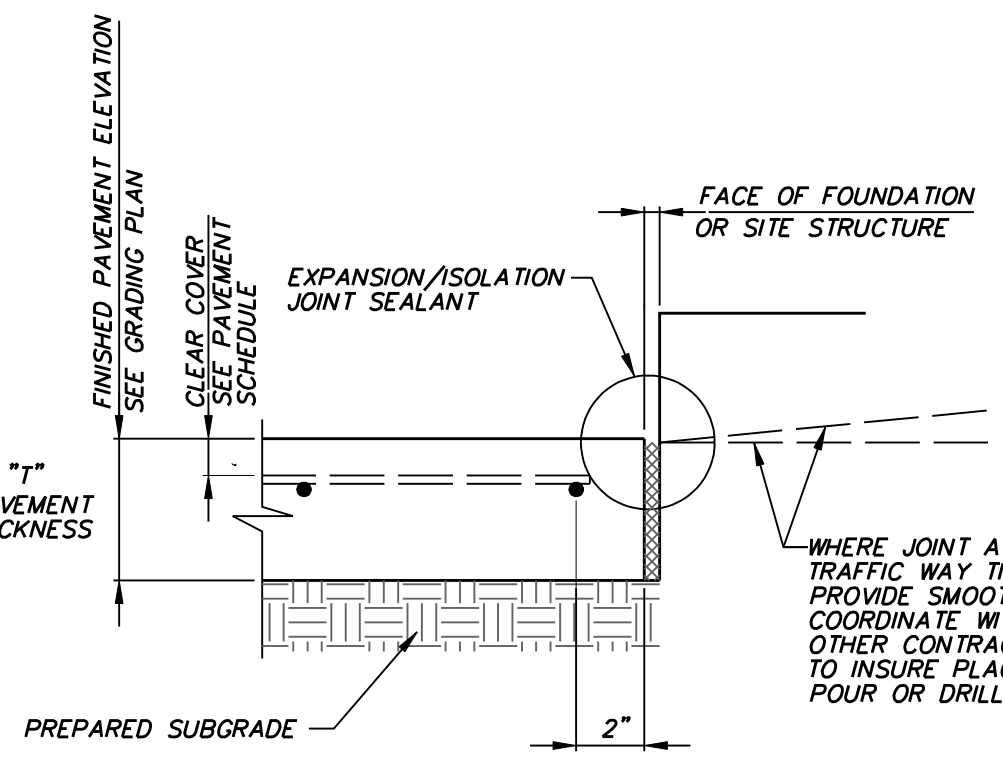
**TRANSVERSE CONTROL JOINT**  
NOT TO SCALE



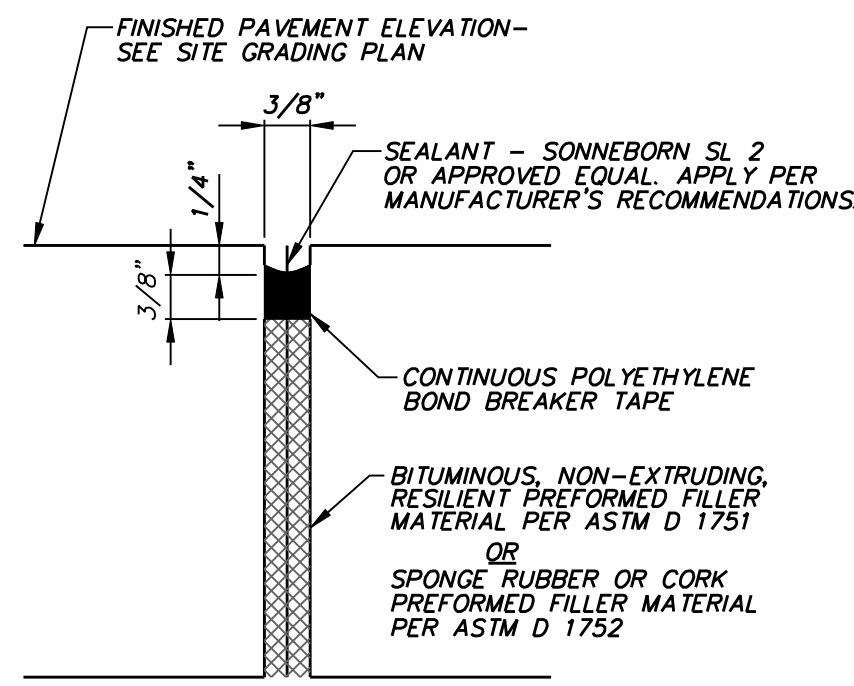
**TRANSVERSE CONSTRUCTION JOINT**  
NOT TO SCALE



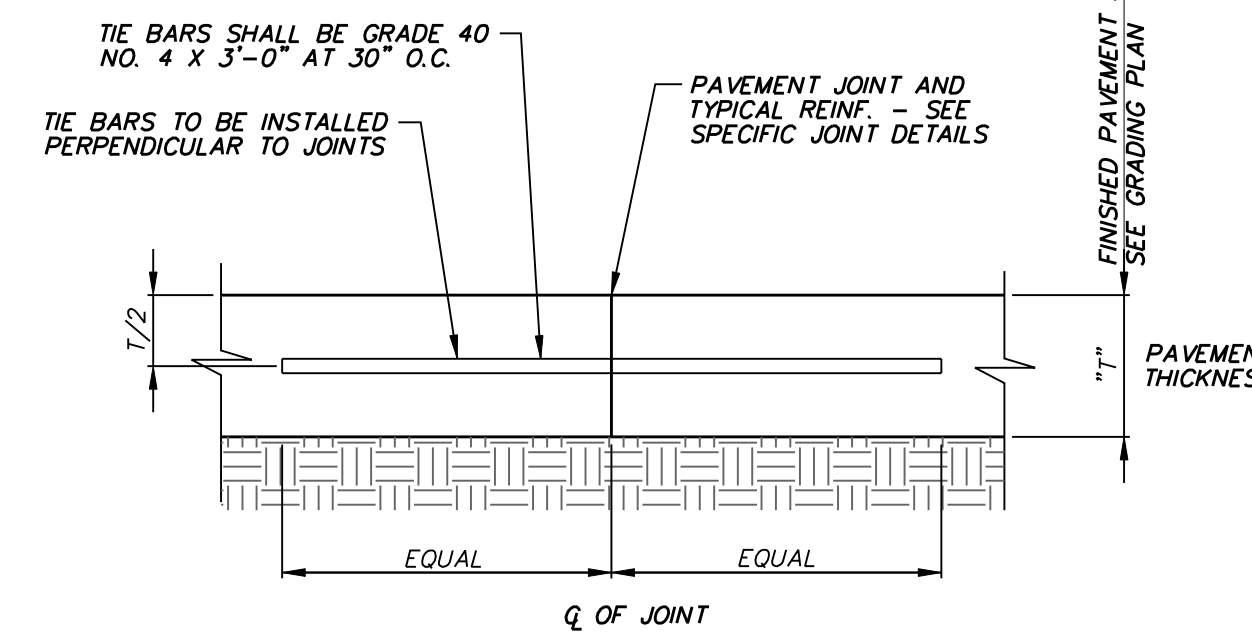
**TRANSVERSE EXPANSION JOINT**  
NOT TO SCALE



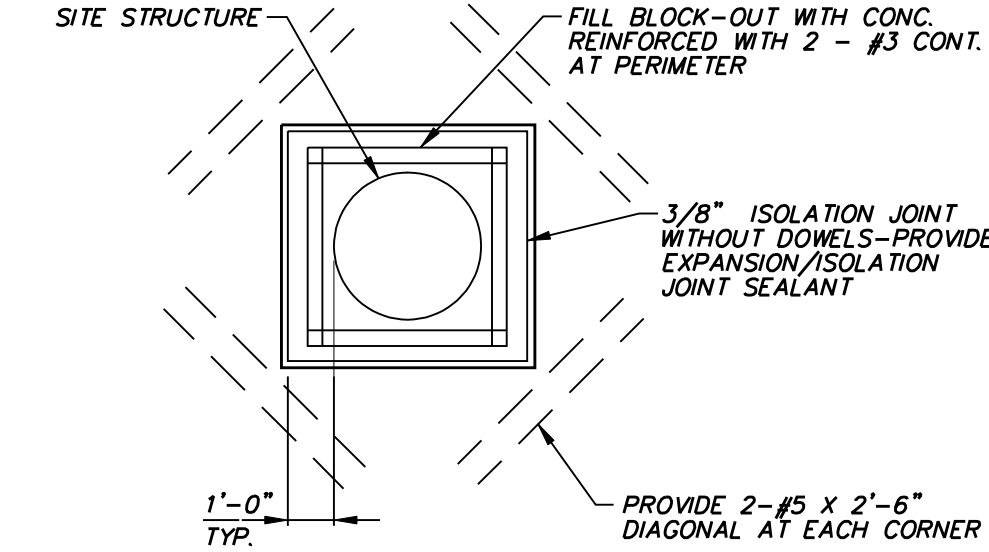
**EXPANSION / ISOLATION JOINT AT STRUCTURES**  
NOT TO SCALE



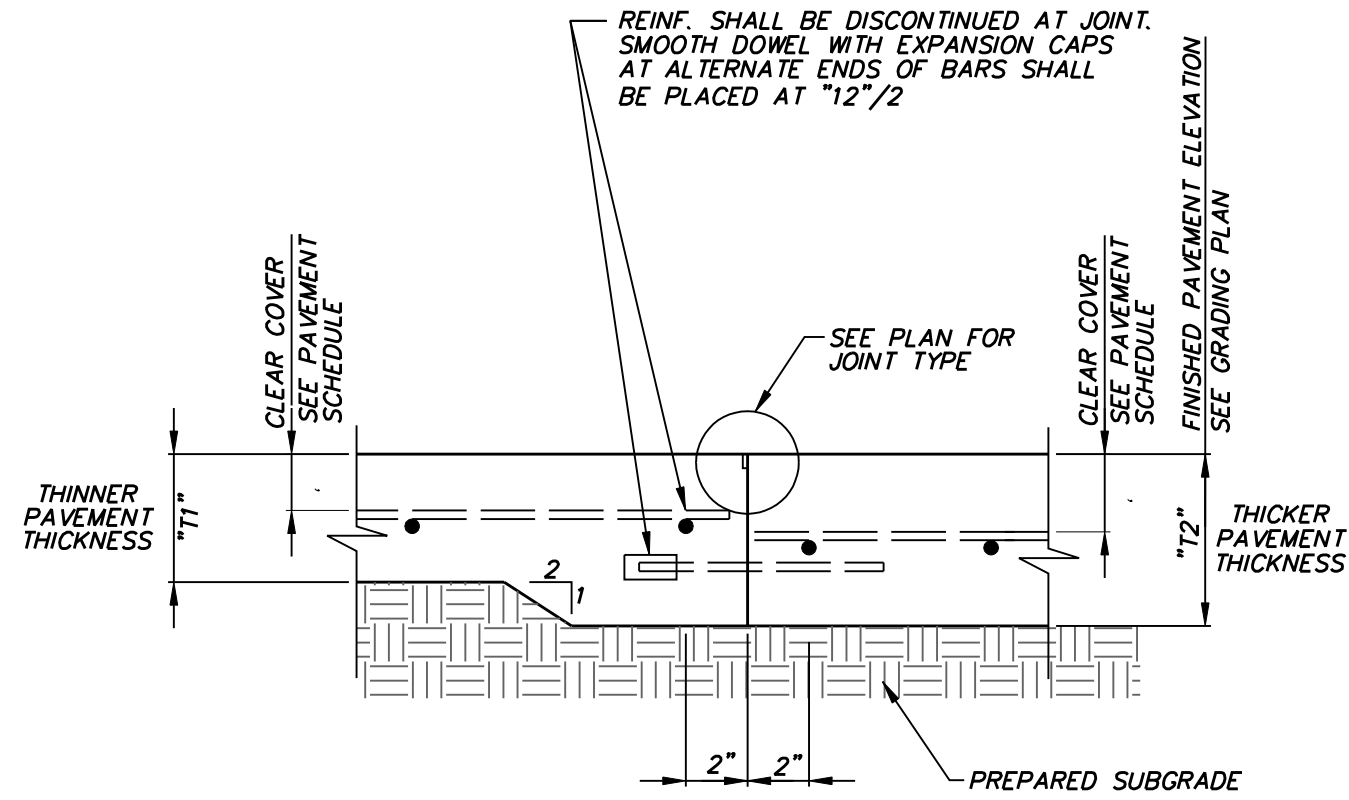
**EXPANSION / ISOLATION JOINT SEALANT**  
NOT TO SCALE



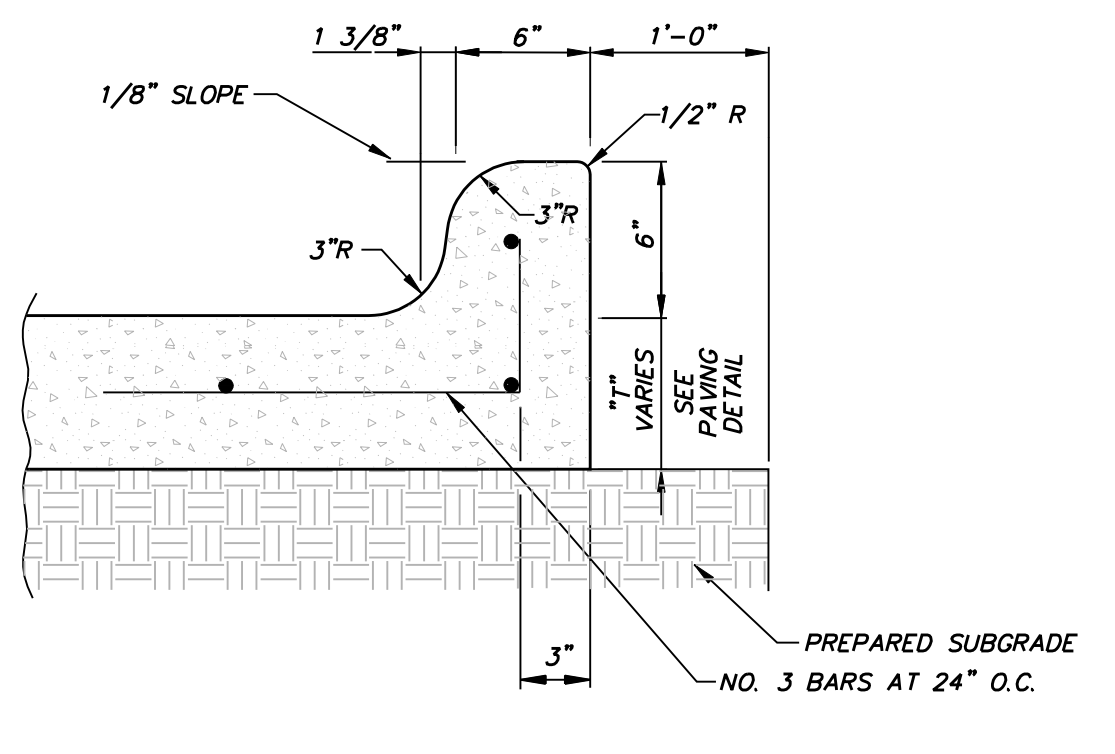
**TIE BAR**  
NOT TO SCALE



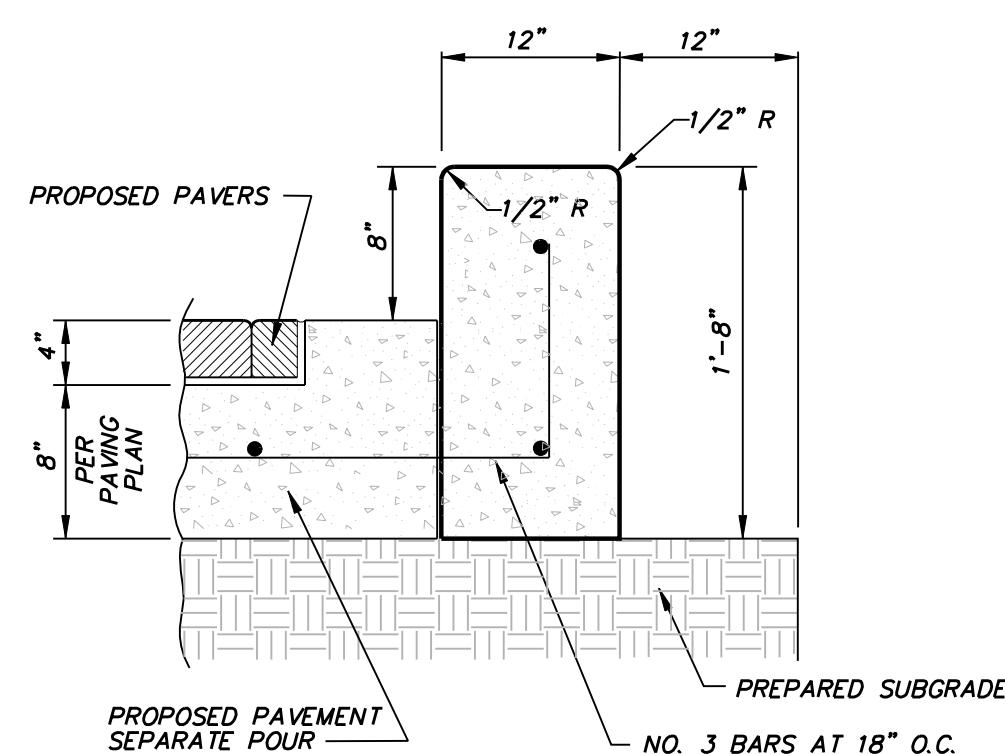
**JOINT TREATMENT AT SITE STRUCTURES**  
NOT TO SCALE



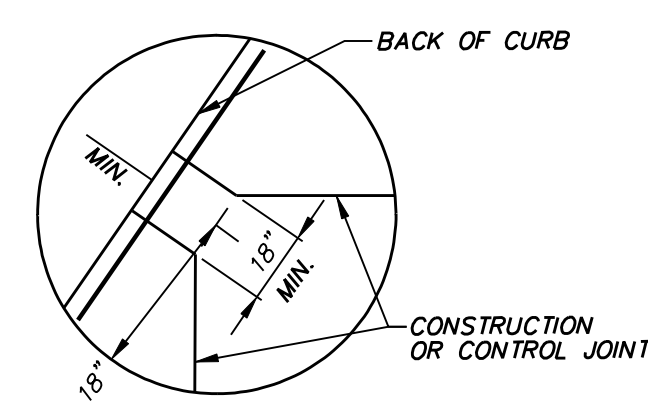
**PAVEMENT DEPTH CHANGE / ISOLATION JOINT**  
NOT TO SCALE



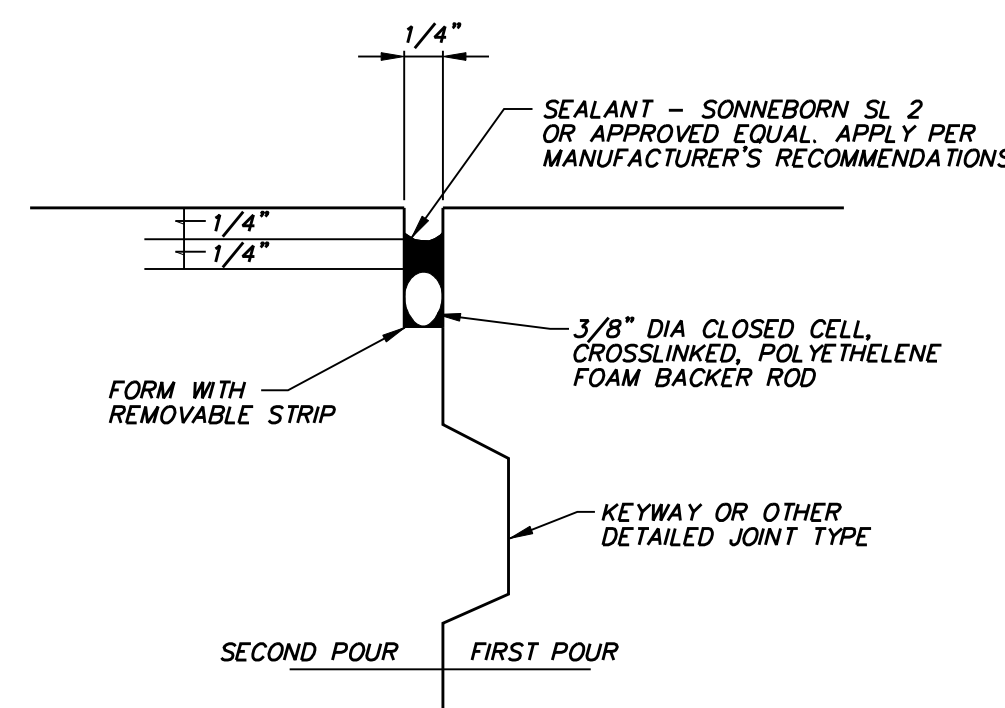
**6" INTEGRAL CURB**  
NOT TO SCALE



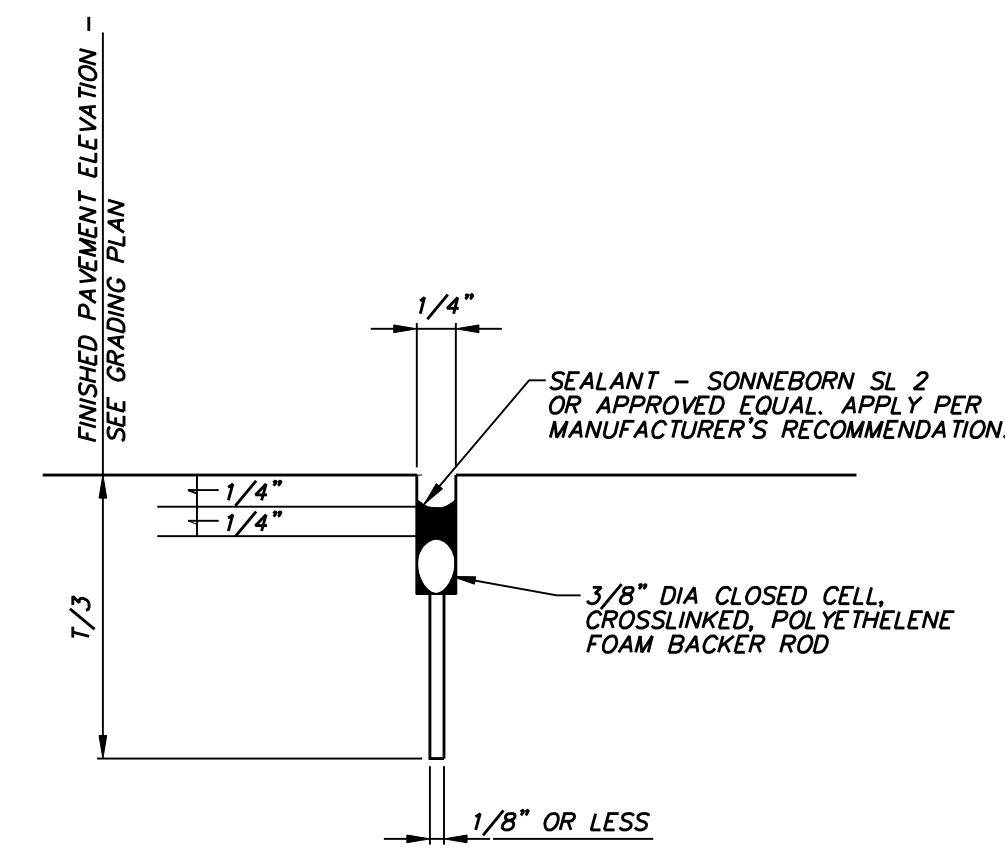
**12" WIDE FORMED CURB**  
NOT TO SCALE



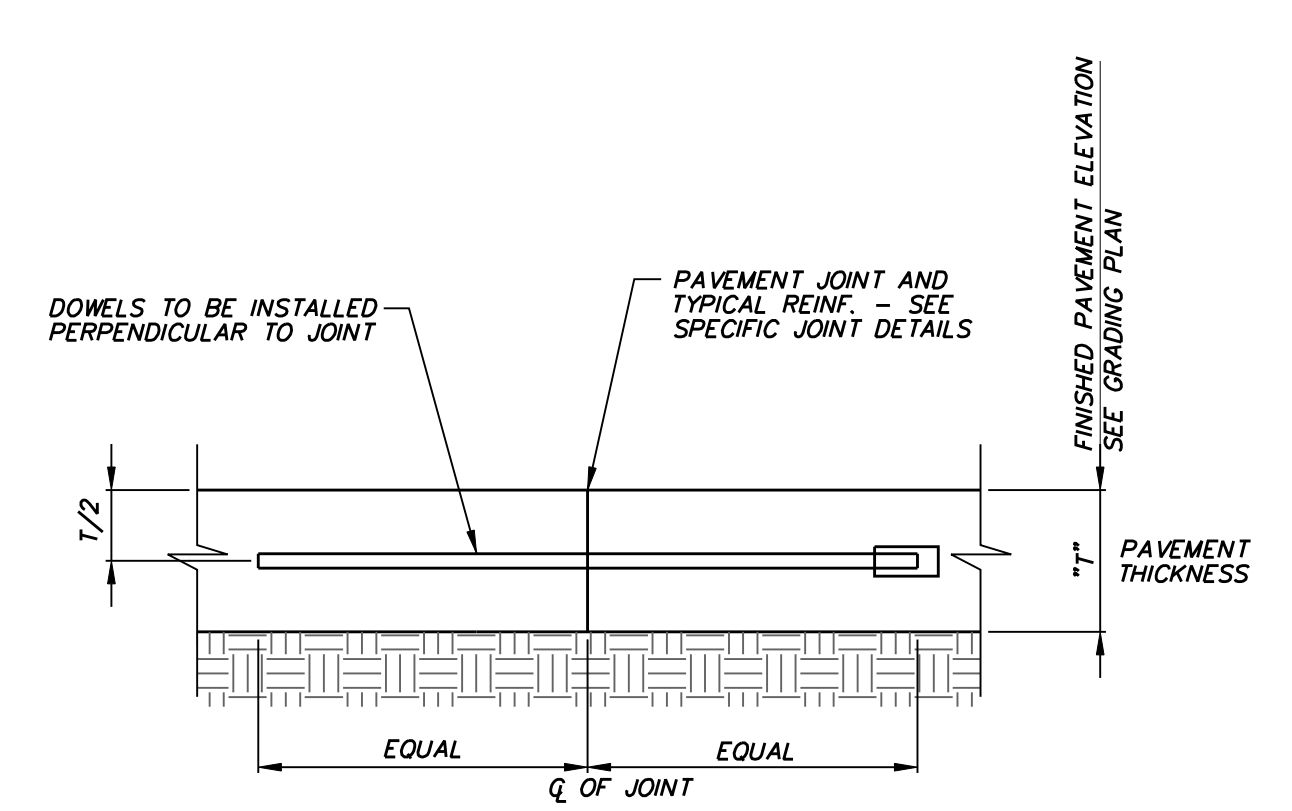
**JOINT TERMINATIONS TYPICAL "AT" ALL ANGLD**



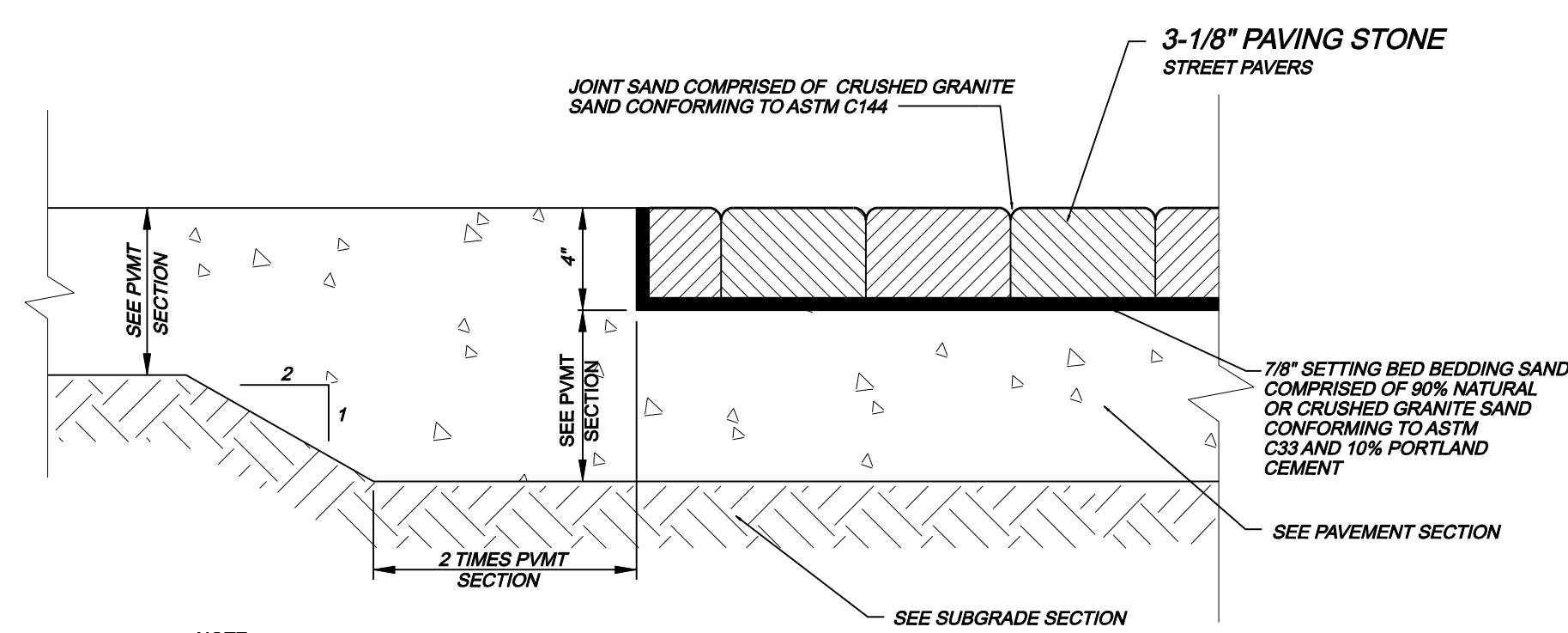
**CONSTRUCTION JOINT SEALANT**  
NOT TO SCALE



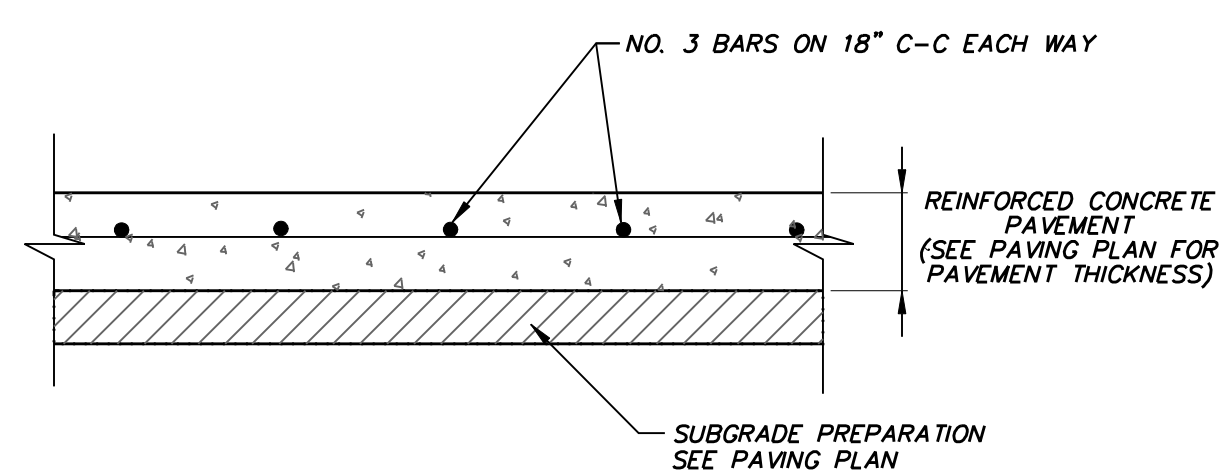
**SAWED CONTROL JOINT SEALANT**  
NOT TO SCALE



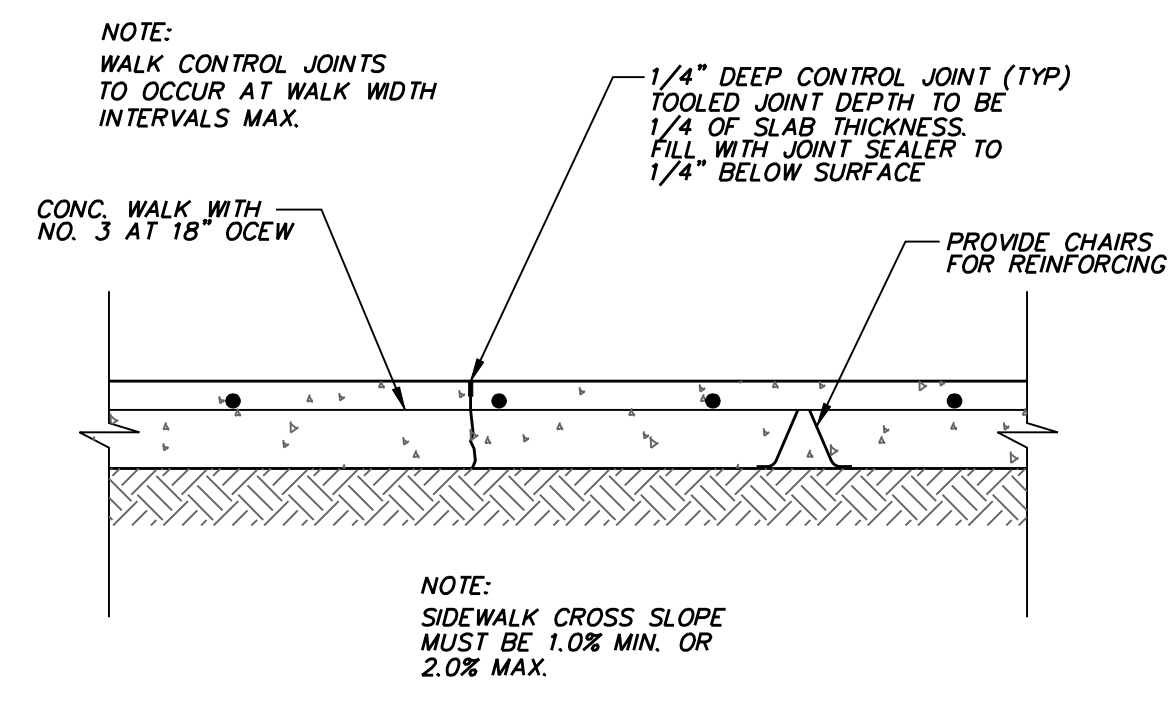
**SMOOTH DOWEL**  
NOT TO SCALE



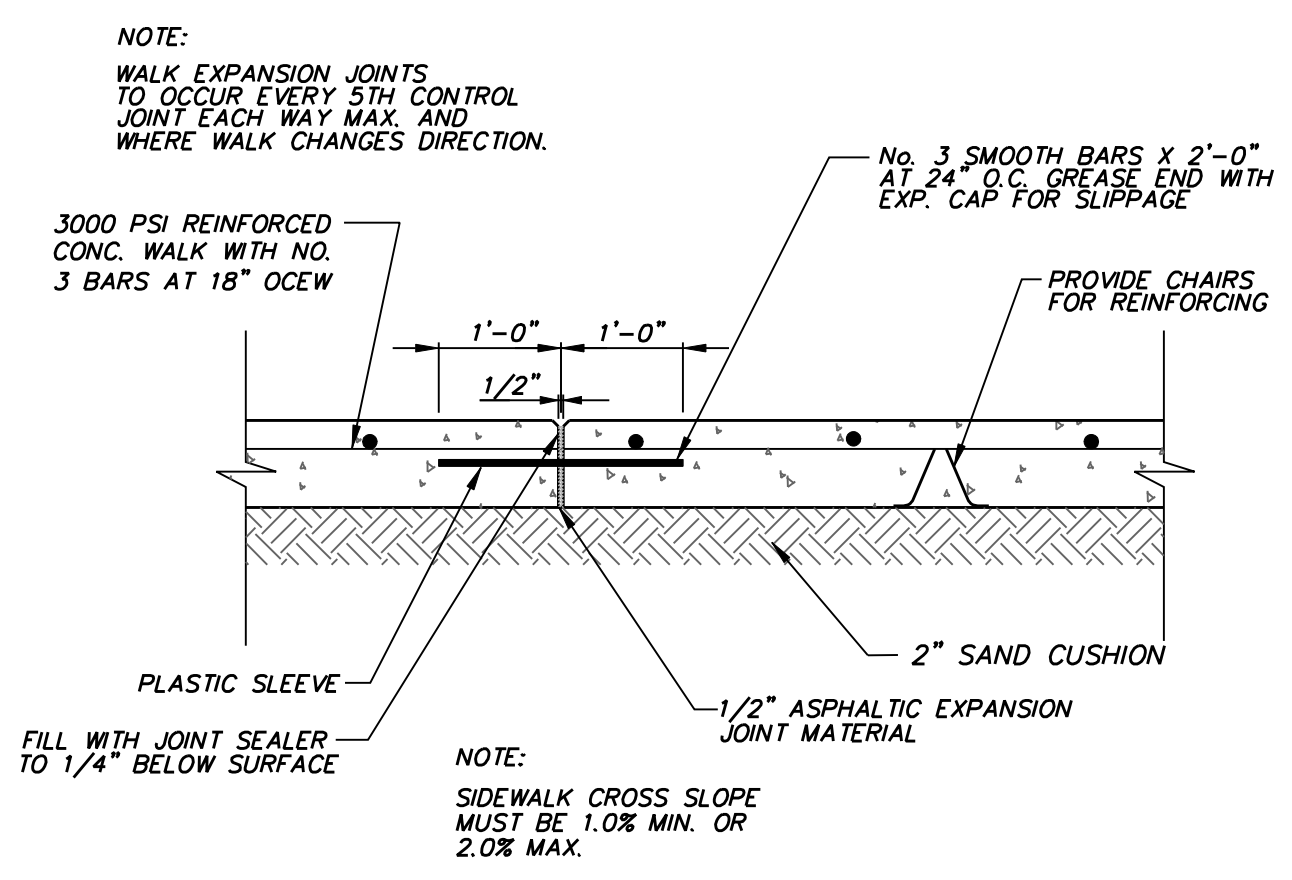
**VEHICULAR PAVEMENT PAVERS ON CONCRETE DROP SLAB**  
NOT TO SCALE



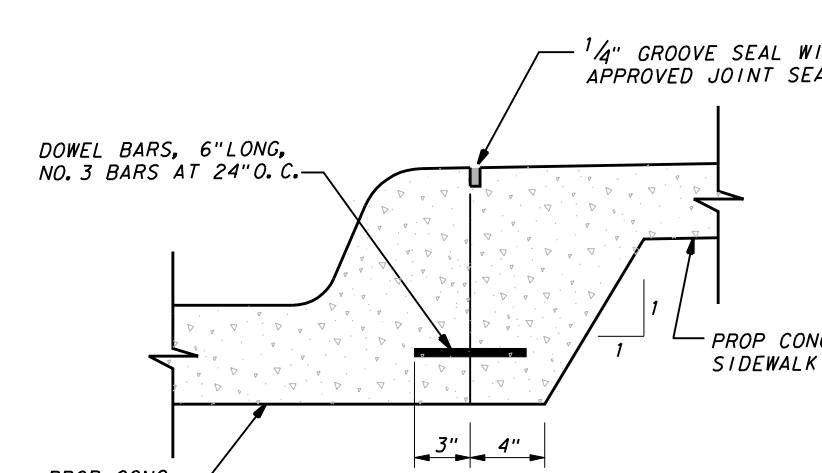
**TYPICAL PAVEMENT SECTION**  
NOT TO SCALE



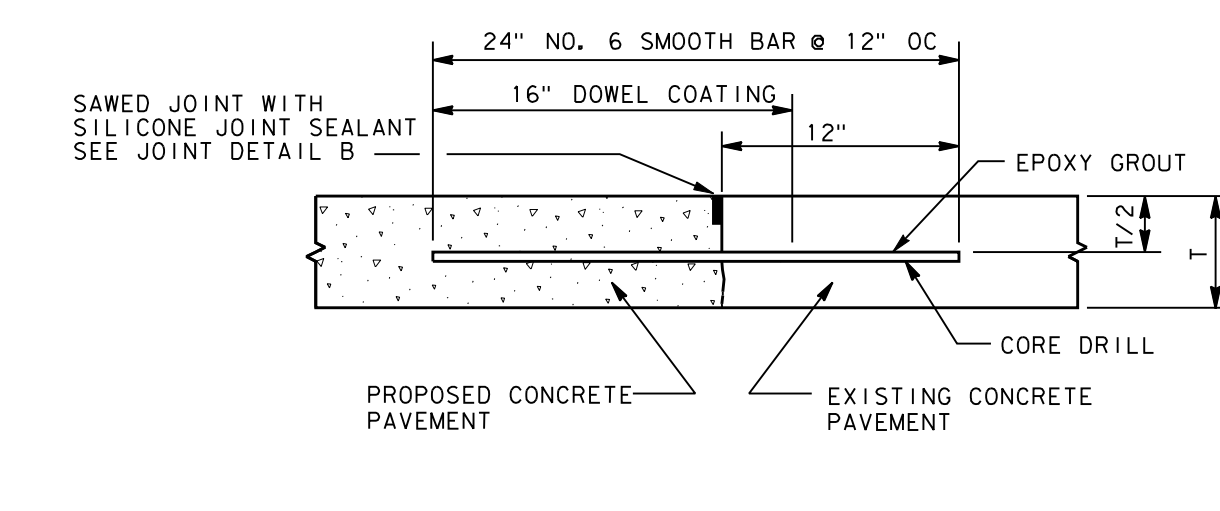
**SIDEWALK CONTROL JOINT**  
NOT TO SCALE



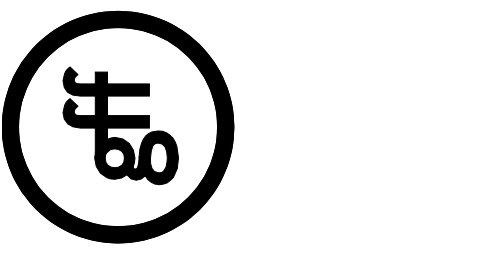
**SIDEWALK EXPANSION JOINT**  
NOT TO SCALE



**JOINT DETAIL FOR SIDEWALK ADJACENT TO CURB**  
NOT TO SCALE

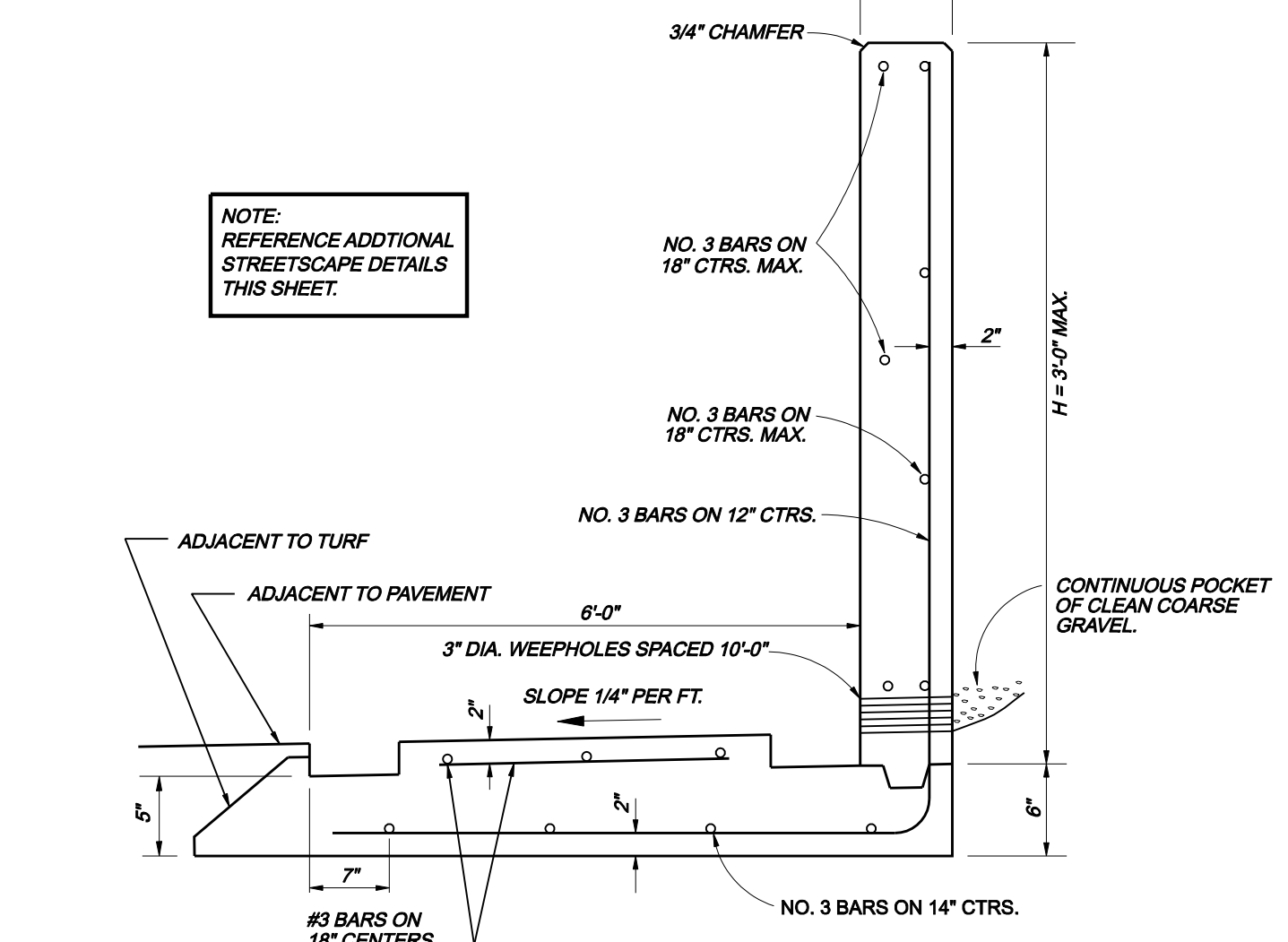
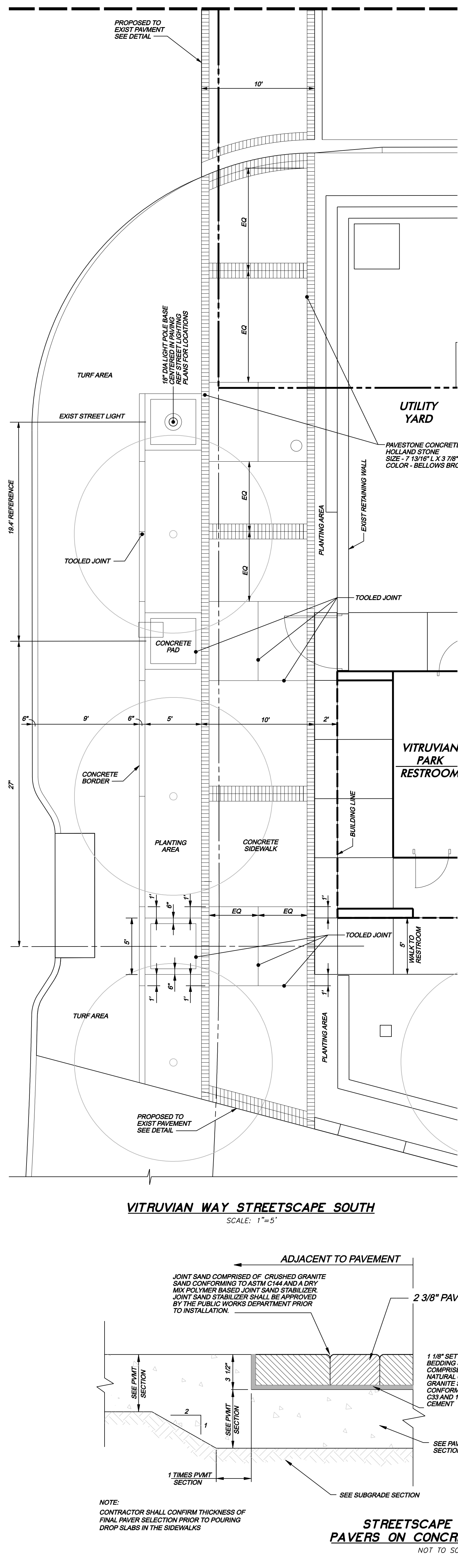
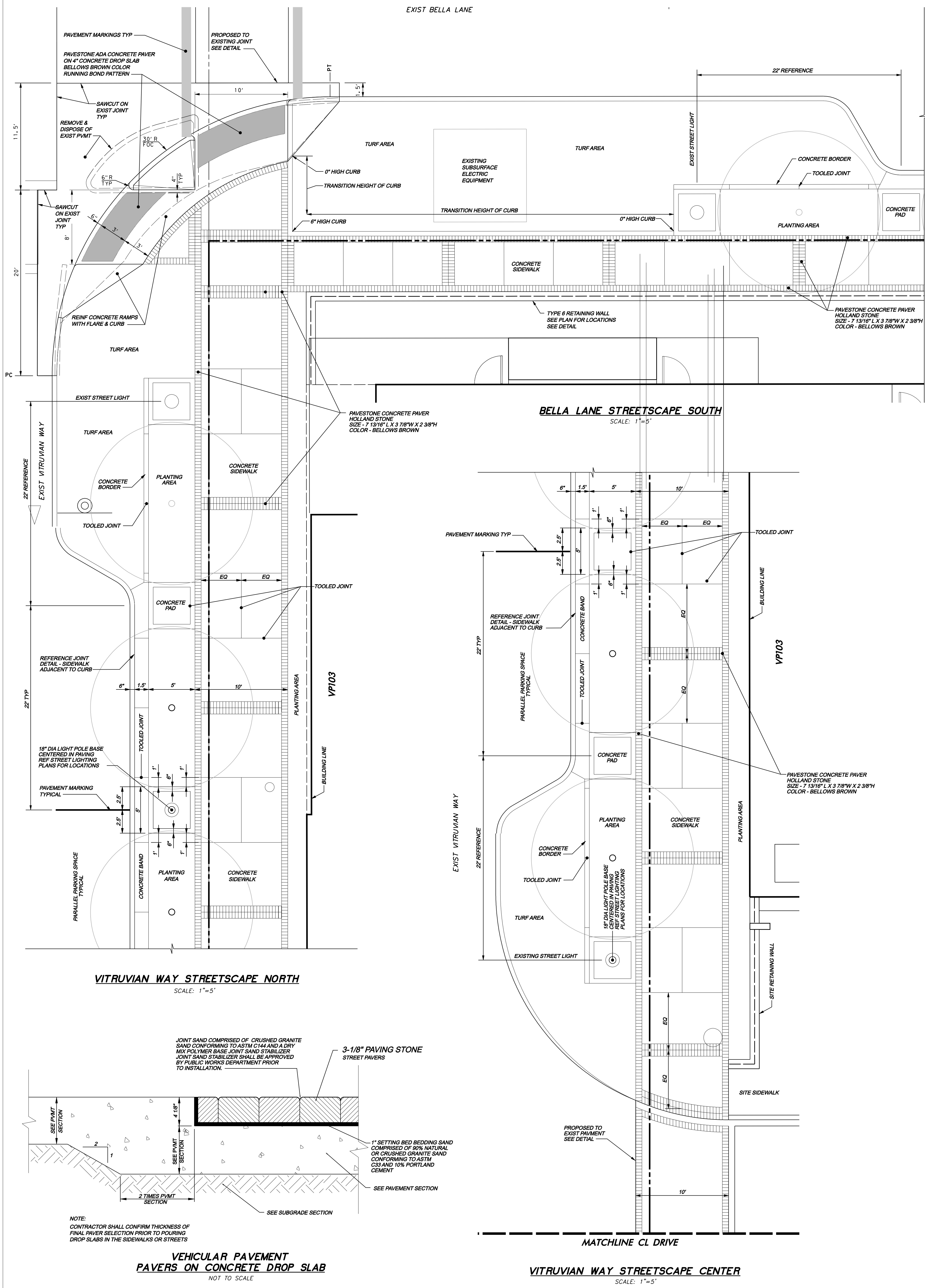


**PROPOSED TO EXISTING CONCRETE PAVEMENT**  
NOT TO SCALE



No.	Date	Item	REVISIONS
25	03.04.2013	PR #21	
6	05.23.2012	PR #6	
1	11.18.2011	PR #1	

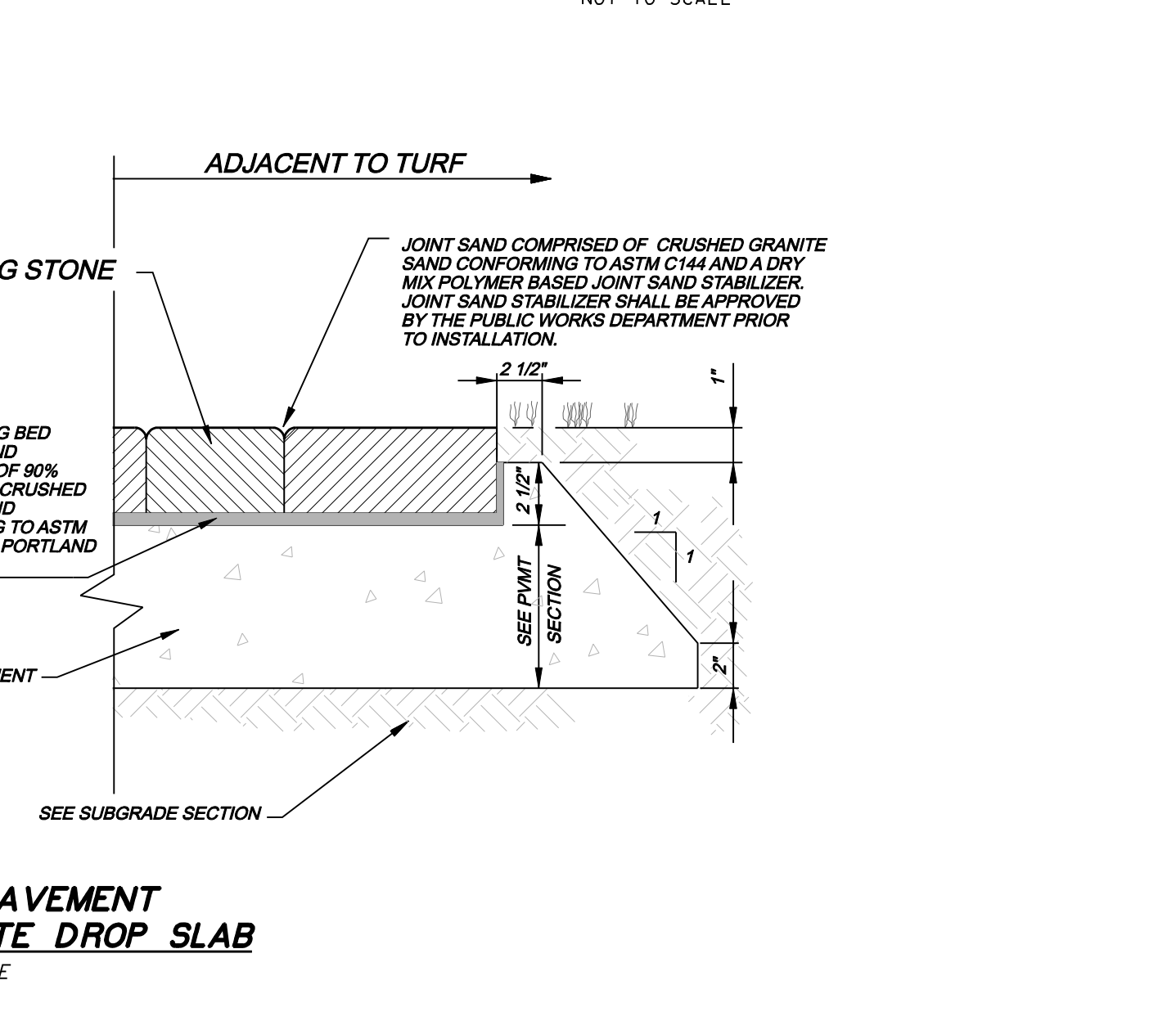
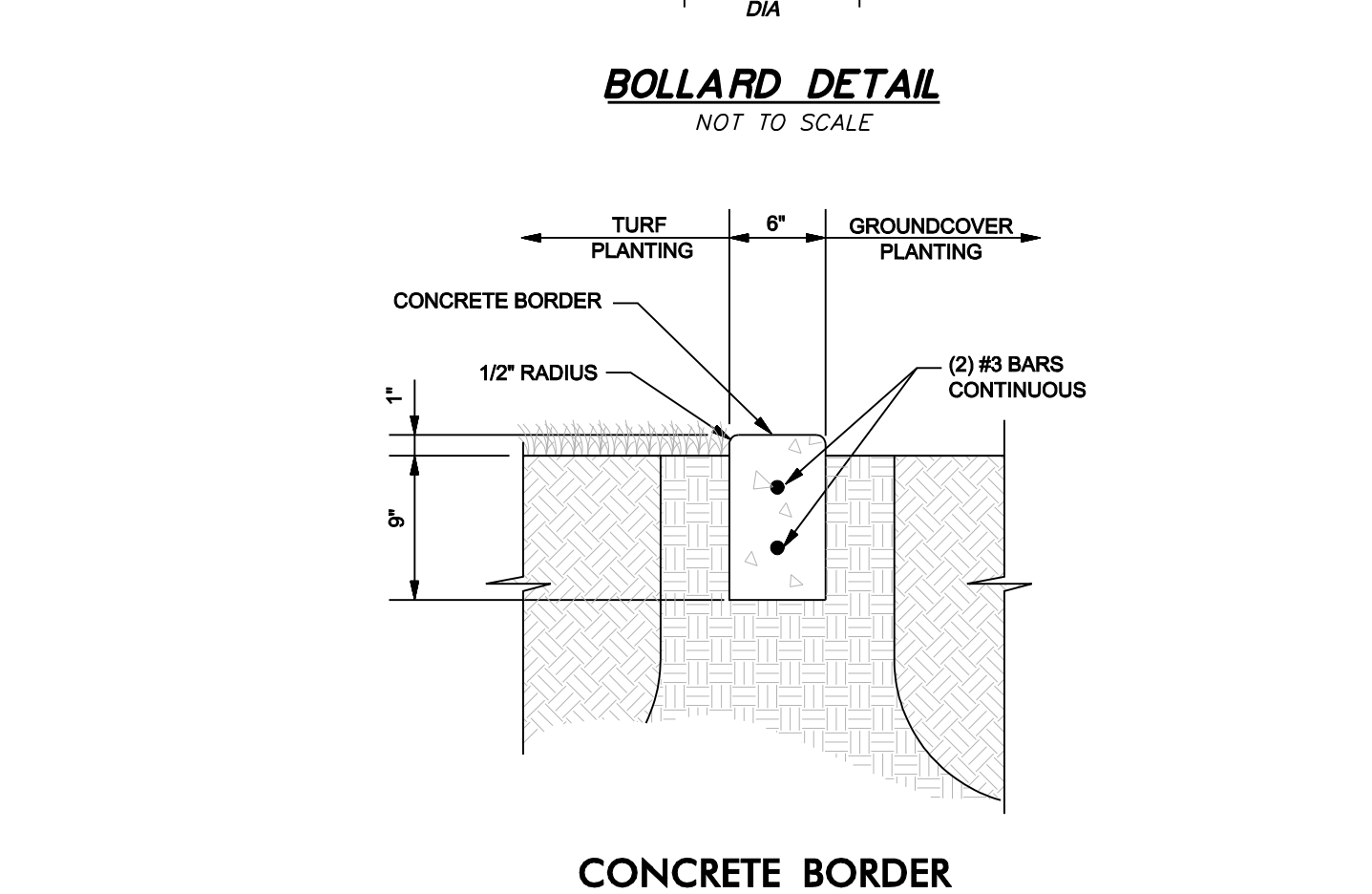
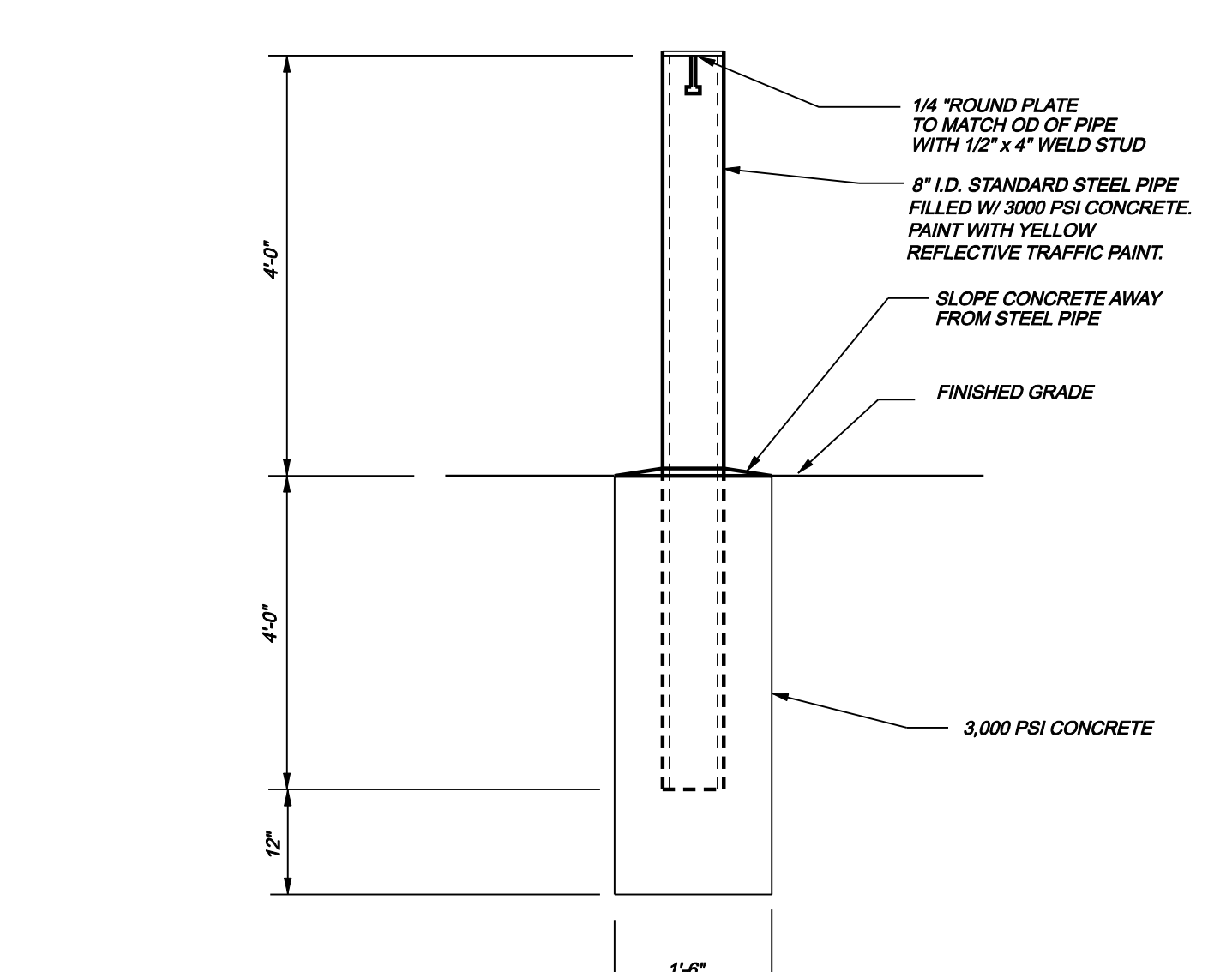




**TYPE 6 RETAINING WALL COMBINATION CANTILEVER & WALK**  
 NOT TO SCALE  
 (WALL GREATER THAN 11'-3" HIGHER REQUIRES SPECIAL ENGINEERING ANALYSIS)

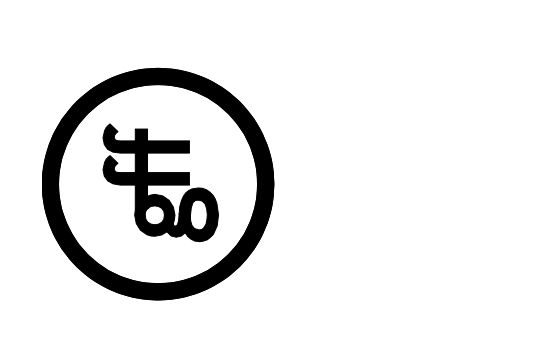
**GENERAL NOTES FOR RETAINING WALLS, ALL TYPES (U.N.O.)**

- RETAINING WALLS SHALL BE BUILT WITH PERFORATED DRAIN SYSTEM INSTEAD OF WEEP HOLES WHENEVER FEASIBLE.
- BARS SHALL CONFORM TO ITEM 2.2.6 OF NCTCOG SPECIFICATIONS.
- BAR LAPS SHALL BE 30 DIAMETERS.
- ALL EXPOSED SURFACES EXCEPT WALK, SHALL RECEIVE A HEAVY SANDBLAST FINISH.
- DRIVEWAY AND WALK SHALL RECEIVE A NON-SKID WOOD FLOAT FINISH.
- EXPOSED EDGES AND CORNERS TO BE ROUNDED OR CHAMFERED AS INDICATED HEREIN.
- WEEP HOLES SHALL BE FORMED BY 3" PVC.
- FOR WALL TYPES 6 & 7, THE WALKWAY WIDTH MAY BE INCREASED WHEN SPECIFIED ON THE PLANS, BUT SHALL NOT BE DECREASED UNLESS A SPECIAL DETAILED DESIGN IS PROVIDED IN THE PLANS AND SPECIFICATIONS.



**Good Fulton & Farrell Architects**  
 214.303.1500/Tel  
 214.303.1512/Fax  
 www.gff.com

2808 Fairmount Street  
 Suite 300  
 Dallas, Texas 75201



**icon**  
 Consulting Engineers, Inc.  
 Civil Engineers - Designers - Planners

Bicentennial Financial Center  
 250 W. Southlake Blvd., Suite 117  
 Southlake, TX 76092  
 Phone: (817) 552-8210  
 Fax: (817) 552-3128



**FIORI**  
 ON VITRUVIAN PARK  
 3990 VITRUVIAN WAY  
 ADDISON, TX 75001

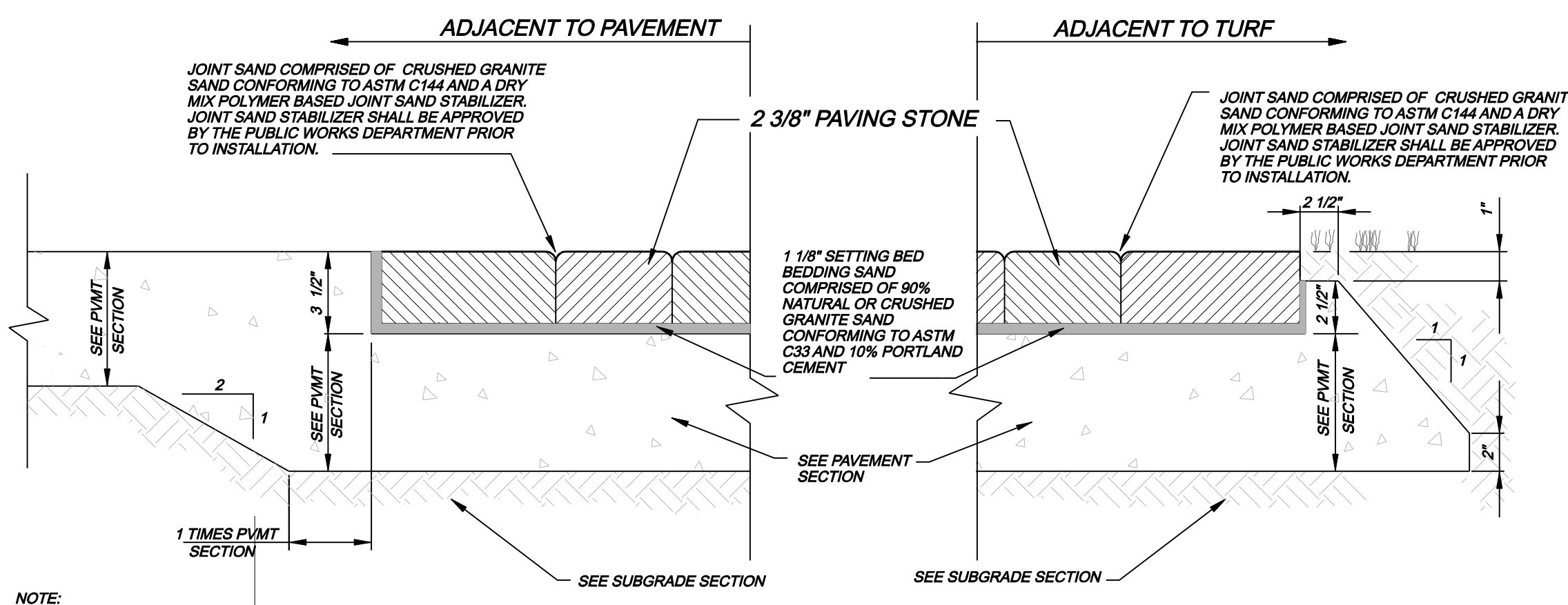
No.	Date	Item	REVISIONS
11.02.2012		BELLA CURB RETURN	
10.31.2012		STREETSCAPE CONST	
05.23.2012		PR #6	
11.18.2011		PR #1	

Project No. 10061.00  
 Date 08.25.11  
 Last Revision

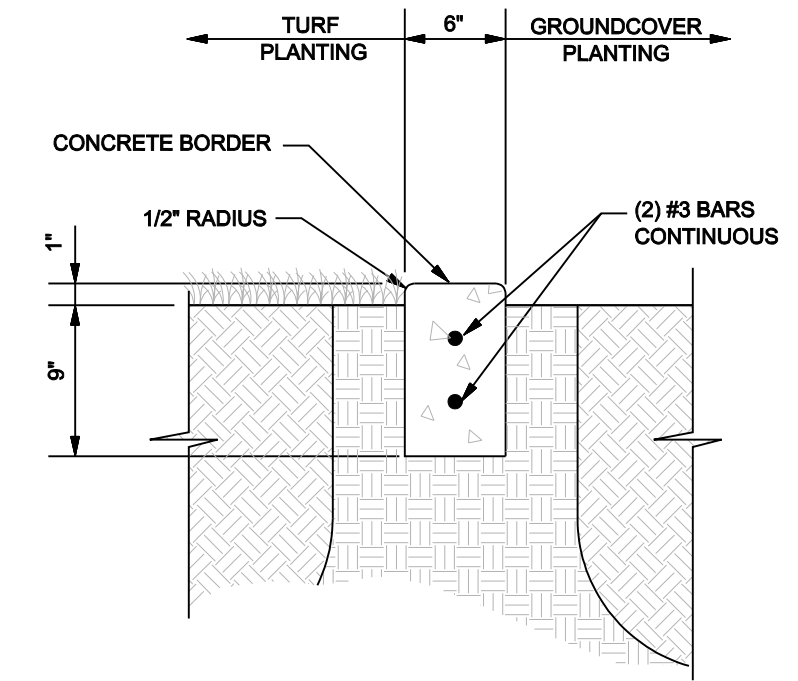
**PAVING DETAILS**

Project No. 10061.00  
 Date 08.25.11  
 Last Revision

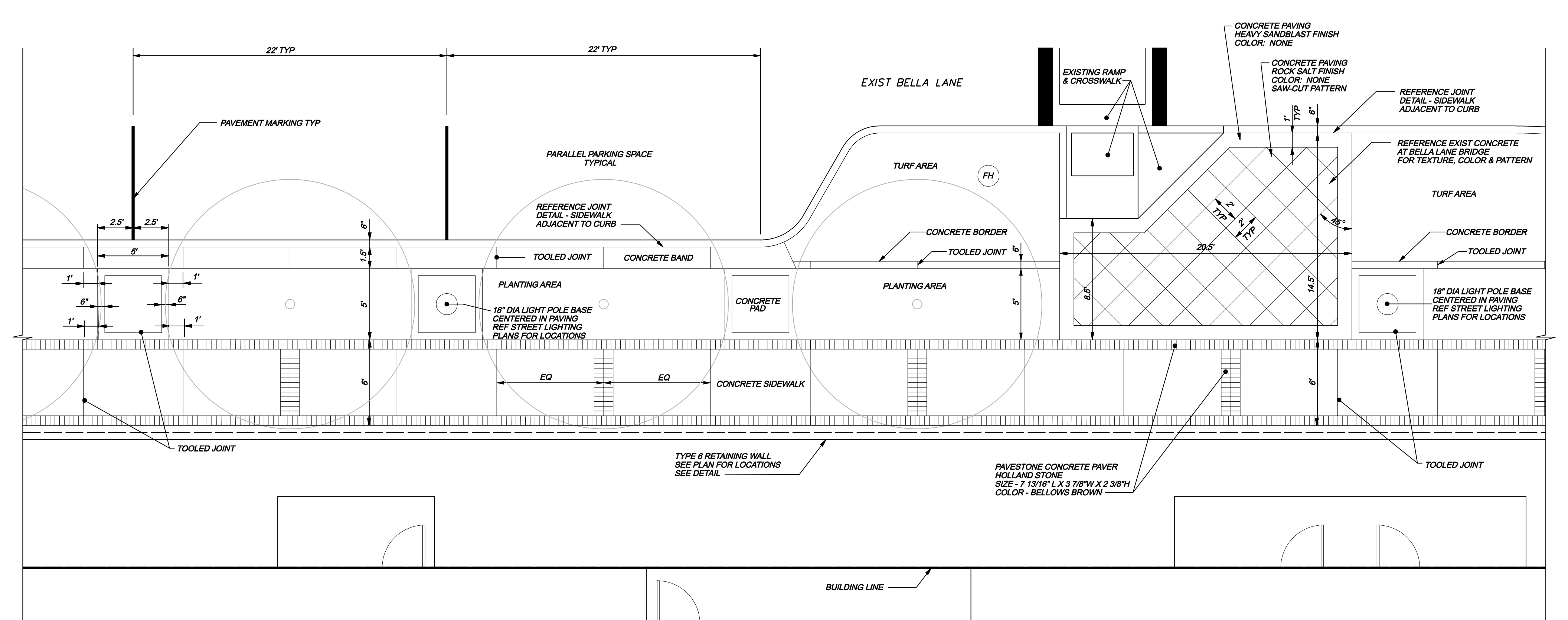
**CO-6.03**  
 RECORD DRAWINGS 11/04/13



**STREETSCAPE PAVEMENT PAVERS ON CONCRETE DROP SLAB**  
NOT TO SCALE



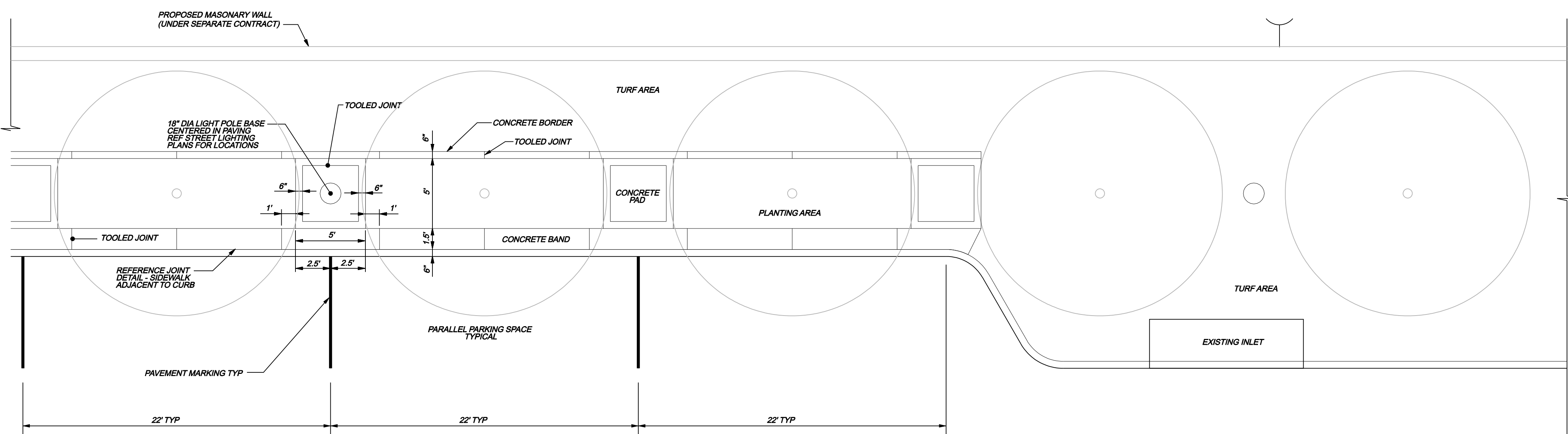
**CONCRETE BORDER**  
NOT TO SCALE



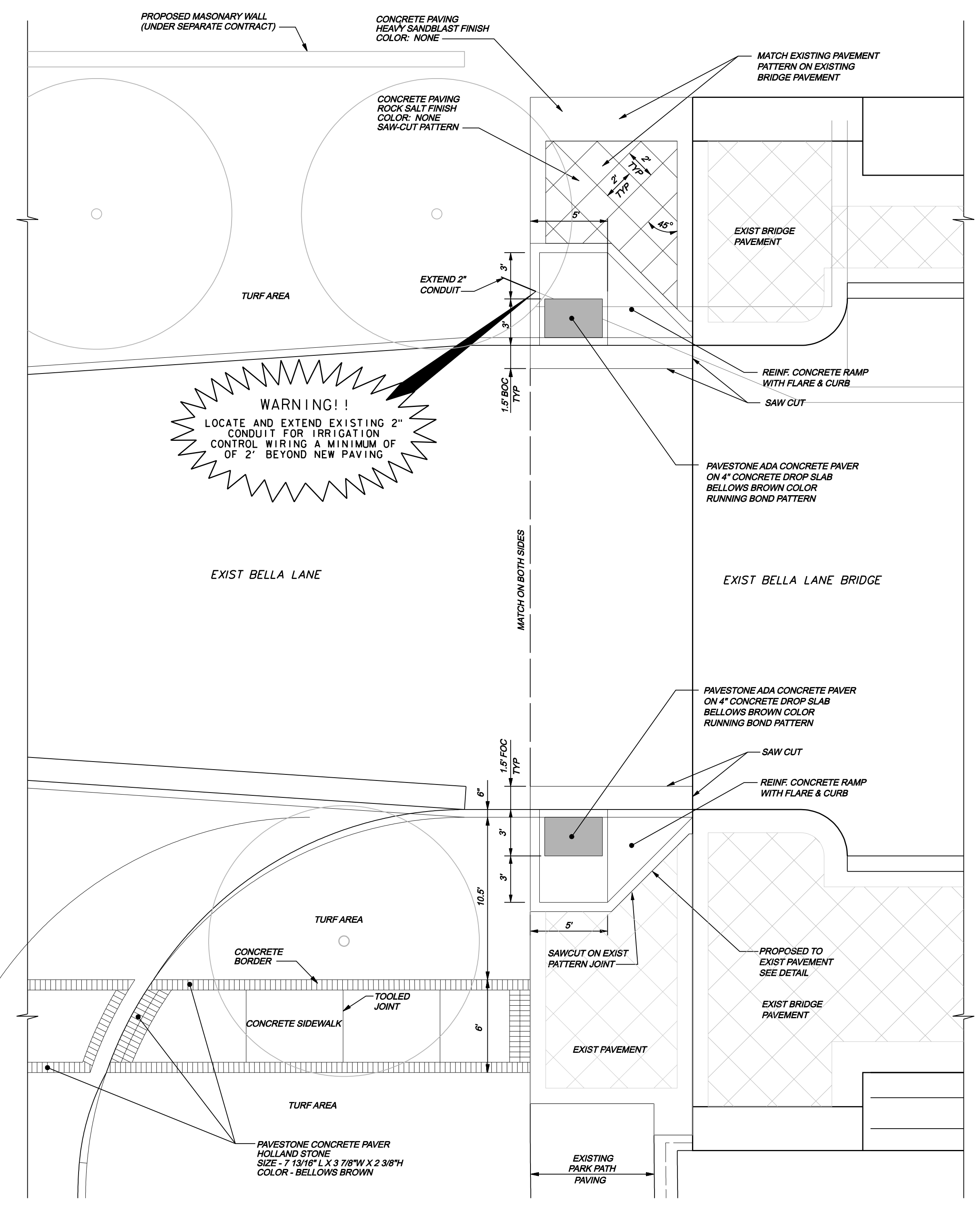
**TYPICAL PLAN BELLA LANE SOUTH**  
SCALE: 1"=5'

**NORTHEAST LANDING BELLA LANE**  
SCALE: 1"=5'

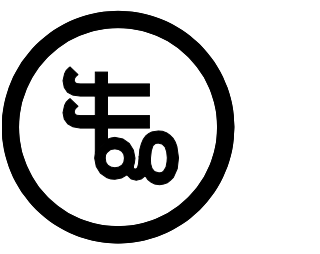
**WARNING**  
CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-345-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DETECTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.



**TYPICAL PLAN BELLA LANE WEST & EAST**  
SCALE: 1"=5'



**SOUTHEAST LANDINGS BELLA LANE**  
SCALE: 1"=5'



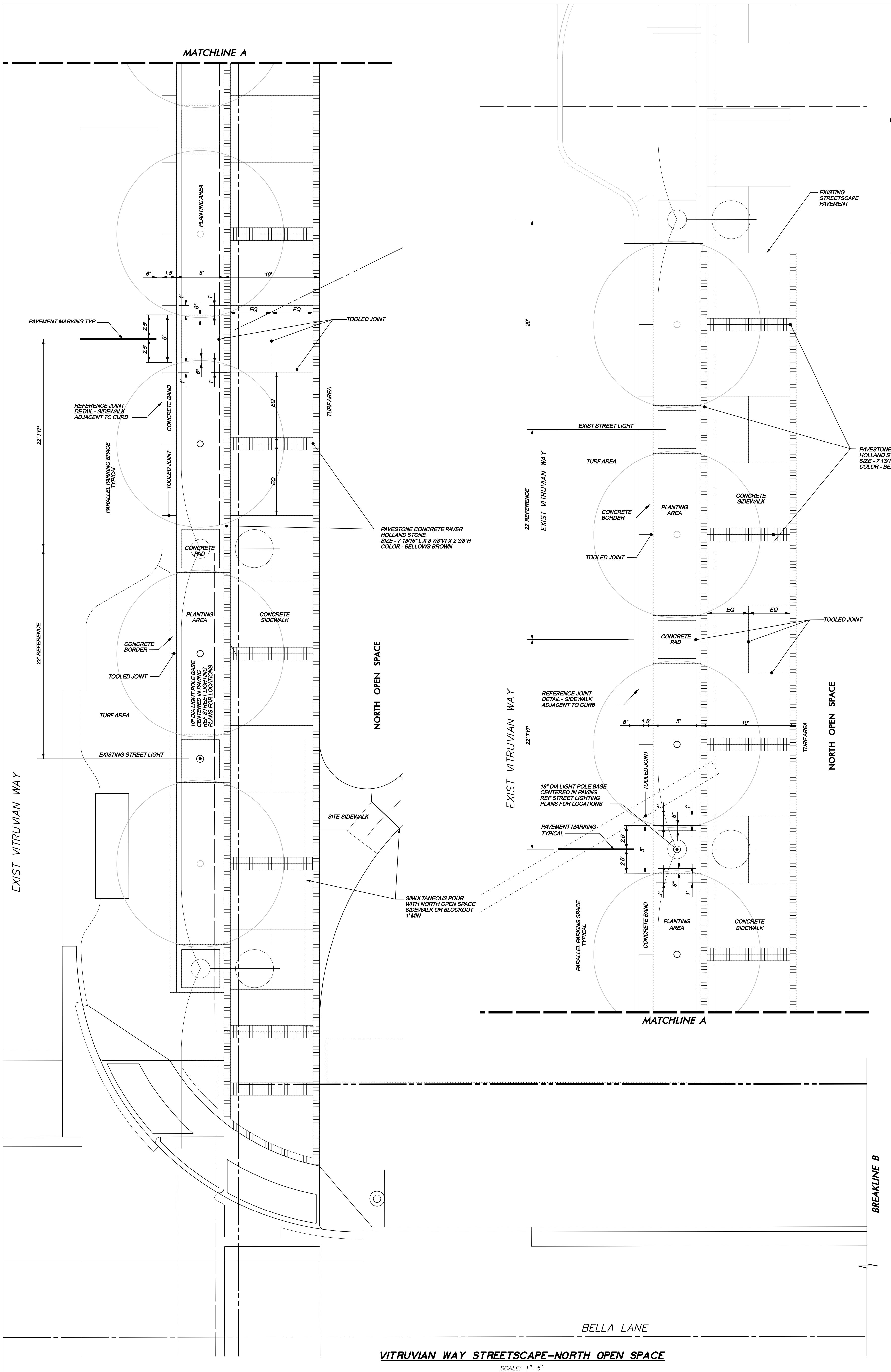
No.	Date	Item	REVISIONS
1	11.18.2011	PR #1	
2	05.23.2012	PR #6	
3	10.31.2012	STREETSCAPE CONST	

ICE  
Drawn  
JAM  
Checked  
BFD  
Approved

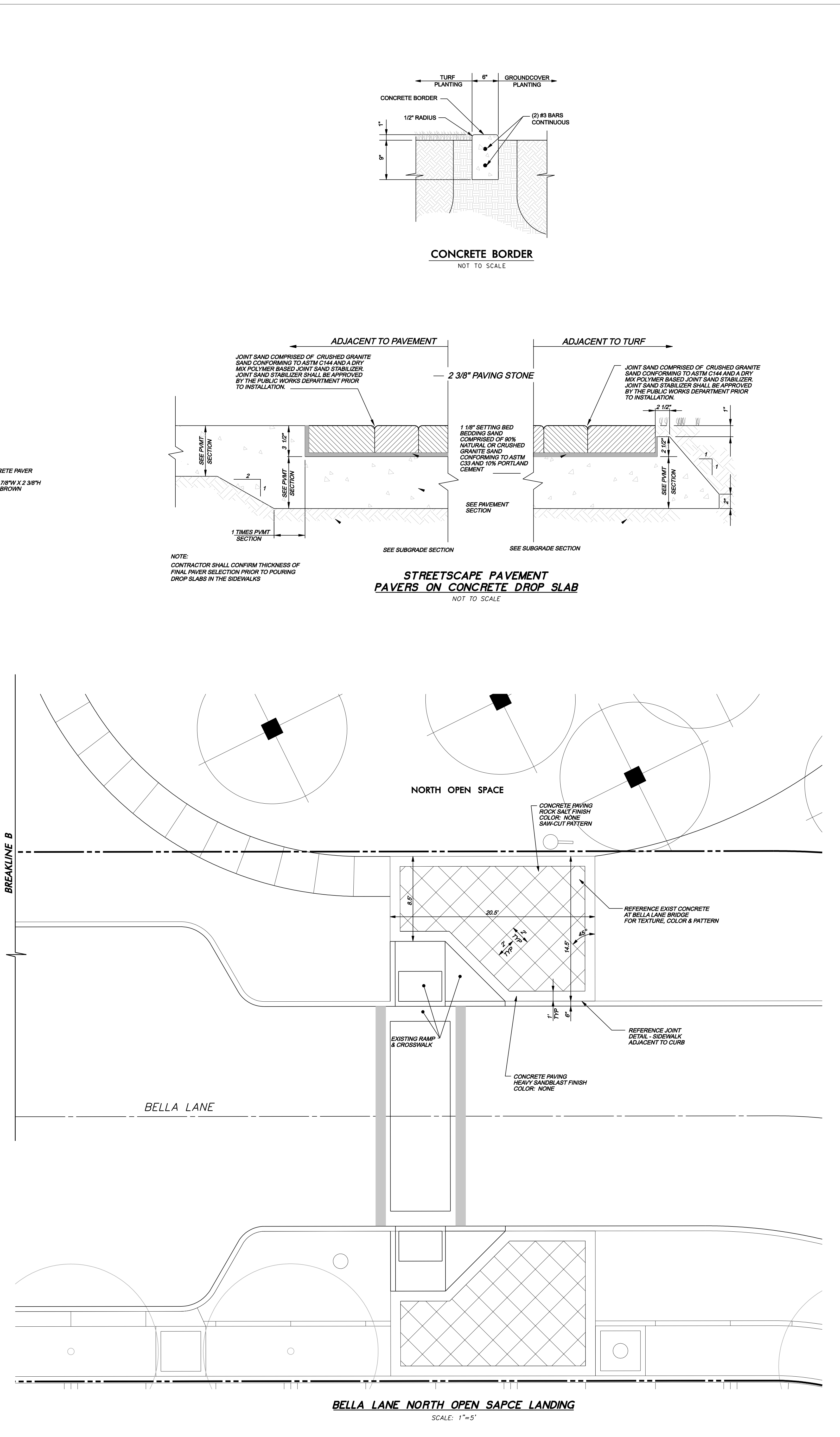
**PAVING DETAILS**

Project No. 10061.00  
Date 08.25.11  
Last Revision



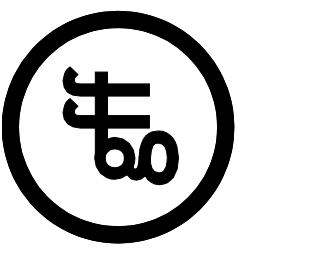


VITRUVIAN WAY STREETScape-NORTH OPEN SPACE  
SCALE: 1"=5'



Bella Lane NORTH OPEN SPACE LANDING  
SCALE: 1"=5'

**Good Fulton & Farrell Architects**  
214.303.1500/Tel  
214.303.1512/Fax  
www.gfa.com  
2808 Fairmount Street  
Suite 300  
Dallas, Texas 75201



**icon**  
Consulting Engineers, Inc.  
Civil Engineers - Designers - Planners  
BiCentennial Financial Center  
250 W. Southlake Blvd., Suite 117  
Southlake, Tx 76092  
Phone: (817) 552-8210  
Fax: (817) 552-3128



**FIORI**  
**ON VITRUVIAN PARK**  
3990 VITRUVIAN WAY  
ADDISON, TX 75001

No.	Date	Item
01.18.2013		NORTH OPEN SPACE
REVISIONS		

ICE  
Drawn  
JAM  
Checked  
BFD  
Approved

*BRUCE F. DUNNE*  
BRUCE F. DUNNE  
62654  
PROFESSIONAL ENGINEER

**PAVING DETAILS**

Project No. 10061.00  
Date 08.25.11  
Last Revision

**C0-6.05**  
RECORD DRAWINGS 11/04/13

SEE SHEET CO-8.02B

BELLA LANE NORTH ELECTRIC PEDESTAL (BLNP) TYPE PS, 120240 VOLT SINGLE PHASE ELECTRIC SERVICE MILBANK CP3B A-SIZE WITH 200 AMP PANEL & MAIN BKR AND 100 AMP PHOTO CONTROLLED CONTACTOR COLOR: PINE GREEN

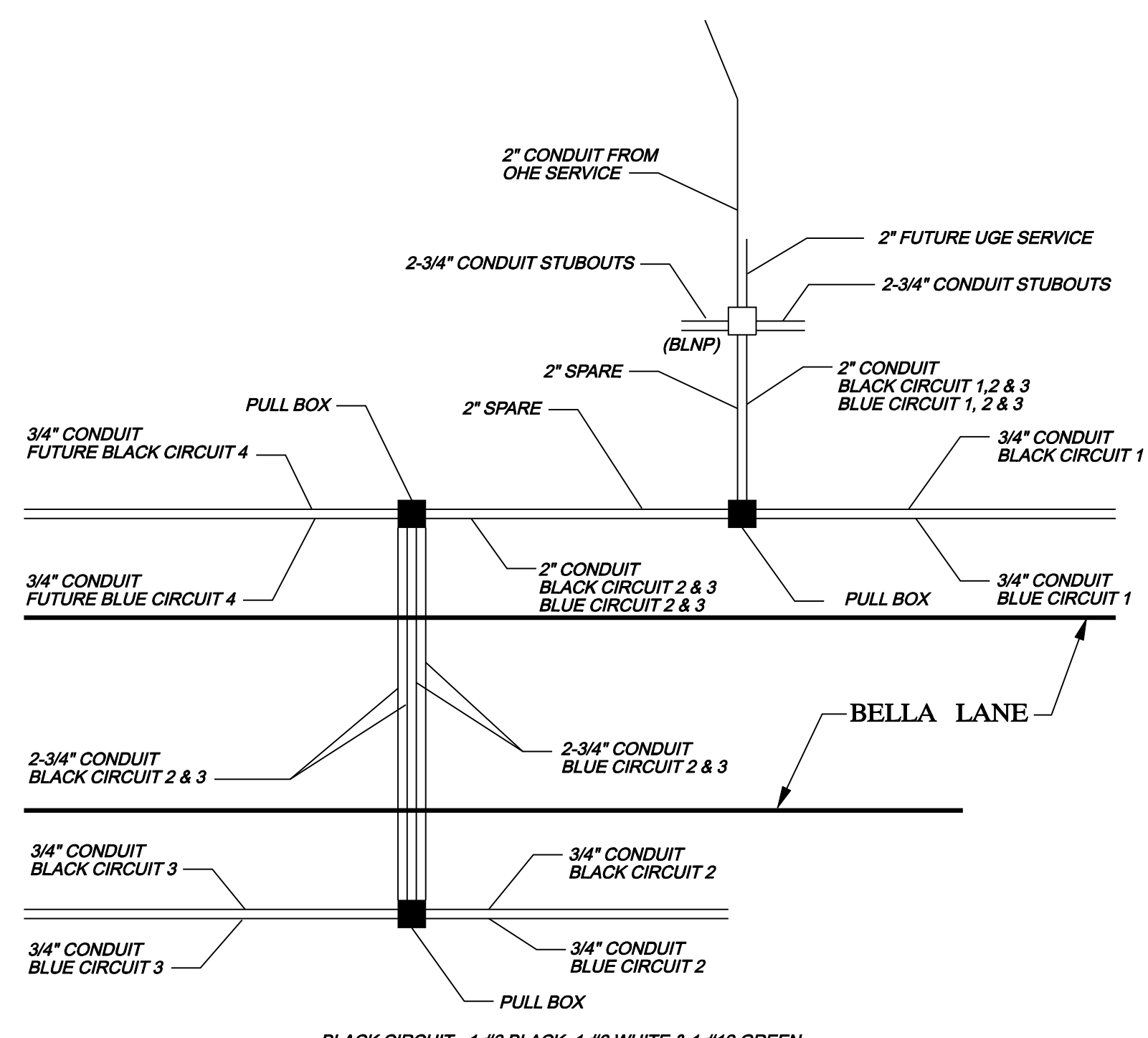
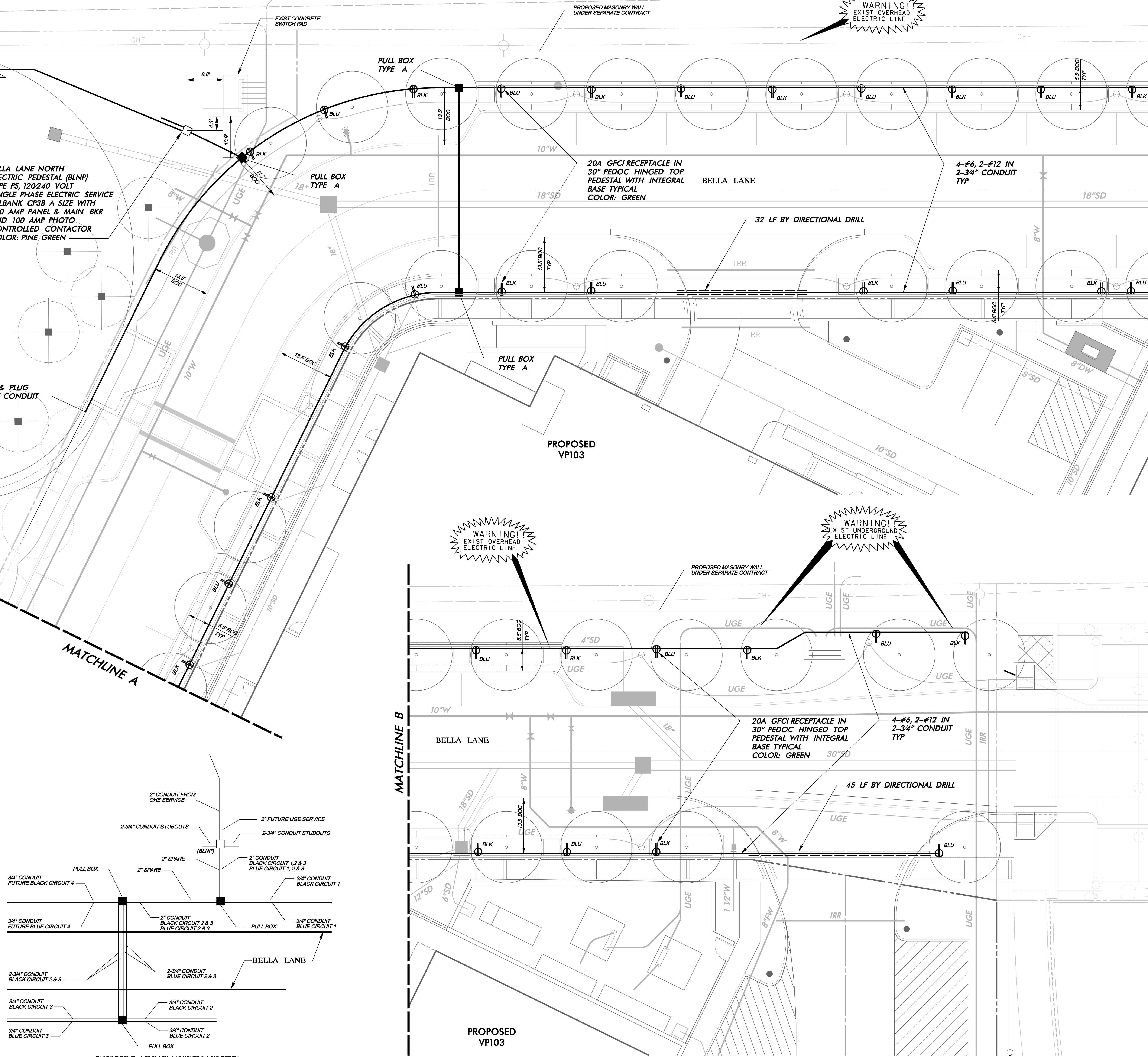
END & PLUG 2-3/4" CONDUIT

MATCHLINE A

MATCHLINE B

MATCHLINE B

FARMERS BRANCH CREEK



CONDUIT CONFIGURATION DETAIL NOT TO SCALE

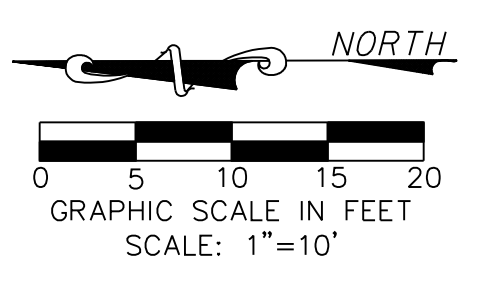
WARNING! EXIST OVERHEAD ELECTRIC LINE

WARNING! EXIST OVERHEAD ELECTRIC LINE

WARNING! EXIST UNDERGROUND ELECTRIC LINE

WARNING CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-246-4443) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47 SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 3127' NORTH OF VITRUVIAN WAY  
BM #2 REF. ELEVATION = 547.84 SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.



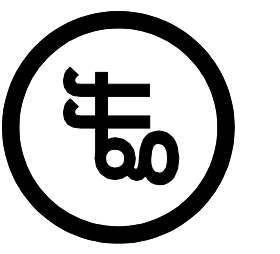
LEGEND

- PULL BOX (GROUND BOX)
PVC CONDUIT (POWER)
EXIST PVC CONDUIT (LIGHTING)
TRANSFORMER ON POLE (PROVIDED BY POWER COMPANY)
EXIST STREET LIGHT
20A GFCI RECEPTACLE HUBBLE GFR53625CW OR EO IN PEDOC OUTLET BOX PEDESTAL 30" HEIGHT SINGLE GANG HINGED TOP WITH INTEGRAL BASE COLOR: GREEN

LIGHTING & CONDUIT NOTES

- 1. REFER TO SHEET CO-100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.
2. REFER TO SHEET CO-8.04 (ED(3))-03 FOR ELECTRIC DETAILS - GROUND BOXES. RIGID METAL CONDUIT ELBOWS ARE NOT REQUIRED. CONCRETE ACHRON IS NOT REQUIRED.
3. WATER, SANITARY SEWER AND STORM DRAIN LINES ARE SHOWN FOR REFERENCE ONLY CONTRACTOR SHALL LOCATE ALL UTILITY LINES IN THE AREA PRIOR TO DIGGING.
4. INSTALL SCHEDULE 40 PVC UNDERGROUND (24" MIN COVER) ALL STREET AND DRIVEWAY CROSSINGS (36" MIN COVER). ALL BENDS TO BE LONG RADIUS.
5. CONNECTION TO POWER COMPANY CIRCUITS TO BE MADE ONLY BY POWER COMPANY.
6. UNLESS OTHERWISE INDICATED ALL WORK SHALL CONFORM TO THE 2008 NATIONAL ELECTRICAL CODE (NFPA 70) AND THE 2007 NATIONAL ELECTRICAL SAFETY CODE (ANSI C2).
7. ALL EMPTY CONDUIT INSTALLED FOR FUTURE EXTENSION SHALL BE TURNED UP AND EXTENDED UP TO FINISHED GRADE. CAP ENDS OF ALL CONDUITS. ALL EMPTY CONDUIT SHALL CONTAIN A PULL LINE - 200 LB TEST NYLON.
8. REFER TO REFERENCED SHEETS FOR ELECTRICAL DETAILS.

Good Fulton & Farrell Architects 214.303.1500/Tel 214.303.1512/Fax www.gff.com 2808 Fairmount Street Suite 300 Dallas, Texas 75201



icon Consulting Engineers, Inc. Civil Engineers - Designers - Planners

Bicentennial Financial Center 250 W. Southlake Blvd., Suite 117 Southlake, TX 76092 Phone: (817) 552-8210 Fax: (817) 552-3128



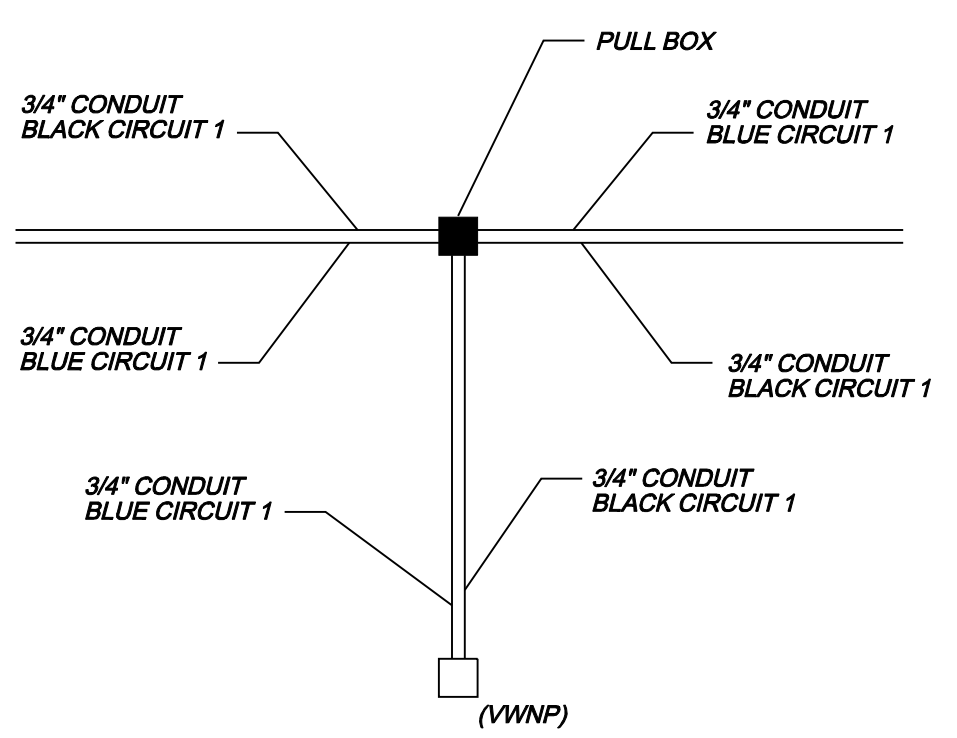
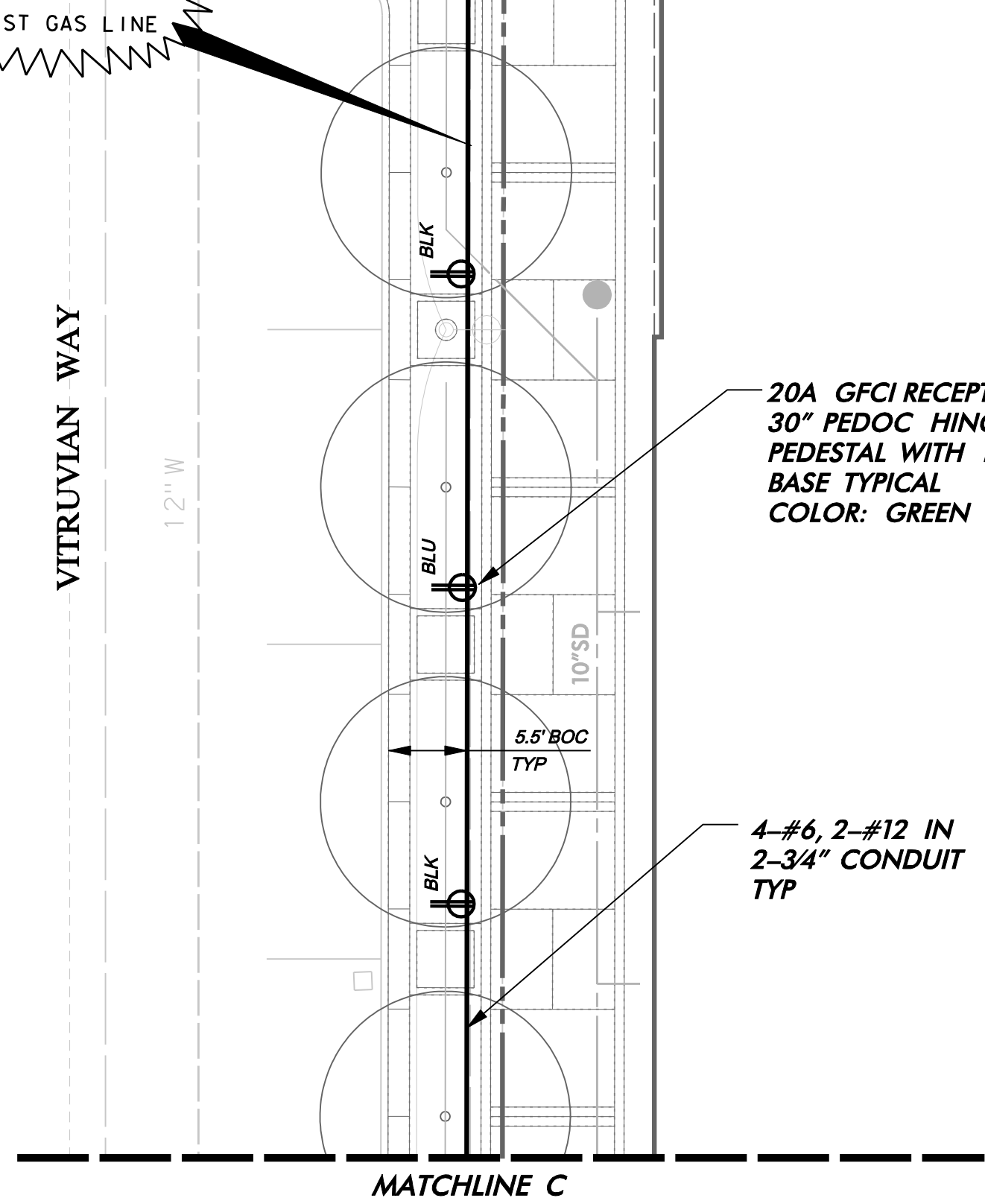
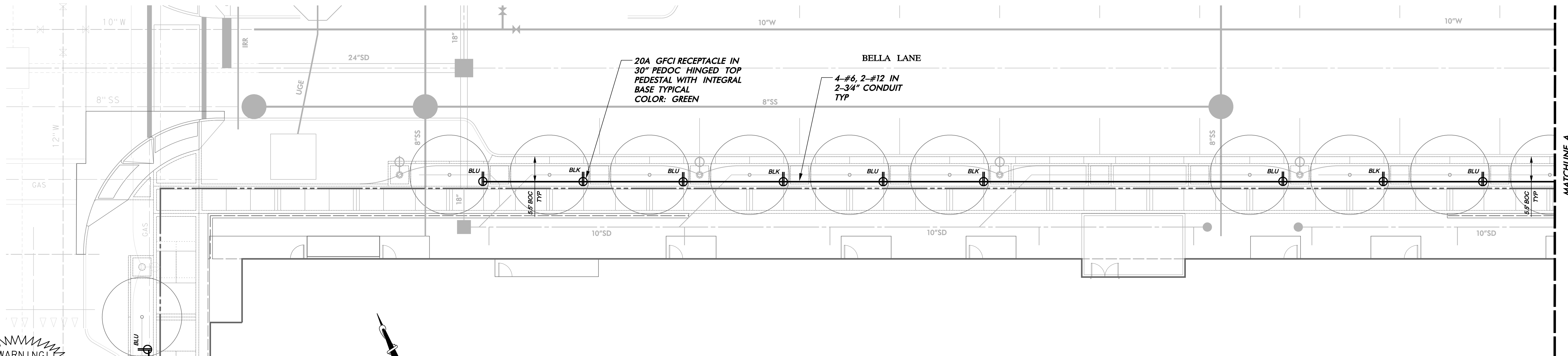
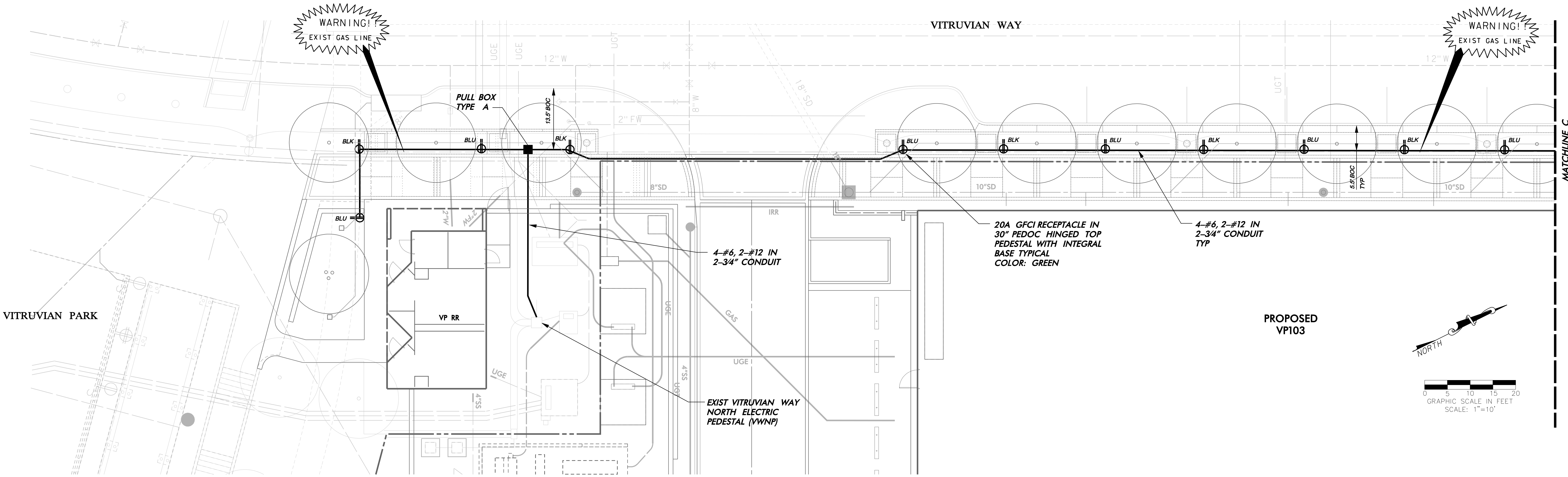
FIORI ON VITRUVIAN PARK 3990 VITRUVIAN WAY ADDISON, TX 75001

Table with 2 columns: No., Date, Item, REVISIONS

Professional Engineer seal for Bruce F. Dunne, License No. 62654

STREETSCAPE ELECTRICAL PLAN

Project No. 10061.00 Date 08.25.11 Last Revision



BLACK CIRCUIT - 1-#6 BLACK, 1-#6 WHITE & 1-#12 GREEN  
 BLUE CIRCUIT - 1-#6 BLUE, 1-#6 WHITE & 1-#12 GREEN

**CONDUIT CONFIGURATION DETAIL**  
NOT TO SCALE

**LEGEND**

- PULL BOX (GROUND BOX)
- PVC CONDUIT (POWER)
- EXIST PVC CONDUIT (LIGHTING)
- TRANSFORMER ON POLE (PROVIDED BY POWER COMPANY)
- EXIST STREET LIGHT
- 20A GFCI RECEPTACLE HUBBLE GFR5362SGW OR EQ IN PEDOC OUTLET BOX PEDESTAL 30" HEIGHT SINGLE GANG HINGED TOP WITH INTEGRAL BASE COLOR: GREEN

**LIGHTING & CONDUIT NOTES**

1. REFER TO SHEET CO-1.00 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.
2. REFER TO SHEET CO-8.04 (ED)(3)-03 FOR ELECTRIC DETAILS - GROUND BOXES. RIGID METAL CONDUIT ELBOWS ARE NOT REQUIRED. CONCRETE APRON IS NOT REQUIRED.
3. WATER, SANITARY SEWER AND STORM DRAIN LINES ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL LOCATE ALL UTILITY LINES IN THE AREA PRIOR TO DIGGING.
4. INSTALL SCHEDULE 40 PVC UNDERGROUND (24" MIN COVER). ALL STREET AND DRIVEWAY CROSSINGS (36" MIN COVER). ALL BENDS TO BE LONG RADIUS.
5. CONNECTION TO POWER COMPANY CIRCUITS TO BE MADE ONLY BY POWER COMPANY.
6. UNLESS OTHERWISE INDICATED ALL WORK SHALL CONFORM TO THE 2008 NATIONAL ELECTRICAL CODE (NFPA 70) AND THE 2007 NATIONAL ELECTRICAL SAFETY CODE (ANSI C2).
7. ALL EMPTY CONDUIT INSTALLED FOR FUTURE EXTENSION SHALL BE TURNED UP AND EXTENDED UP TO FINISHED GRADE. CAP ENDS OF ALL CONDUITS. ALL EMPTY CONDUIT SHALL CONTAIN A PULL LINE - 200 LB TEST NYLON.
8. REFER TO REFERENCED SHEETS FOR ELECTRICAL DETAILS.

**WARNING**

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

**BM #1 REF. ELEVATION = 559.47**  
 SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY

**BM #2 REF. ELEVATION = 547.84**  
 SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

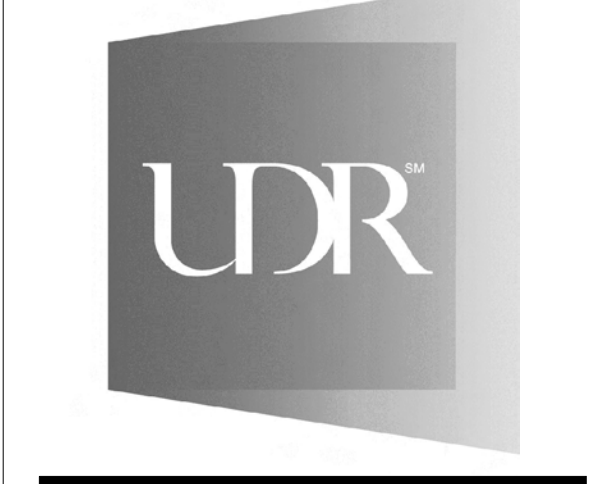
**Good Fulton & Farrell Architects**  
 214.303.1500/Tel  
 214.303.1512/Fax  
 www.gff.com

2908 Fairmount Street  
 Suite 300  
 Dallas, Texas 75201

**gff**

**icon**  
 Consulting Engineers, Inc.  
 Civil Engineers - Designers - Planners

Bicentennial Financial Center  
 250 W. Southlake Blvd., Suite 117  
 Southlake, Tx 76092  
 Phone: (817) 552-8210  
 Fax: (817) 552-3128



**FIORI**  
**ON VITRUVIAN PARK**  
 3990 VITRUVIAN WAY  
 ADDISON, TX 75001

No.	Date	REVISIONS
1	11.26.2012	STREETSCAPE CONST
		Item

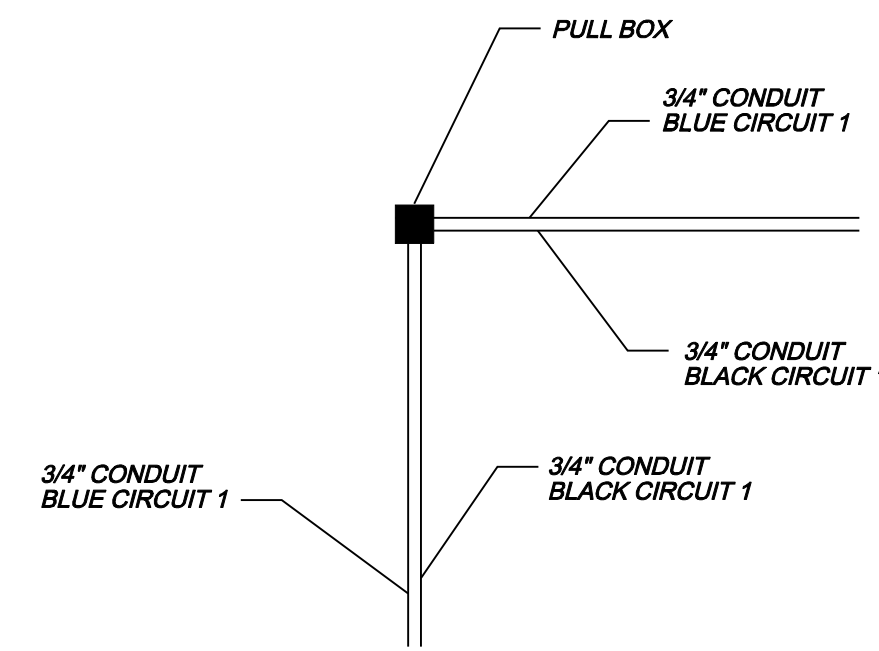
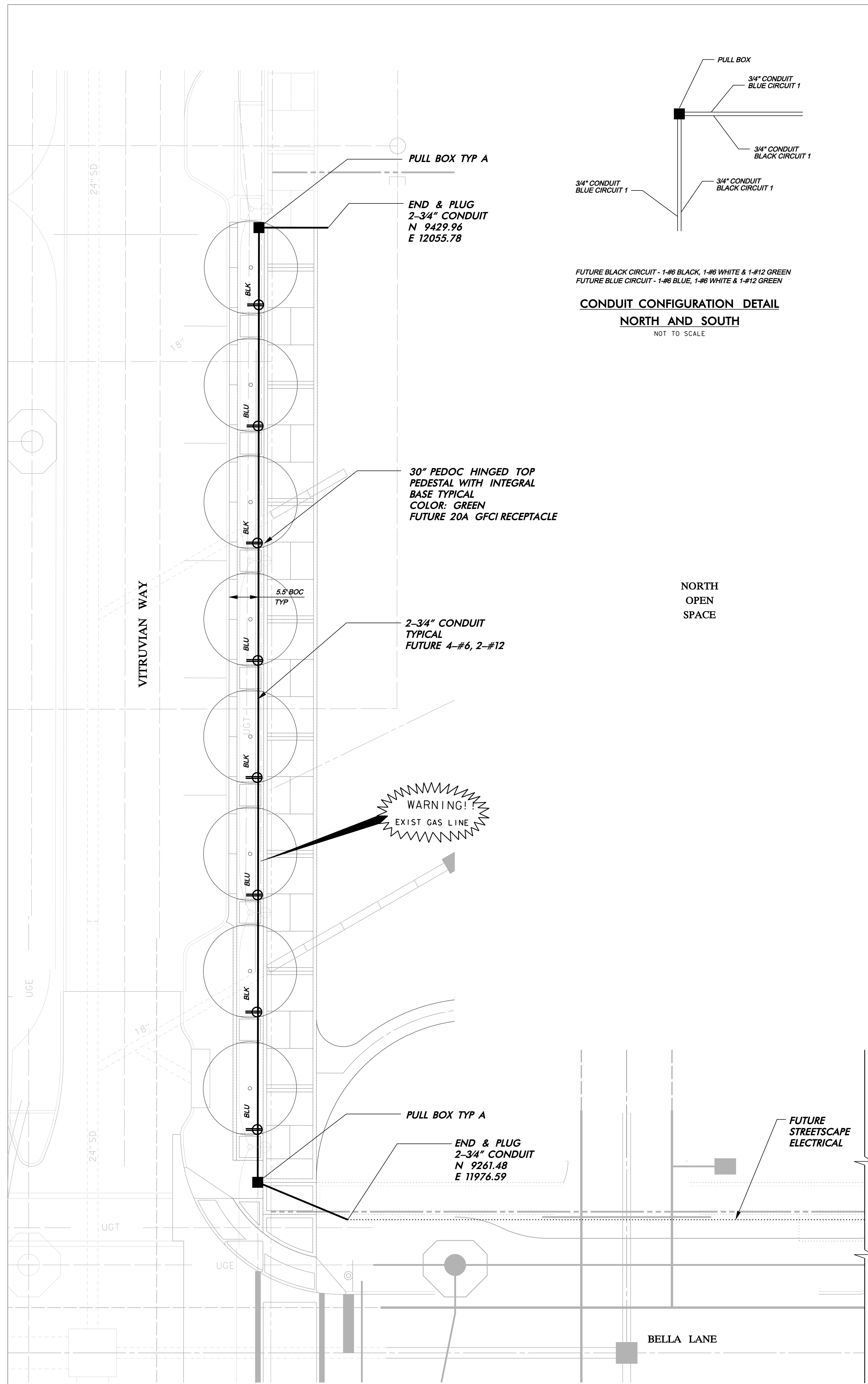
ICE  
 Drawn  
 JAM  
 Checked  
 BFD  
 Approved

**BRUCE F. DUNNE**  
 LICENSE NO. 62654  
 PROFESSIONAL ENGINEER

**STREETSCAPE ELECTRICAL PLAN**

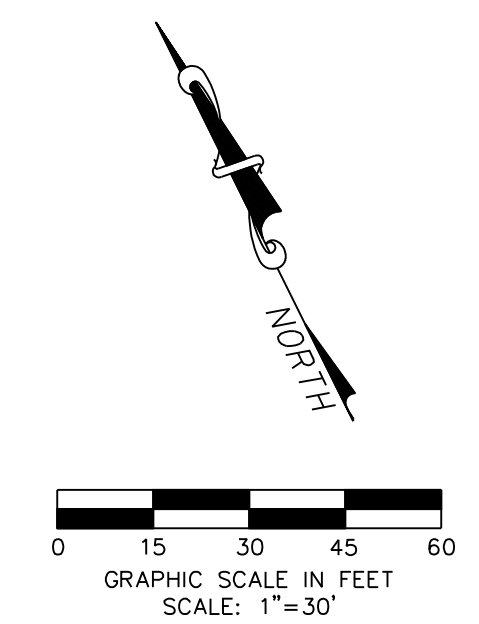
Project No. 10061.00  
 Date 08.25.11  
 Last Revision

**C0-8.02**  
 RECORD DRAWINGS 11/04/13



**CONDUIT CONFIGURATION DETAIL  
NORTH AND SOUTH**  
NOT TO SCALE

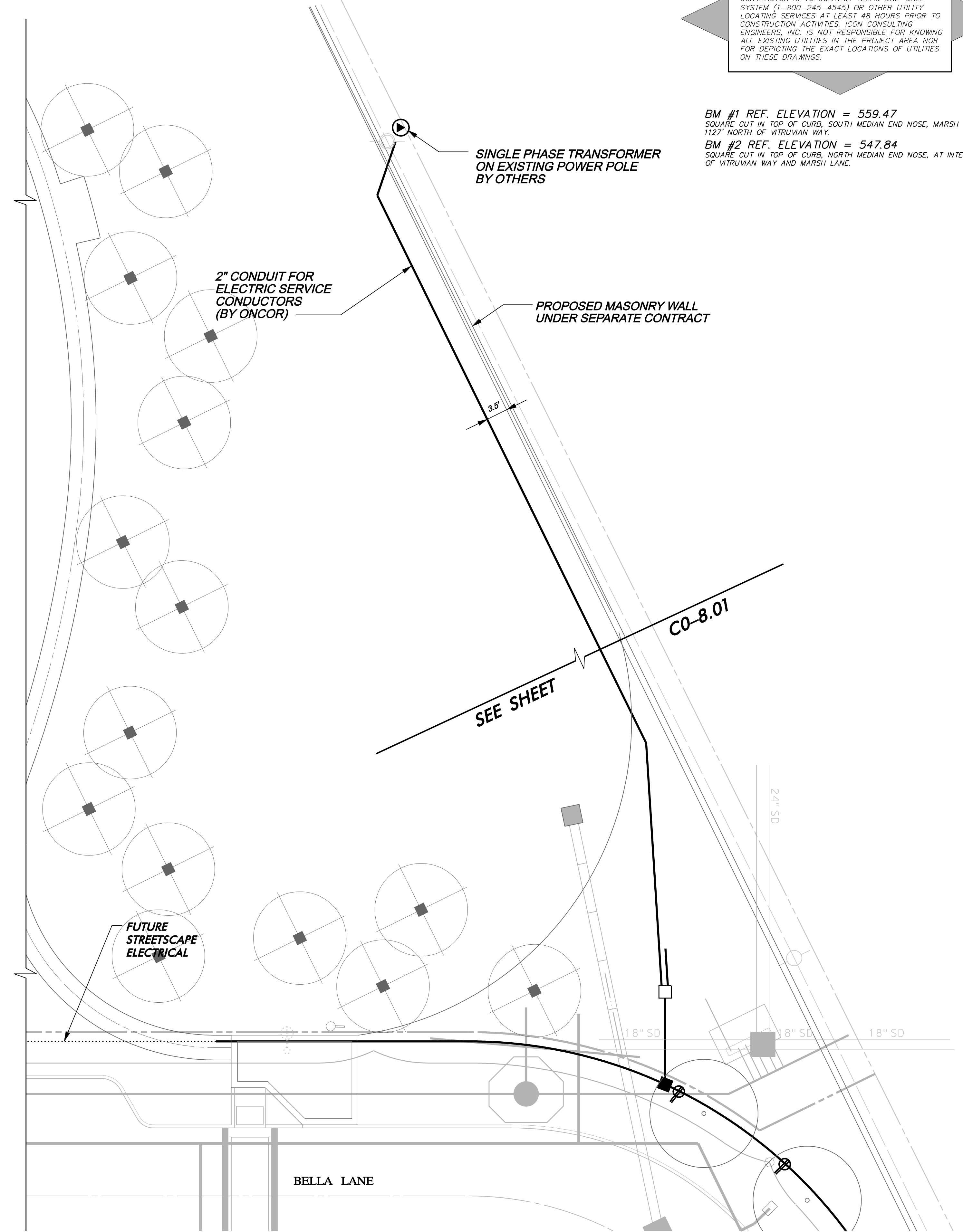
- LIGHTING & CONDUIT NOTES**
- REFER TO SHEET C0-1.00 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.
  - REFER TO SHEET C0-8.04 (ED)(3)-03 FOR ELECTRIC DETAILS - GROUND BOXES. RIGID METAL CONDUIT ELBOWS ARE NOT REQUIRED. CONCRETE APRON IS NOT REQUIRED.
  - WATER, SANITARY SEWER AND STORM DRAIN LINES ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL LOCATE ALL UTILITY LINES IN THE AREA PRIOR TO DIGGING.
  - INSTALL SCHEDULE 40 PVC UNDERGROUND (24" MIN COVER). ALL STREET AND DRIVEWAY CROSSINGS (36" MIN COVER). ALL BENDS TO BE LONG RADIUS.
  - CONNECTION TO POWER COMPANY CIRCUITS TO BE MADE ONLY BY POWER COMPANY.
  - UNLESS OTHERWISE INDICATED ALL WORK SHALL CONFORM TO THE 2008 NATIONAL ELECTRICAL CODE (NFPA 70) AND THE 2007 NATIONAL ELECTRICAL SAFETY CODE (ANSI C2).
  - ALL EMPTY CONDUIT INSTALLED FOR FUTURE EXTENSION SHALL BE TURNED UP AND EXTENDED UP TO FINISHED GRADE. CAP ENDS OF ALL CONDUITS. ALL EMPTY CONDUIT SHALL CONTAIN A PULL LINE - 200 LB TEST NYLON.
  - REFER TO REFERENCED SHEETS FOR ELECTRICAL DETAILS.



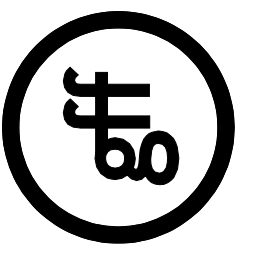
- LEGEND**
- PULL BOX (GROUND BOX) [Symbol]
  - PVC CONDUIT (POWER) [Symbol]
  - EXIST PVC CONDUIT (LIGHTING) [Symbol]
  - TRANSFORMER ON POLE (PROVIDED BY POWER COMPANY) [Symbol]
  - EXIST STREET LIGHT [Symbol]
  - PEDOC OUTLET BOX PEDESTAL 30" HEIGHT SINGLE GANG HINGED TOP WITH INTEGRAL BASE COLOR: GREEN FUTURE 20A GFCI RECEPTACLE HUBBLE GFR5362SGW OR EO [Symbol]

**WARNING**  
CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-246-4645) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DETERMINING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47  
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.  
BM #2 REF. ELEVATION = 547.84  
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.



**Good Fulton & Farrell Architects**  
214.303.1500/Tel  
214.303.1512/Fax  
www.gff.com  
2908 Fairmount Street  
Suite 300  
Dallas, Texas 75201



**icon**  
Consulting Engineers, Inc.  
Civil Engineers - Designers - Planners  
Bicentennial Financial Center  
250 W. Southlake Blvd., Suite 117  
Southlake, Tx 76092  
Phone: (817) 552-8210  
Fax: (817) 552-3128



**FIORI  
ON VITRUVIAN PARK**  
3990 VITRUVIAN WAY  
ADDISON, TX 75001

No.	Date	Item
1	02.05.13	SERVICE LOCATION
2	01.25.13	NORTH OPEN SPACE
REVISIONS		

ICE  
Drawn  
JAM  
Checked  
BFD  
Approved

**STREETSCAPE  
ELECTRICAL PLAN**

Project No. 10061.00  
Date 08.25.11  
Last Revision

**C0-8.02B**  
RECORD DRAWINGS 11/04/13

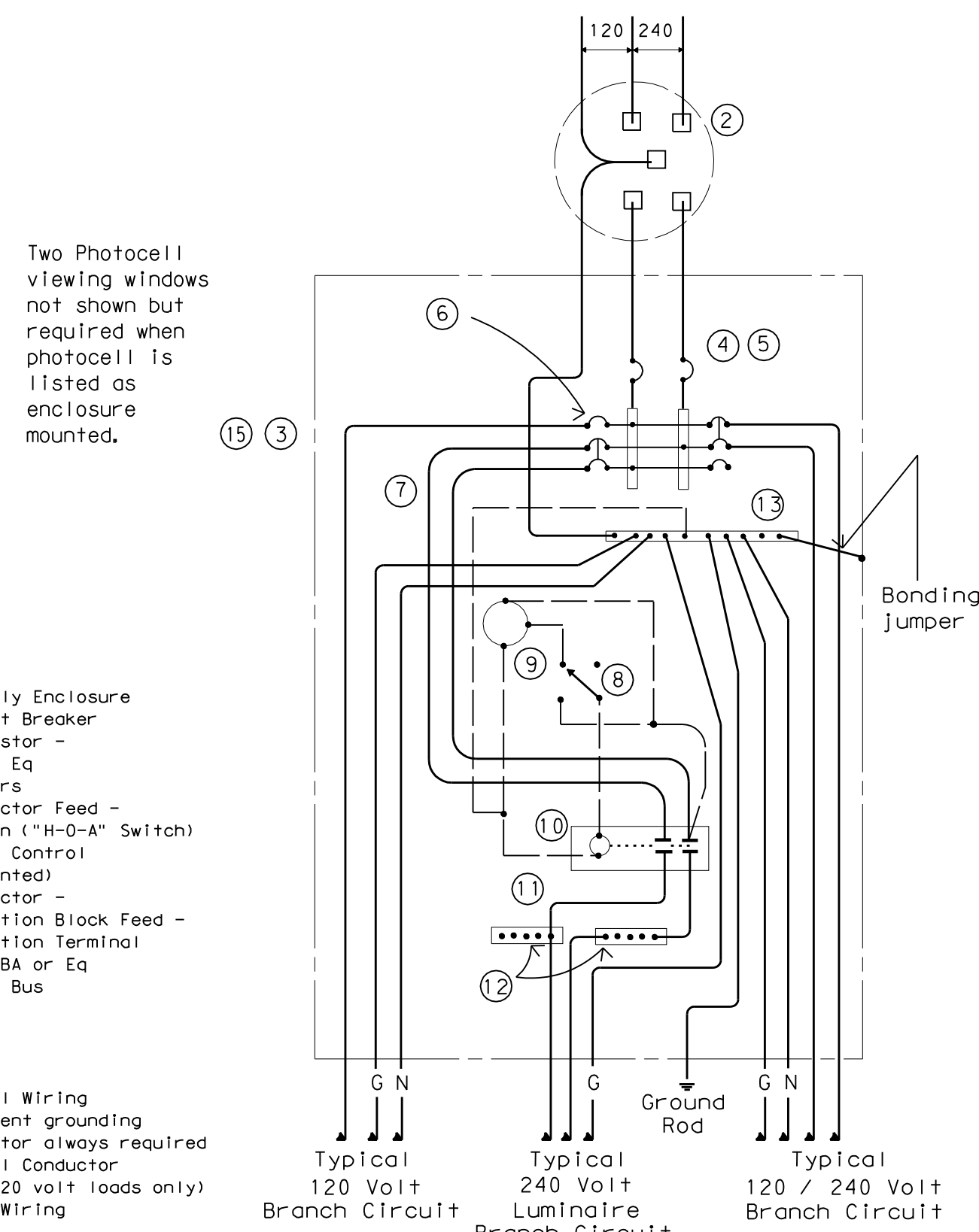
**GENERAL ELECTRICAL NOTES:**

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2008 NATIONAL ELECTRICAL CODE (N.E.C. 70), THE 2007 NATIONAL ELECTRIC SAFETY CODE (ANSI C2) AND ALL LOCAL AND STATE CODES AND REGULATIONS. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY THE BUILDING AND SAFETY CODES AND ORDINANCES, AND THE RULES AND REGULATIONS OF ANY LEGAL BODY HAVING JURISDICTION.
- ALL MATERIAL FURNISHED AND ALL LABOR PERFORMED UNDER THESE CONTRACTS SHALL BE IN STRICT ACCORDANCE WITH THE RULES, REGULATIONS, AND CODES OF NATIONAL, STATE, MUNICIPAL OR ANY OTHER AUTHORITIES THAT MAY HAVE LAWFUL JURISDICTION PERTAINING TO THE WORK SPECIFIED. EACH CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS, LICENSES, AND CERTIFICATES OF APPROVAL AND PAY THEIR FEES TO CARRY OUT HIS WORK.
- CONTRACTOR IS CAUTIONED OF HIS SOLE RESPONSIBILITY TO ASCERTAIN THE LOCATION OF ANY AND ALL BURIED UTILITIES, AND ONLY BY EXERCISE OF DUE CAUTION CAN DAMAGE TO SAID UTILITIES AND ASSOCIATED PROPERTIES, ALONG WITH PERSONNEL INJURY OF LOSS OR LIFE, BE AVOIDED.
- ALL CHANGES OR VARIATIONS NECESSITATED BY UNFORESEEN CONDITIONS SHALL BE VERIFIED WITH ENGINEER BEFORE SUCH CHANGES OR VARIATIONS ARE UNDERTAKEN.
- EACH CONTRACTOR SHALL MAKE HIMSELF & HIS TRADESMEN FAMILIAR WITH THE COMPLETE SET OF DRAWINGS AND SHALL BE PARTICULARLY AWARE OF ANY AND ALL CONFLICTS REGARDING HIS TRADE AND OTHER TRADES OCCUPYING THE SAME AREA, I.E. PIPES, DUCTS, CONDUIT, ETC. WHEN INSTALLING ITEMS OF HIS TRADE EACH CONTRACTOR SHALL CONSULT WITH OTHER TRADES OCCUPYING THE SAME AREA AND THE ENGINEER TO DETERMINE THE BEST SOLUTION TO THE CONFLICT. ALL DECISIONS BY THE ENGINEER SHALL BE FINAL AND BINDING TO ALL PARTIES CONCERNED.
- THE LOCATION OF ALL PIPES, OUTLETS, FIXTURES, ETC. SHOWN ON PLANS IS THE DESIGN INTENT. ANY REVISION OR ADJUSTMENT SHALL BE COORDINATED AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE ENGINEER RESERVES THE RIGHT TO MAKE REASONABLE CHANGES TO THE INDICATED LOCATIONS BEFORE WORK IS ROUGHED-IN WITHOUT ADDITIONAL CHARGE TO THE OWNER.
- FINAL CONNECTIONS TO EQUIPMENT SHALL BE PER MANUFACTURER'S APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH ACTUAL EQUIPMENT SUPPLIED.
- VERIFY EXACT LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES, PIPING AND RACEWAY SYSTEMS PRIOR TO TRENCHING. PROVIDE NECESSARY TRENCHING, BACKFILL, EXCAVATION, SUPPORTS, SERVICES (CONDUIT AND/OR WIRE), PULLBOXES, TRANSFORMER PADS, SAWCUTTING AND PATCHING, CONCRETE/PAVING, ETC. AS REQUIRED. CONTRACTOR SHALL OBTAIN AND VERIFY EXACT UTILITY COMPANY DRAWINGS AND REQUIREMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING EQUIPMENT WHICH IS DAMAGED DUE TO INCORRECT FIELD WIRING OR FACTORY WIRING IN EQUIPMENT.
- ALL COST INCURRED BY THE ACCEPTANCE OF SUBSTITUTIONS SHALL BE BORNE BY THE CONTRACTOR. PROOF FOR THE EQUALITY OF SUBSTITUTIONS SHALL BE BY THE CONTRACTOR.

- ALL ELECTRICAL ITEMS SHALL BE U.L. LABELED AND LISTED FOR THEIR SPECIFIC USE.
- THE ELECTRICAL CONTRACTOR SHALL PAY ALL COSTS REQUIRED BY THE LOCAL UTILITY COMPANY PROVIDING SERVICES INDICATED. ELECTRICAL CONTRACTOR SHALL COORDINATE METERING, TRANSFORMER PAD, CONNECTION POINTS AND GROUNDING WITH UTILITY COMPANY.
- ALL SERVICE ENTRANCE EQUIPMENT, INCLUDING BUT NOT LIMITED TO ANY MAIN DISCONNECT SWITCH, PANEL, OR SWITCHBOARD, SHALL BE LISTED AND LABELED AS "SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT."
- THE ELECTRICAL SYSTEMS SHALL BE SOLIDLY GROUNDED. ALL NON-CURRENT CARRYING METAL PARTS OF THE ELECTRICAL SYSTEM, I.E. RACEWAYS, EQUIPMENT ENCLOSURES, FRAMES, JUNCTION AND OUTLET BOXES AND OTHER CONDUCTIVE ITEMS IN CLOSE PROXIMITY WITH ELECTRICAL CIRCUITS, SHALL BE GROUNDED TO PROVIDE A LOW IMPEDANCE PATH FOR POTENTIAL GROUND FAULTS.
- EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSTALLED IN ALL RACEWAYS AND CABLES.
- THE NEUTRAL AND GROUND BUS SHALL BE BONDED TOGETHER AT ALL SERVICE EQUIPEMENT.
- CONDUIT SHALL BE RUN PARALLEL OR AT RIGHT ANGLES TO WALLS, CEILINGS, AND STRUCTURAL MEMBERS.
- ALL RACEWAYS SHALL BE INSTALLED CONCEALED EXCEPT IN UNFINISHED SPACES WHERE INDICATED ON DRAWINGS.
- ALL EMPTY CONDUITS SHALL BE EQUIPPED WITH A PULL LINE-200 LB TEST NYLON.
- OPEN TRENCHES SHALL BE PROTECTED AND SUPERVISED AT ALL TIMES.
- SELECT GRANULAR STRUCTURAL BACKFILL IS REQUIRED AROUND, AND 12" ABOVE, ALL CONDUIT.
- ELECTRICAL "WARNING TAPE" SHALL BE INSTALLED IN ALL TRENCHES 12" ABOVE HIGHEST CONDUIT.
- FASTENERS AND SUPPORTS SHALL BE AS MANUFACTURED BY GEDNEY, EFCOR OR EQUAL. SUPPORTING DEVICES SHALL BE THOSE AS MANUFACTURED FOR A SPECIFIC PURPOSE. NAILS, WIRE OR PIPE STRAP SHALL NOT BE USED.
- ALL CIRCUIT CONDUCTORS SHALL BE COPPER, 90°C, XHHW-2 INSULATION.
- WIRE NO. 8 AWG AND LARGER SHALL BE STRANDED, NO. 10 AND SMALLER SHALL BE SOLID. MINIMUM CONDUCTOR SIZE SHALL BE NO. 12.

- ALL BRANCH CIRCUIT AND FEEDER CONDUCTORS, NO. 8 AWG AND SMALLER, SHALL BE COLOR CODED AS FOLLOWS (WHERE APPROVED BY THE AUTHORITY HAVING JURISDICTION):
 

<u>120/208 VOLT SYSTEM</u>	<u>120/240 VOLT SYSTEM</u>
PHASE A - BLACK	LINE 1 - BLACK
PHASE B - RED	LINE 2 - BLUE
PHASE C - BLUE	NEUTRAL - WHITE
NEUTRAL - WHITE	GROUND - GREEN
GROUND - GREEN	
- CONTRACTOR SHALL VERIFY AVAILABLE FAULT CURRENT, TRANSFORMER SIZE, AND SERVICE CONDUCTOR FROM ELECTRIC POWER UTILITY BEFORE ORDERING BREAKERS.
- ELECTRICAL CONTRACTOR SHALL VERIFY THE MOTOR UNIT LOADS BEFORE ORDERING BREAKERS.
- PANELBOARDS SHALL HAVE BOLT-IN CIRCUIT BREAKERS AND ALUMINUM BUSSING.
- OVERCURRENT PROTECTIVE DEVICES SHALL BE AUTOMATIC TRIP THERMAL MAGNETIC TYPE WITH QUICK-MAKE, QUICK-BREAK FOR BOTH MANUAL AND AUTOMATIC OPERATIONS. ALL MULTIPOLE BREAKERS SHALL BE COMMON TRIP. HANDLE TIES WILL NOT BE ACCEPTED.
- SWITCHBOARDS, DISTRIBUTION BOARDS, PANELBOARDS, DISCONNECT SWITCHES AND MOTOR CONTROL CENTERS SHALL BE MANUFACTURED BY SQUARE 'D', GENERAL ELECTRIC, SIEMENS, OR EATON/CUTLER HAMMER.
- TYPEWRITTEN PANELBOARD SCHEDULES AND DESIGNATION PLATES SHALL BE PROVIDED BY THE CONTRACTOR FOR ALL PANELBOARDS. PANELBOARD DESIGNATIONS SHALL BE PHENOLIC-ENGRAVED.
- WIRE TERMINATION PROVISIONS FOR PANELBOARDS, CIRCUIT BREAKERS, SAFETY SWITCHES AND ALL OTHER ELECTRICAL APPARATUS SHALL BE LISTED AS SUITABLE FOR 75°C MINIMUM.
- SAFETY-TYPE DISCONNECT SWITCHES SHALL BE HEAVY DUTY WITH QUICK-MAKE, QUICK-BREAK MECHANISM WITH INTERLOCKING COVER WHICH NORMALLY CANNOT BE OPENED WHEN THE SWITCH IS IN THE 'ON' POSITION. SWITCH SHALL HAVE PROVISIONS FOR PAD-LOCKING IN THE OPEN OR CLOSED POSITION. FUSIBLE DISCONNECT SWITCHES SHALL HAVE REJECTION-TYPE FUSEHOLDERS. FUSES SHALL BE NON-RENEWABLE, DUAL ELEMENT TIME-DELAY 'RK1' OR 'RK5', OR AS SPECIFIED OTHERWISE. ACCEPTABLE MANUFACTURERS: SQUARE 'D', GENERAL ELECTRIC, SIEMENS, OR EATON/CUTLER HAMMER.
- UNLESS INDICATED ON DRAWINGS, BALLASTS PROVIDED WITH FIXTURES SHALL BE ETL-CBM APPROVED, HIGH POWER FACTOR, WITH U.L. LABEL. ALL BALLASTS FOR RAPID START LAMPS SHALL BE PREMIUM CLASS P.
- ALL FIXTURES TO BE FURNISHED COMPLETE WITH LAMPS.
- UNLESS OTHERWISE NOTED, DUPLEX RECEPTACLES SHALL BE RATED 20 AMP, HUBBELL CR5362 OR APPROVED EQUAL.
- UNLESS OTHERWISE NOTED, TOGGLE SWITCHES SHALL BE 20 AMP, HUBBELL CS1221 OR APPROVED EQUAL.



**SCHEMATIC LEGEND**

- 1 - Onit
- 2 - Meter
- 3 - Service Assembly Enclosure
- 4 - Main Disconnect Breaker
- 5 - Lightning Arrester - Delta LA302 or Eq
- 6 - Circuit Breakers
- 7 - Lighting Contactor Feed -
- 8 - Control Station ("H-O-A" Switch)
- 9 - Photo Electric Control (enclosure-mounted)
- 10 - Lighting Contactor -
- 11 - Power Distribution Block Feed -
- 12 - Power Distribution Terminal Blocks - S&D LBA or Eq
- 13 - Neutral/Ground Bus
- 14 - Onit
- 15 - Load Center

- Control Wiring
- Equipment grounding conductor always required
- N - Neutral Conductor (for 120 volt loads only)
- G - Power Wiring

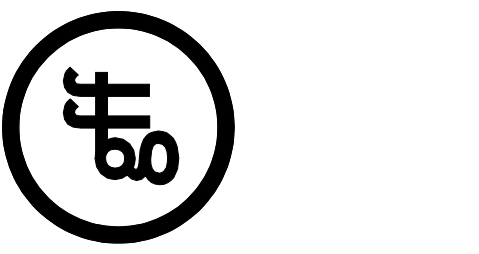
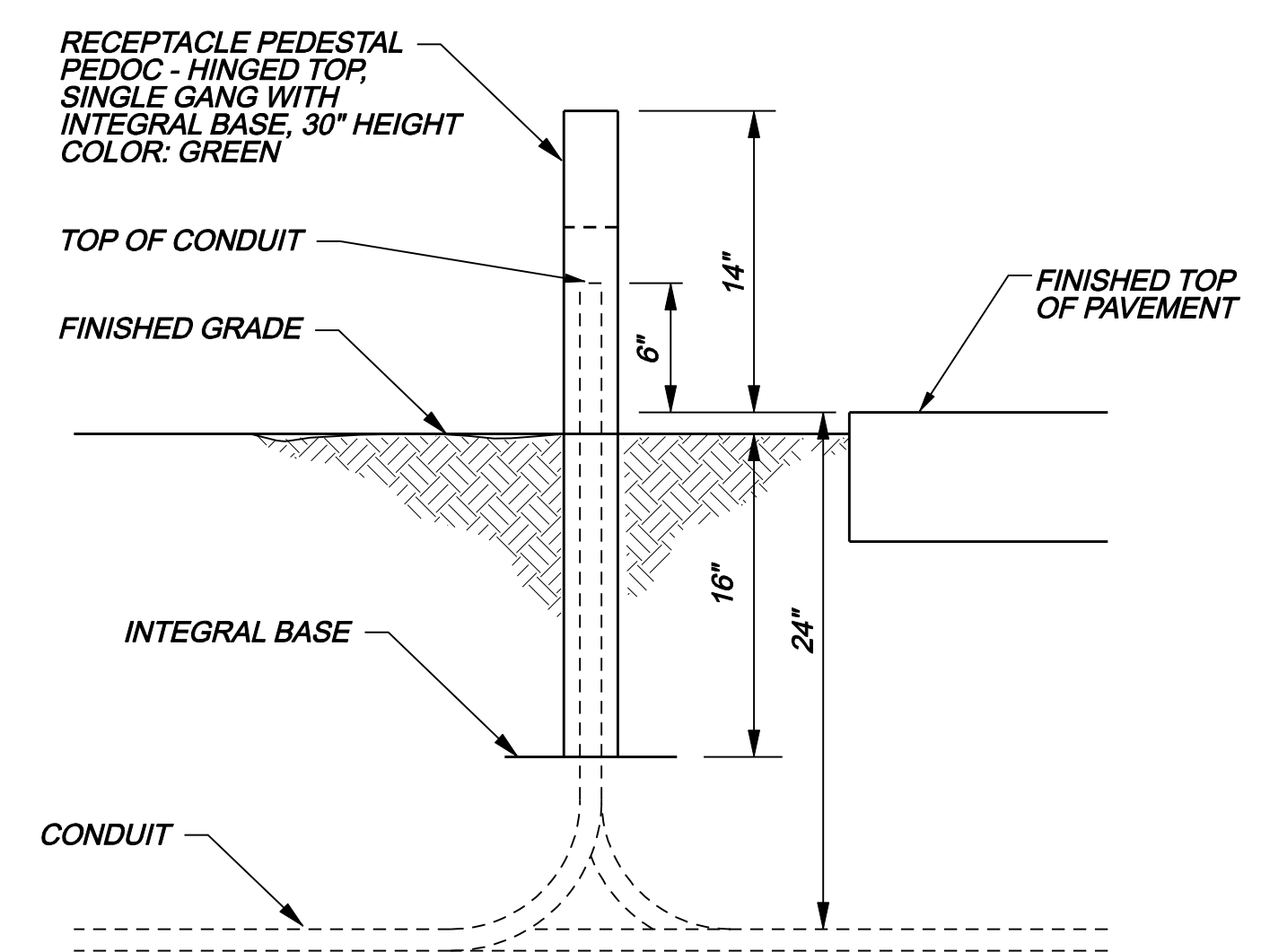
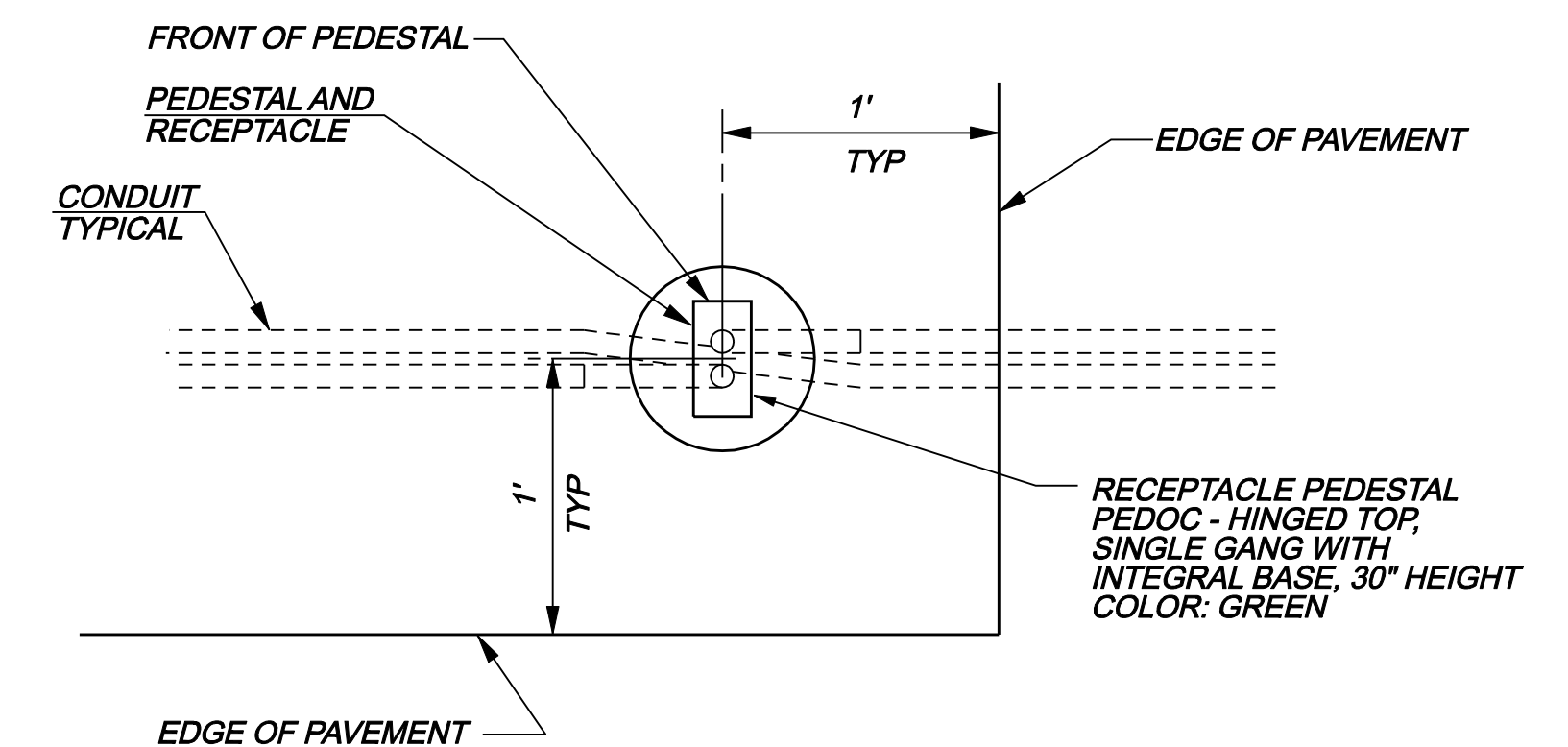
**TYPE D SERVICE NOTES**

Photo cell and lighting contactor shall be located in the same UL type 3R enclosure with load center. There shall be a window on each side of enclosure to allow operation of photo cell. Both photo cell, contactor and breaker area shall have dead front trim. Type D load center with lighting controls shall have power distribution blocks for a minimum of 16, #4 conductors.

**ELECTRIC SERVICE PEDESTAL SCHEMATIC**

Panel Schedule										Date: 11/21/2012	
Project: Bella Lane North Pedestal - Northeast of VP103											
Panel Name: BLNP - Bella Lane North Pedest										Volts<L-L>: 240	
										Main Bkr: 200 Amps	
										Volts<L-G>: 120	
										Phase: 1	
										Panel AIC: 22,000 Amps	
										Wires: 3	
										Neutral Bar: Y / N	
										Ground Bar: Y / N	
										Breaker Mounting: S	
										"I" = Indoor, "O" = Outdoor	
										"S" = Standard, "B" = Bolt-in	
Pos. No.	Bkr No.	Trip Amps	No. Poles	Serves	Load VA	Pos. No.	Bkr No.	Trip Amps	No. Poles	Serves	
1	100	2	2	Contact 1	< 10500 4500 >	2			2	Space	
3	100		2	Contact 1	< 10500 4500 >	4				Space	
5	100	2	2	Spare	< 0 1920 >	6		20	1	Irrigation Controller	
7	100		2	Spare	< 0 1920 >	8		20	1	Pedestal Duplex Outlet	
9		1	1	Space	< 1920 1920 >	10		20	1	Spare	
11		1	1	Space	< 1920 1920 >	12		20	1	Spare	
CONTACTOR FEED SUB-PANEL											
1	20	1	1	BL SE Black Tree Outlets	< 1750 1750 >	2		20	1	BL SE Blue Tree Outlets	
3	20	1	1	BL SW Black Tree Outlets	< 1750 1750 >	4		20	1	BL SW Blue Tree Outlets	
5	20	1	1	FUT BL WN Black Tree Outle	< 1750 1750 >	6		20	1	FUT BL WN Blue Tree Outlets	
7	20	1	1	BL WS Black Tree Outlets	< 1750 1750 >	8		20	1	BL WS Blue Tree Outlets	
9	20	1	1	Spare	< 1750 1750 >	10		20	1	Spare	
11	20	1	1	Spare	< 1750 1750 >	12		20	1	Spare	
Connected VA per Leg =					20760	20760					
Total Amps per Leg =					173	173					

**PROPOSED BELLA LANE NORTH PEDESTAL PANEL SCHEDULE**



No.	Date	REVISIONS
1	11.26.2012	STREETSCAPE CONST

ICE  
Drawn  
JAM  
Checked  
BFD  
Approved

**STREETSCAPE ELECTRICAL PLAN**

Project No. 10061.00  
Date 08.25.11  
Last Revision

II. GROUND RODS

A. MATERIALS

- All ground rods installed at electrical services, including supplemental lightning protection ground rods specified by the plans in other locations such as pole bases, shall be copper clad and UL listed. Rods shall be a minimum diameter of 5/8 inch. The length shall be a minimum of 8 feet. Larger diameter or longer length rods may be called for in some specific locations, see the individual plans sheets.
- Ground rod clamps shall be listed to be in direct contact with the soil. Where concrete encasement is required, the clamp shall be listed for concrete encasement.

B. CONSTRUCTION METHODS

- Ground rods installed in locations such as pole bases, to provide supplemental lightning protection need not be totally in contact with the soil. Where called for in the plans, rods may be encased in soil or concrete or any combination of soil and concrete. When concrete encased, the connection of the conductor to the rod shall be readily accessible for inspection or repairs. When driven into the soil the upper end shall be between 2 to 4 inches below finished grade. Ground rods shall not be placed in the same drilled hole as a timber pole.
- Ground rods shall be installed such that the end imprinted with the rod's part number is installed as being the upper end.
- Non-conductive coatings such as concrete spatter shall be removed from the rod at the clamp location.
- Routing of lightning protection ground rod wires shall be run as short and straight as possible. Where bends are required they shall have a minimum radius of four inches.
- Unless specifically called for by the plans, conduits used for ground rod wires shall be non-metallic. Where metal conduits are specified, a grounding bushing and properly sized bonding jumper shall be provided and properly installed on each end.
- Where rocky soil or a solid rock bottom is encountered when driving a ground rod and the horizontal trench placement method is the only viable solution, written authorization from the Engineer must be obtained.

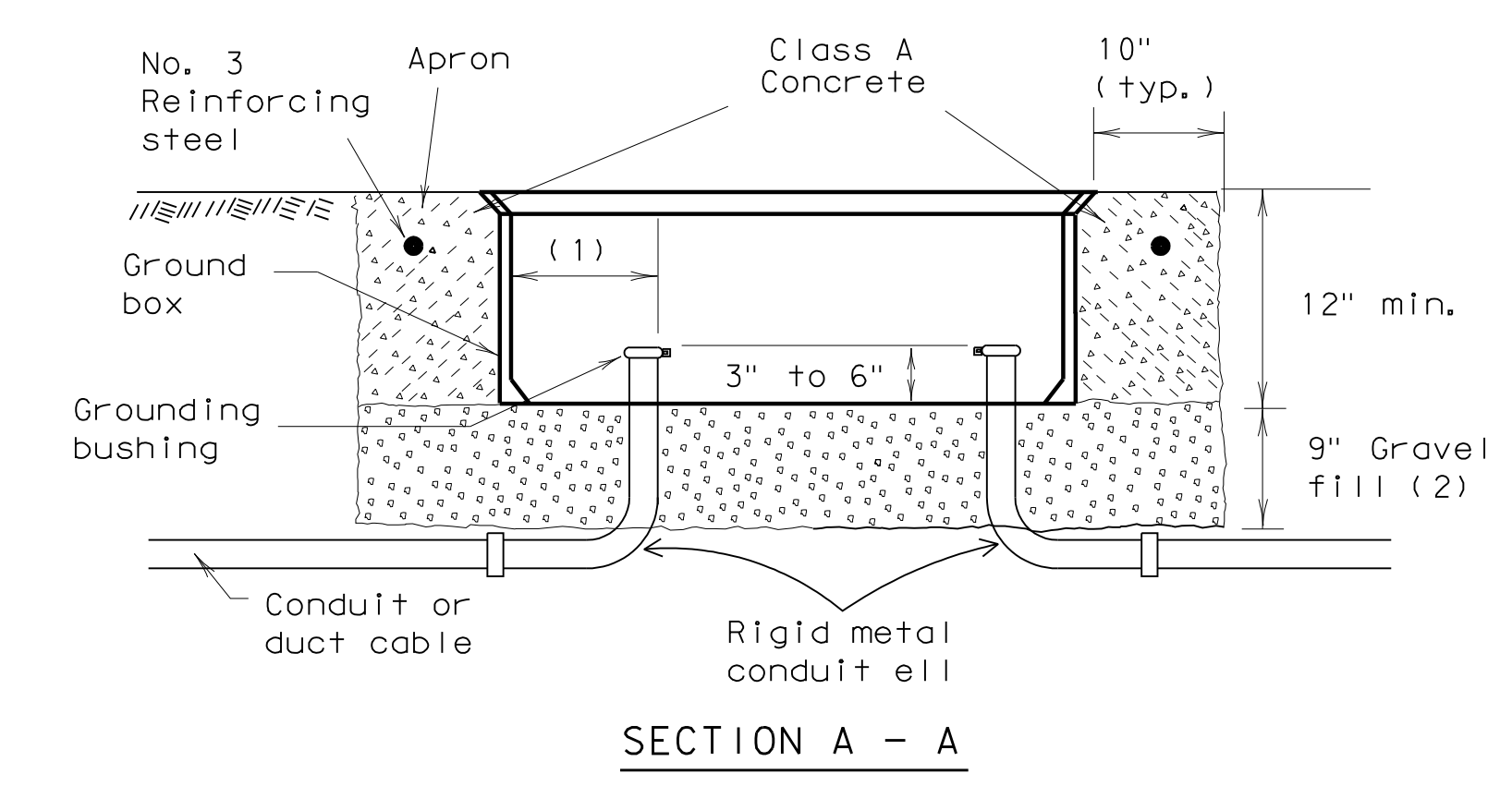
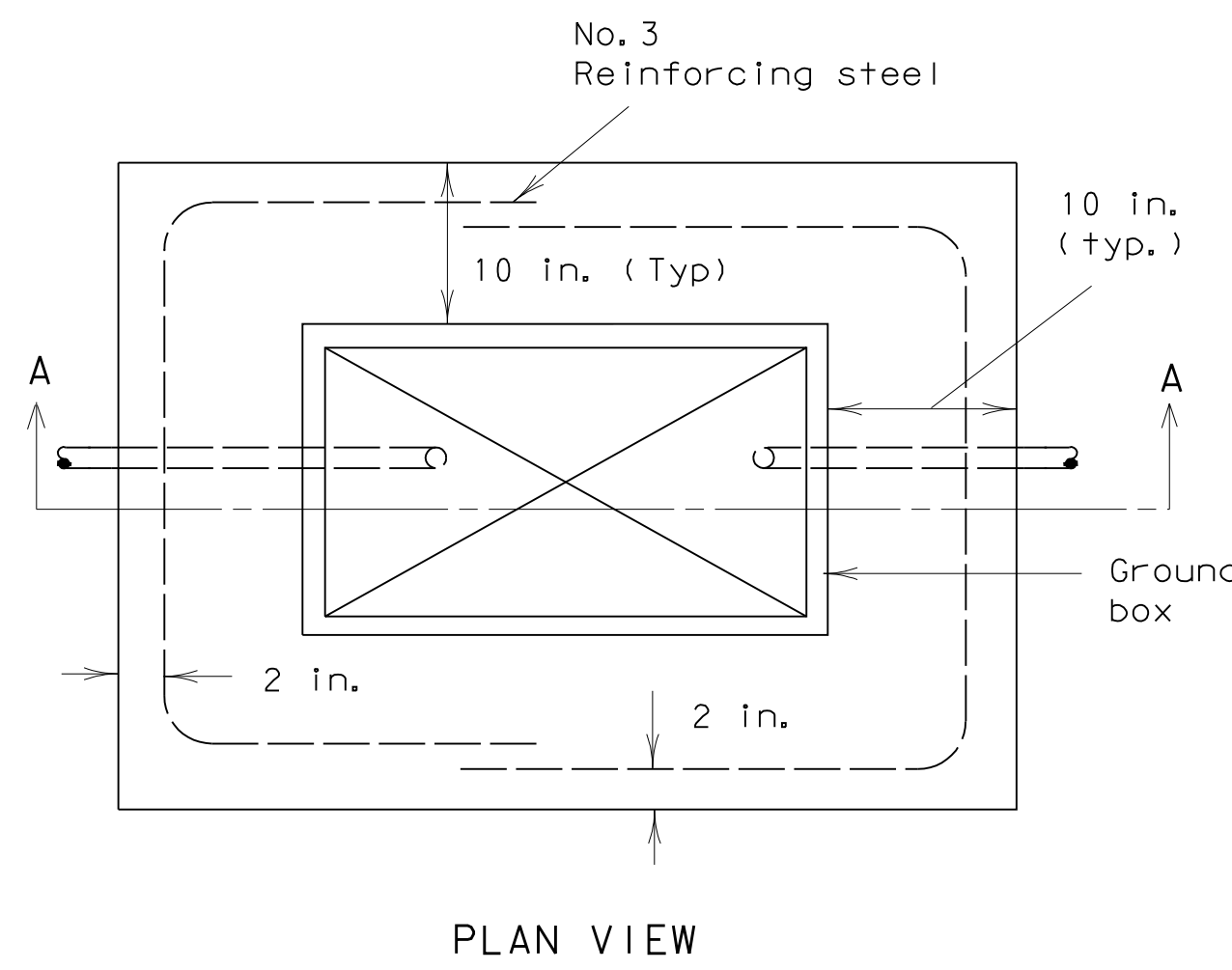
III. GROUND BOX

A. MATERIALS

- Ground boxes 16x30x24 inches (WxLxD) or smaller shall be polymer concrete of the type required by the descriptive code shown elsewhere. Larger ground boxes shall be as shown elsewhere in the plans.
- All ground boxes and covers shall be permanently marked either by impress or by permanent ink, with manufacturer's model number and manufacturer's name or logo.
- Covers shall be bolted down, and bolt holes in the box shall be arranged to drain dirt.
- Ground box Types A, B, C, D & E shall meet the following requirements:
  - Ground boxes and covers be manufactured from polymer concrete reinforced with continuous strands of woven or stitched borosilicate fiberglass cloth. The polymer concrete shall be made from catalyzed polyester resin, sand and aggregate, and shall have a minimum compressive strength of 11,000 psi. Polymer concrete containing chopped fiberglass or fiber-glass reinforced plastic is not acceptable.
  - Minimum inside dimensions shall be as follows (width x length x depth):
    - Type A shall be 11.5 inches x 21 inches x 10 inches, (122311)
    - Type B shall be 11.5 inches x 21 inches x 20 inches, (122322)
    - Type C shall be 15.25 inches x 28.25 inches x 10 inches, (162911)
    - Type D shall be 15.25 inches x 28.25 inches x 20 inches, (162922)
    - Type E shall be 11.5 inches x 21 inches x 16 inches, (122317)
  - Bottom edge of box or extension shall be footed with a minimum 1/4 inch flange.
  - Ground boxes shall withstand 600 lbs. per sq. ft. applied over the entire sidewall with less than 1/4 inch deflection per foot length of box. Ground boxes and covers shall withstand a test loading of 20,000 lbs. over a 10 inch by 10 inch area centered on the cover with less than 1/2 inch deflection. Ground boxes and covers shall meet Western Underground Standards 3.6. Manufacturer shall supply certification by an independent laboratory or sealed by a Texas-Licensed Professional Engineer.
  - Covers shall be 2 inch (nominal) thick polymer concrete. All hardware shall be stainless steel. Cover shall be secured with two 1/2 inch stainless steel bolts. Bolts shall be self-retaining and shall withstand a minimum of 70 ft-lbs. torque and shall have a minimum 750 lbs. straight pull out strength. Nuts shall be floating and shall provide a minimum of 1/2 inch movement from the center of the nut. Covers shall be skid resistant, minimum 0.5 coefficient of friction. Covers shall be interchangeable between manufacturers and shall conform to the dimensions shown herein. Unless otherwise approved by the Engineer, cover shall be legibly imprinted with the following words in minimum 1 inch letters:
    - Ground boxes containing wiring for traffic signals shall be labeled, Danger High Voltage Traffic Signal.
    - Ground boxes containing wiring for illumination systems shall be labeled, Danger High Voltage Illumination.
    - Ground boxes containing wiring for traffic management systems shall be labeled, Danger High Voltage Traffic Management.
    - Ground boxes containing wiring for sign illumination systems shall be labeled, Danger High Voltage Sign Illumination.
    - Ground boxes containing wiring for traffic signals that also contain illumination, powered by the signal electrical service, shall be labeled, Danger High Voltage Traffic Signal.

B. CONSTRUCTION METHODS

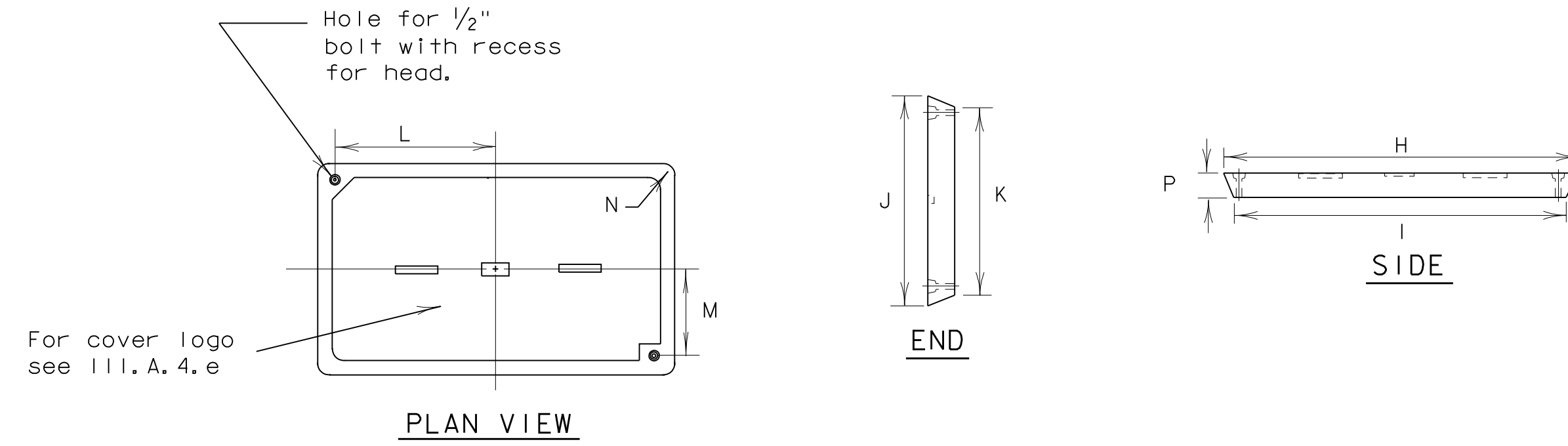
- Ground boxes shall be set on a 9 inch (minimum) bed of aggregate from 3/4 " up to 2" in size. Aggregate shall be in place prior to setting box and conduits shall be capped. Any gravel or dirt in conduit shall be removed.
- When required by item descriptive code, construction of an apron encasing a ground box including concrete and reinforcing steel shall not be paid for directly but shall be subsidiary to the ground box. Reinforcing steel may be field bent. Concrete for aprons shall be considered miscellaneous concrete for testing purposes. Aprons shall be cast in place.
- Conduit holes may be cut in the walls of type B & D boxes at least 18 inches beneath the cover.
- If, within the limits of this project, the Contractor must utilize an existing ground box equipped with a metal cover, the Contractor shall bond the cover to the grounding conductor with a 3 foot long flexible stranded jumper the same size as the grounding conductor. Connection of bonding jumper to metal ground cover shall not be paid for directly but shall be subsidiary to various bid items. The box(es) must be clearly shown on the plans with plan notes fully describing the work required.
- If there are other ground boxes with metal covers within the project limits but not involved in the contract, the Engineer may direct the Contractor to ground the covers, designating and identifying the specific boxes in writing. This work will be paid for separately.
- Termination to metal ground box covers shall be made using a tank ground type lug.



APRON FOR GROUND BOXES

(Where required)

- Final position of end of conduit shall not exceed one-half the distance to the side of box opposite the conduit entry.
- Place gravel "under" the box, not "in" the box. Gravel should not encroach on the interior volume of the box.
- Install bushing on the upper end of all ells.
- Where a ground rod is present in the ground box, connect it to any and all equipment grounding conductors using a listed connector.
- Maintain sufficient space between all conduits so as to allow for proper installation of bushings.
- All conduits shall be installed in a neat and workmanlike manner.
- All conduits installed in the ground box shall be sealed after completion of conductor installation and any required pull tests. Silicone shall not be used as sealant.



GROUND BOX COVER

GROUND BOX COVER DIMENSIONS								
BOX	DIMENSIONS (INCHES)							
SIZE	H	I	J	K	L	M	N	P
A, B & E	23 1/4	23	13 3/4	13 1/2	9 7/8	5 1/8	1 3/8	2
C & D	30 1/2	30 1/4	17 1/2	17 1/4	13 1/4	6 3/4	1 3/8	2

STANDARD PLANS  
TEXAS DEPARTMENT OF TRANSPORTATION  
Traffic Operations Division

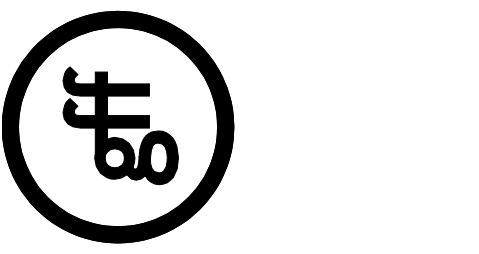
ELECTRICAL DETAILS-  
GROUND BOXES

ED(3)-03

5/03 Revision  
Revised notes.

TXDOT January 1992	EN-KB	EN-JW	EN-DN	EN-GC	NEG-NL			
REVISIONS	STATE	FEDERAL	FEDERAL AID PROJECT	COUNTY	SECTION	JOB	THIRDMAN	SHEET
4-98	G							CO-8.04
12-00								
3-03								
5-03								

71C



11.26.2012	STREETScape CONST
No. Date	Item
	REVISIONS

ICE  
Drawn  
JAM  
Checked  
BFD  
Approved

STREETScape  
ELECTRICAL DETAILS

Project No. 10061.00  
Date 08.25.11  
Last Revision