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TOTAL SHEETS 70



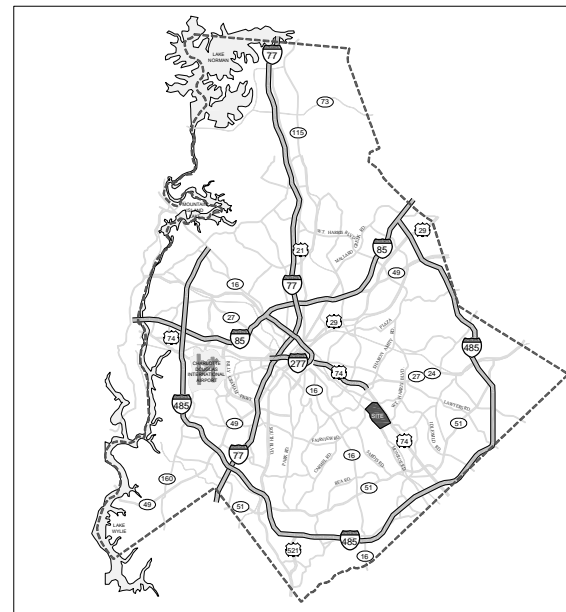
CHARLOTTE
 ENGINEERING & PROPERTY
 MANAGEMENT

**Construction Plans of Proposed
 EAST FOREST NEIGHBORHOOD IMPROVEMENT PROJECT**

Project No. 512-07-027

Project Features:

CONCRETE SIDEWALK



VICINITY MAP
 NTS



SHEET INDEX
 NTS

PE SEAL



Record Drawings

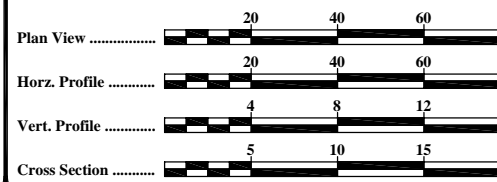
CONVENTIONAL SIGNS

Proposed Property Line	---
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Maintained as R/W Line	---
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Existing Light Pole	LP
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Proposed Utility Pole	UP
Iron Pin	IP
Existing Fire Hydrant	FH
Proposed Fire Hydrant	FH
Existing Drop Inlet	DI
Proposed Drop Inlet	DI
Accessible Ramp	WCR
Tree Protection	TP
Proposed Guardrail	GR
Silt Fence	SF
Proposed Curb & Gutter, Conc. Drive, Sidewalk	CG
Proposed Asphalt Pavement	AP
Proposed Rip Rap Ditch	RD
Proposed Gravel	GR
Proposed Pavement Removal	PR
Proposed Sidewalk Bridging Tree Roots	SBTR

**RECOMMENDED
 FOR CONSTRUCTION**

Utility Coordination	
Contract Administration	
Construction Administration	
Landscape Management	
Engineering Services	
CDOT	
CDOT Implementation	
CMU	
Planning Commission	
Storm Water Services	

GRAPHIC SCALES



TOTAL PROJECT LENGTH = 2.3 MILES
 2006 STANDARD SPECIFICATIONS

PLANS PREPARED BY:



Armstrong Glen, P.C.
 9731-L Southern Pine Boulevard
 P.O. Box 7326
 Charlotte, NC 28241
 Phone: 704-529-0345
 Fax: 704-529-0493



CHARLOTTE
 ENGINEERING & PROPERTY
 MANAGEMENT

Bid Set No.

APPROVED _____
 CITY ENGINEER DATE

GENERAL NOTES

PROPOSED CURB ELEVATIONS:

THE CONTRACTOR SHALL SET AND ADJUST PROPOSED CURB ELEVATIONS AS NECESSARY TO ENSURE PROPER LONGITUDINAL GRADE FOR DRAINAGE. THE CONTRACTOR SHALL RETAIN EXISTING PAVEMENT, UNLESS OTHERWISE NOTED.

DRIVEWAYS AND SIDEWALKS:

PROPOSED DRIVEWAY ENTRANCE DIMENSIONS ARE FROM EXPANSION JOINT TO EXPANSION JOINT. MATCH REPLACEMENT MATERIALS TO THE EXISTING SURFACE ACCORDINGLY:

- CONCRETE - SIX INCH PORTLAND CEMENT CONCRETE (3600 PSI).
● ASPHALT - (COMMERCIAL) TWO INCH SF9.5B COURSE AND FOUR INCH I19.0B INTERMEDIATE COURSE.
● GRAVEL - SIX INCH INCIDENTAL STONE

SIDEWALK SHALL BE FOUR INCHES THICK, AND SIX INCHES THICK AT DRIVEWAY CROSSINGS, PER CITY STD. NO. 10.22.

DRAINAGE STRUCTURES:

GRADES, ELEVATIONS AND LOCATIONS SHOWN ARE APPROXIMATE. AS DIRECTED BY THE ENGINEER, THEY MAY BE ADJUSTED TO ACCOMMODATE UNFORESEEN CONDITIONS. STATIONS, OFFSETS AND ELEVATIONS REFER TO THE CENTER OF DROP INLETS, MANHOLES AND JUNCTION BOXES, AND THE MIDPOINT OF THE LIP FOR CATCH BASINS. ALL PIPES SHALL BE RCP CLASS III, UNLESS OTHERWISE NOTED.

WEEPHOLES ARE TO BE CONSTRUCTED IN ALL DRAINAGE STRUCTURES, A MINIMUM OF 1/3 WEEPHOLE PER STRUCTURE. WEEPHOLES ARE TO BE CONSTRUCTED IN THE BOTTOM 1/3 OF STRUCTURE AND COVERED ON THE OUTSIDE OF THE STRUCTURE BY A BAG MADE OF FILTER FABRIC AND FILLED W/#78 STONE. THERE WILL BE NO SEPARATE PAYMENT FOR THIS WORK.

UTILITIES:

UTILITIES ARE ILLUSTRATED FOR INFORMATION PURPOSES ONLY. THE CITY WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF UTILITY LOCATIONS, SIZES, DEPTHS, OR FOR COMPLETENESS OF UTILITY INFORMATION. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY AND MEET WITH ALL UTILITY OWNERS, THE CITY UTILITY COORDINATOR AND CITY INSPECTOR WHOSE FACILITIES WILL BE AFFECTED TO DETERMINE UTILITY LOCATIONS. THE CONTRACTOR SHALL PROTECT ALL UTILITIES FROM DAMAGE CAUSED BY HIS OPERATIONS OR THOSE OF HIS AGENTS. THE CONTRACTOR SHALL HOLD THE CITY HARMLESS FOR ANY THIRD-PARTY INCONVENIENCE CREATED BY WORK OF HIS OWN FORCES OR THAT OF HIS AGENTS. ANY DAMAGES INCURRED SHALL BE THE CONTRACTORS FINANCIAL RESPONSIBILITY.

FOR UTILITY LOCATES CALL NORTH CAROLINA ONE-CALL @ 1-800-632-4949.

FOR LOCATES OF UTILITIES NOT MEMBERS OF NORTH CAROLINA ONE-CALL CONTACT PROJECT MANAGER & UTILITY COORDINATOR.

THE CONTRACTOR SHALL ADJUST ALL WATER VALVES, WATER METER BOXES AND WATER VAULTS TO FINISHED GRADE. WATER METERS LOCATED IN SIDEWALKS OR CONCRETE DRIVEWAYS SHALL BE INSTALLED WITHIN CONCRETE BOXES.

GAS LINES WILL BE ADJUSTED/RELOCATED AS NEEDED BY PIEDMONT NATURAL GAS. A REPRESENTATIVE OF PIEDMONT NATURAL GAS MUST BE PRESENT JUST PRIOR TO AND DURING CONSTRUCTION NEAR EXISTING GAS LINES, THE CONTRACTOR SHALL CONTACT PIEDMONT NATURAL GAS AT LEAST TWO WEEKS PRIOR TO CONSTRUCTION.

WATER AND SEWER:

- 1. THE CONTRACTOR SHALL ADJUST ALL WATER VALVE BOXES, WATER METER BOXES, WATER VAULTS, AND SANITARY SEWER MANHOLES AND CLEANOUTS TO MATCH THE ADJACENT FINISHED GRADE(S). WATER METERS LOCATED ENTIRELY WITHIN SIDEWALKS OR CONCRETE DRIVEWAYS SHALL BE INSTALLED WITHIN CONCRETE BOXES AND ADJUSTED TO MATCH THE ADJACENT FINISHED GRADE(S). WATER METERS LYING PARTIALLY INSIDE THE SIDEWALK OR DRIVEWAY LIMITS ARE TO BE RELOCATED TO THE RIGHT-OF-WAY LINE (OUTSIDE THE PAVEMENT LIMITS).
2. EXISTING WATER AND SEWER SERVICE IS OWNED AND MAINTAINED BY CHARLOTTE-MECKLENBURG UTILITIES (CMU). THE CONTRACTOR IS TO NOTIFY CMU 48 HOURS PRIOR TO BEGINNING WORK. FOR LOCATION OF EXISTING WATER AND SANITARY SEWER LINES AND TO NOTIFY CMU THAT CONSTRUCTION IS TO BEGIN, THE CONTRACTOR IS TO CONTACT CMU AT THE FOLLOWING NUMBERS:

WATER DEPARTMENT: 704-336-2564 SEWER DEPARTMENT: 704-357-6064

CABLE TV SERVICE:

TIME WARNER MAINTAINS CABLE TV SERVICE WITHIN THE NEIGHBORHOODS. SHOULD THE CONTRACTOR DAMAGE ANY CABLE TV SERVICE LINES, CONTACT

TELICS
ANGIE TAYLOR
287 SPRINGHILL FARM ROAD
FORT MILL, SC 29715
PHONE: 980-721-2903

ELECTRIC SERVICE:

DUKE POWER OWNS AND MAINTAINS ELECTRIC SERVICE TO THE NEIGHBORHOODS. SHOULD THE CONTRACTOR DAMAGE ANY ELECTRIC SERVICE OR NEED FOR A POLE TO BE BRACED, CONTACT

DUKE ENERGY COMPANY
MIKE TROWER
LR01A/6325 WILKINSON BOULEVARD
CHARLOTTE, NC 28214
PHONE: 704-382-0563
E-MAIL: mdtrower@duke-energy.com

GENERAL NOTES

NATURAL GAS:

ALL GAS LINES WILL BE ADJUSTED/RELOCATED BY PIEDMONT NATURAL GAS. A REPRESENTATIVE OF PIEDMONT NATURAL GAS MUST BE PRESENT JUST PRIOR TO AND DURING ANY CONSTRUCTION NEAR EXISTING GAS LINES, THE CONTRACTOR SHALL CONTACT PIEDMONT NATURAL GAS AT LEAST TWO WEEKS PRIOR TO CONSTRUCTION.

PIEDMONT NATURAL GAS COMPANY REPRESENTATIVE
HAROLD GREENE
TELICS
287 SPRINGHILL FARM ROAD
FORT MILL, SC 29715
CELL: 704-241-6441
EMAIL: hgreene@telics.com

TELEPHONE SERVICE:

AT&T TELEPHONE MAINTAINS BOTH OVERHEAD AND UNDERGROUND SERVICE IN THE PROJECT AREA. SHOULD THE CONTRACTOR DAMAGE ANY AT&T SERVICE LINES, CONTACT AT&T PROJECT MANAGER.

AT&T TELEPHONE
MR. DANNY MOUNTS
TELICS
4100 SOUTH STREAM BOULEVARD
ROOM 320
FORT MILL, SOUTH CAROLINA 29715
704-424-1522

EXISTING SANITARY SEWER AND WATER LINE:

THE CONTRACTOR SHALL USE CARE WHEN WORKING AROUND SANITARY SEWERS AND WATER LINES. SHOULD THE CONTRACTOR DAMAGE EXISTING SEWER OR WATER LINES, HE SHALL IMMEDIATELY REPLACE THE LINE AT HIS EXPENSE WITH DUCTILE IRON PIPE. THE CONTRACTOR SHALL REPLACE SANITARY SEWER AND/OR WATER LINE, WITH A MINIMUM TEN FOOT SECTION OF DUCTILE IRON PIPE WHEN DRAINAGE PIPE COMES WITHIN TWO FEET OF SAID LINES, VERTICALLY OR HORIZONTALLY.

SUBSURFACE PLANS:

NO SUBSURFACE INVESTIGATIONS HAVE BEEN MADE ON THIS PROJECT. THE CONTRACTOR MAY MAKE HIS OWN INVESTIGATION TO DETERMINE SUBSURFACE CONDITIONS.

MAIL BOXES:

THE CONTRACTOR SHALL RELOCATE MAIL BOXES, AS REQUIRED BY SECTION 107-12 OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. COORDINATE THIS WORK WITH THE U.S. POSTAL SERVICE.

FENCES:

THE CONTRACTOR SHALL REMOVE AND RESET FENCES AS NOTED ON THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

TREES, SHRUBS, AND HEDGES:

THE CONTRACTOR SHALL REMOVE ALL TREES, SHRUBS, AND HEDGES WITHIN THE EASEMENT LINES UNLESS SHOWN ON THE PLANS TO BE PROTECTED OR AS DIRECTED BY THE ENGINEER. WHEN ROOT PRUNING IS NECESSARY, CUT ROOTS CLEANLY USING A DISC TRENCHER IN ACCORDANCE WITH SECTION 01000 OF THE CITY OF CHARLOTTE LANDSCAPE CONSTRUCTION STANDARDS. PRUNING SHALL BE PER THE LATEST STANDARD OF THE LANDSCAPE CONSTRUCTION STANDARDS MANUAL (TYP.) USE PLYWOOD FORMS WHEN TREE ROOTS ARE ADJACENT TO PROPOSED CURB & GUTTER OR SIDEWALK. TREE PROTECTION SHALL BE IN ACCORDANCE WITH CMLD STD. 40.02 USE CMLD STD. 40.11 FOR BRIDGING TREE ROOTS. WHEN THE TREE IS CLOSE TO THE WORK AREA TREE PROTECTION CMLD STD. 40.12 SHALL BE USED. TREES SPECIFIED BY THE PLANS TO HAVE ASPHALT CURBING MUST USE CMLD STD. 40.13

SIDE SLOPES:

LIMITS OF PROPOSED SLOPES ARE INDICATED IN THE PLANS, DETAILS AND STANDARD DRAWINGS. THE MAXIMUM SLOPE SHALL NOT EXCEED A 3:1 (HORIZONTAL TO VERTICAL) UNLESS DESIGNATED BY THE ENGINEER. A CUT SLOPE OF 2:1 MAXIMUM WILL BE USED ONLY AS DIRECTED BY THE ENGINEER.

SAWCUTS:

THE CONTRACTOR SHALL SAWCUT EXISTING ASPHALT AND/OR CONCRETE SURFACES PRIOR TO REMOVAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER. SAW CUT WIDTH SHALL BE 1 FOOT MINIMUM FROM THE EXISTING EDGE OF PAVEMENT. SAW CUT PAVEMENT SHALL BE REPLACED AS WELL AS ADDITIONAL PAVEMENT REQUIRED TO TIE-IN TO FACE OF PROPOSED CURB AND GUTTER.

TRAFFIC CONTROL:

TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE 2006 EDITION OF THE "WORK AREA TRAFFIC CONTROL HANDBOOK" (WATCH) AND THE TRAFFIC CONTROL PLAN ON SHEET TCP-1

PAVEMENT DEGRADATION:

CDOT HAS DETERMINED THAT NO PAVEMENT DEGRADATION FEE IS TO BE ASSESSED. CDOT AND E&PM HAVE AGREED ON THE STREET CUTS FOR WHICH A PAVEMENT DEGRADATION FEE IS REQUIRED. THE DEGRADATION FEE ASSESSMENT SHALL BE PAID VIA INTERNAL CITY MECHANISMS (DTI) PRIOR TO CONSTRUCTION.

PROJECT NOTES

PROJECT NOTES:

- 1. CONSTRUCTION STAKING FOR THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CITY.
2. WRITTEN INFORMATION AND WRITTEN DIMENSIONS SHALL GOVERN OVER SCALED DISTANCES. DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO ATTEMPTING ANY WORK IN THE AREA IN QUESTION.
3. THE CONTRACTOR SHALL CONFINE DISTURBED AREAS TO A MINIMUM. ALL TREES AND OTHER VEGETATION SHALL REMAIN UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR UNLESS WRITTEN AUTHORIZATION IS GIVEN BY THE CITY. DAMAGED PLANTS NOT AUTHORIZED FOR REMOVAL ARE TO BE REPLACED AT NO ADDITIONAL COST TO THE CITY. TREE LIMBS REMOVED FOR CONSTRUCTION SHALL BE SAW CUT IN ACCORDANCE WITH CLD STANDARD 40.02.
4. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ALL EXISTING PAVEMENT DAMAGED DURING CONSTRUCTION. BROKEN CONCRETE THAT IS TO BE REPLACED MUST BE SAW CUT TO FORM A SMOOTH EVEN EDGE PRIOR TO THE PAVEMENT REPLACEMENT.
5. IF DISCREPANCIES DEVELOP BETWEEN THE PROPOSED GRADES AS SHOWN ON THE PLAN AND THE EXISTING GROUND SURFACE ELEVATIONS, THE CONTRACTOR, WITH APPROVAL OF THE ENGINEER, SHALL MAKE GRADE ADJUSTMENTS AS NECESSARY TO MAINTAIN THE GENERAL INTENT OF THE DESIGN.

EROSION AND SEDIMENT CONTROL NOTES

EROSION & SEDIMENT CONTROL NOTES:

- 1. CONSTRUCTION AND MAINTENANCE OF SILT DETENTION DEVICES ARE TO BE IN ACCORDANCE WITH NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) SECTION 1630.
2. THE CONTRACTOR SHALL CONSTRUCT EROSION AND SEDIMENT CONTROL MEASURES AND DEVICES AS NECESSARY TO COMPLY WITH THE STANDARDS AND SPECIFICATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (NCDENR), AND APPLICABLE STATE AND LOCAL LAWS AND ORDINANCES.
3. THE CONTRACTOR SHALL STABILIZE ALL DITCHES DISTURBED BY THE CONSTRUCTION. A TEMPORARY DITCH LINER OF FIBERGLASS ROVING (NCDOT SECTION 1631) IS TO BE CONSTRUCTED ON THE DITCH BOTTOM AND SIDE SLOPES OF NEW OR DISTURBED UNPAVED DITCHES HAVING GRADES EXCEEDING 4%. ALL AREAS DISTURBED BY THE CONSTRUCTION SHALL BE SEEDED, FERTILIZED AND MULCHED IN ACCORDANCE WITH NCDOT SECTION 1660.
4. THE CONTRACTOR IS TO INSTALL TEMPORARY SILT FENCE (NCDOT SECTION 1605 ADJACENT TO DITCHES, AT THE TOE OF FILL SLOPES, AND AS NECESSARY TO CONTROL SEDIMENT RUNOFF. EROSION CONTROL MEASURES ARE TO BE CONSTRUCTED WHERE NATURAL VEGETATION DOES NOT PROVIDE A SUFFICIENT BUFFER TO CONTROL SEDIMENT RUNOFF.
5. CATCH BASIN INLET PROTECTION (CLD. 30.15) IS TO BE USED AT ALL NEW AND EXISTING STORM INLETS UNTIL SURFACE STABILIZATION IS ESTABLISHED AND THERE IS NO LONGER A THREAT OF SEDIMENT RUNOFF.
6. COMPLY WITH THE FOLLOWING CONSTRUCTION SEQUENCE:
A. ASSURE EXISTING DRAINAGE FACILITIES ARE FUNCTIONING PROPERLY PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.
B. CONSTRUCT EROSION CONTROL STRUCTURES AS CONSTRUCTION PROGRESSES. EXISTING EROSION AND SEDIMENT CONTROL DEVICES ARE TO BE CHECKED DAILY AND MAINTAINED UNTIL A VEGETATIVE COVER IS ESTABLISHED AND/OR SURFACE STABILIZATION IS COMPLETE. DAMAGED OR INEFFECTIVE EROSION CONTROL DEVICES ARE TO BE REPAIRED OR REPLACED IMMEDIATELY. SILT IS TO BE REMOVED FROM THE STRUCTURES BEFORE THE SILT HAS ACCUMULATED TO HALF THE STRUCTURE'S DESIGN VOLUME. TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURES ARE TO BE REMOVED AND LEGALLY DISPOSED OFF-SITE UPON ESTABLISHMENT OF VEGETATIVE COVER AND PRIOR TO PROJECT COMPLETION.
C. ESTABLISH TEMPORARY VEGETATION OF CRITICAL AREAS AS NEEDED TO CONTROL SEDIMENT RUNOFF (NCDOT SECTIONS 1615 & 1620).

- 7. ALL ROADWAYS ARE TO BE INSPECTED DAILY BY THE CONTRACTOR. ANY DEBRIS OR SOIL DEPOSITED ON THE ROADWAY SURFACE IS TO BE REMOVED BY THE CONTRACTOR PRIOR TO VACATING THE CONSTRUCTION SITE FOR THAT DAY. IF DANGEROUS CONDITIONS EXIST, THE ROADWAY SURFACE IS TO BE CLEANED IMMEDIATELY. CLEANING SHALL INCLUDE BROOM CLEANING OF THE ROADWAY SURFACE.
8. ALL AREAS DISTURBED BY THE CONSTRUCTION THAT ARE NOT TO RECEIVE A "HARD SURFACE" ARE TO BE SEEDED, FERTILIZED AND MULCHED IN ACCORDANCE WITH NCDOT SECTION 1660.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER REMOVAL AND LEGAL OFF-SITE DISPOSAL OF ANY UNSUITABLE MATERIAL. THE CONTRACTOR SHALL OBTAIN ALL STATE OR LOCAL APPROVALS AND SUBMIT COPIES TO THE CITY FOR RECORD.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AN APPROVABLE EROSION CONTROL PLAN AND COMPLY WITH THE NC SEDIMENTATION & POLLUTION CONTROL ACT FOR ANY OFFSITE AREAS USED FOR STORAGE OR STAGING.
11. INLET PROTECTION IS REQUIRED FOR ALL INLETS LOCATED IN THE WORKING AREA.
12. ADDITIONAL SILT FENCE MAY BE REQUIRED BASED UPON FIELD CONDITIONS.
13. SEE EROSION CONTROL PLANS ON SHEETS EC-1 TO EC-15.
14. TOTAL DISTURBED AREA = 5.50 ACRES

ABBREVIATIONS

Table listing various abbreviations and their meanings, such as ABAND, ALGEBRAIC DIFFERENCE, ASPHALT, BACK OF CURB, BITUMINOUS, BUILDING, BOULEVARD, BEARING, BELLSOUTH TELEPHONE, CHARLOTTE AREA TRANSIT SYSTEM, CATCH BASIN, CHARLOTTE DEPARTMENT OF TRANSPORTATION, CUBIC FEET PER SECOND, CURB AND GUTTER, CHORD BEARING, HORIZONTAL CURVE CHORD LENGTH, CENTER LINE, CLEARANCE, CHARLOTTE-MECKLENBURG LAND DEVELOPMENT, CORRUGATED METAL PIPE, CHARLOTTE-MECKLENBURG UTILITIES (OR) CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT (OR) CONCRETE MASONRY UNIT, CONCRETE, CONSTRUCTION, CONTROL POINT, CUBIC YARDS, DEED BOOK, DOUBLE, DROP INLET, DIAMETER, DUCTILE IRON PIPE, DIMENSION, EAST/EASTING, EACH, ELEVATION, EDGE OF PAVEMENT, EASEMENT, EXISTING, FACE OF CURB, FLARED END SECTION, FIRE HYDRANT, FIBER OPTIC CABLE, FEET, GAS, GAS VALVE, HORIZONTAL, HEADWALL, INTERSECTION, INVERT, IRON PIN FOUND, IRON PIN SET, LENGTH, LENGTH OF CURVE, LINEAR FEET, LIGHT POLE, LEFT, MAXIMUM, MAILBOX, MANHOLE, MINIMUM, MONOLITHIC, MILES PER HOUR, METAL, NORTH/NORTHING, NOT APPLICABLE, NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, DEPARTMENT OF TRANSPORTATION, NUMBER, NOT TO SCALE, ON CENTER, OUTSIDE DIAMETER, OVERHEAD ELECTRIC, PAVEMENT, POINT OF CURVATURE, PERMANENT, PERMANENT PAGE, POINT OF INT, PK NAIL SET, POWER POLE, PROPOSED, PERMANENT STORM DRAIN EASEMENT, PERM SIDEWALK & UTILITIES EASEMENT, POUNDS PER SQUARE INCH DRAIN EASEMENT, POINT OF TANGENCY, POLYVINYL CHLORIDE (PIPE MATERIAL), POINT OF VERTICAL INTERSECTION, PERM UTILITY EASEMENT, RADIUS, RADIUS OF HORIZONTAL CURVE, REINFORCED CONC PIPE, REINFORCED CONCRETE BOX CULVERT, RELOCATE, RIGHT OF WAY, RIGHT, RIGHT-OF-WAY, SOUTH, STORM DRAIN, STORM DRAIN MANHOLE, SQUARE FOOT, SPLIT RAIL FENCE, SANITARY SEWER, SANITARY SEWER MANHOLE, STATION, STANDARD, SIDEWALK, SQUARE YARDS, TANGENT, TEMPORARY CONSTRUCTION EASEMENT, TEMPORARY TRAVERSE POINT, TEST WIRE, TYPICAL, UNDERGROUND TELEPHONE, VERTICAL CURVE, VERTICAL, WATER LINE, WEST, WITH, WATER METER, WITHOUT, WATER VAULT, WATER VALVE, YARD INLET, YEAR, SIXTY PENNY NAIL SET, FOOT, INCH.

STANDARDS

THE FOLLOWING STANDARDS ARE IN REFERENCE TO THE CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL (DECEMBER 1, 2006 AND THE LATEST REVISIONS). THE STANDARDS ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE ARE CONSIDERED A PART OF THE PLANS.

Table listing standards: 10.17B CURB AND GUTTER, 10.22 CONCRETE SIDEWALKS, 10.25A RESIDENTIAL DROP CURB TYPE I DRIVEWAY WITH PLANTING STRIP (2'-6" CURB AND GUTTER), 10.27A RESIDENTIAL DRIVEWAY (TYPE I) FOR 2'-0" VALLEY GUTTER, 10.33 ACCESSIBLE RAMP STANDARD 2'-0" VALLEY GUTTER, 10.35B TRUNCATED DOMES, 30.06A TEMPORARY SILT FENCE, 30.15 CATCH BASIN INLET PROTECTION, 40.02 TREE PROTECTION DETAIL, 40.11 BRIDGING TREE ROOTS, 40.12 TEMPORARY TREE PROTECTION DETAIL.

CHARLOTTE LAND DEVELOPMENT STANDARDS:



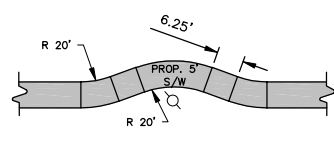
Plus Prepared By:
Armstrong Glen, P.C.
9731-L Southern Pine Boulevard
P.O. Box 7326
Charlotte, NC 28241
Phone: 704-529-0345
Fax: 704-529-0493



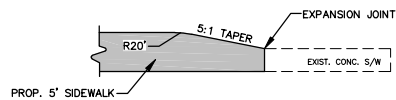
Table with columns: NO., DATE, BY, REVISION PER NCDOT COMMENTS, DESCRIPTION. Includes a circular seal for the Professional Engineer in Civil Engineering, State of North Carolina, No. 034936, Matthew R. Matthews.

Table with columns: AS NOTED, SCALE, AS NOTED, SCALE, JOB NO., JOB NO., CAD FILE PATH, CHECKED BY, DATE, PREPARED BY, DATE, APPROVED BY.

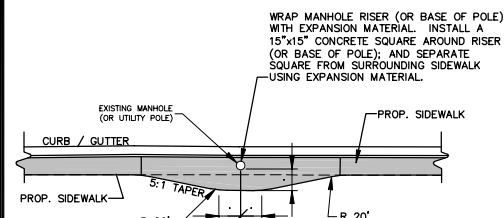
EAST FOREST N.I.P.
GENERAL NOTES AND PROJECT NOTES
SHEET 2 OF 70



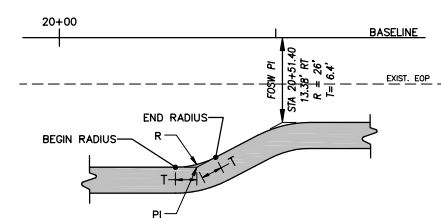
DETAIL 1 - SIDEWALK TAPER AT MANHOLE / UTILITY POLE
NTS



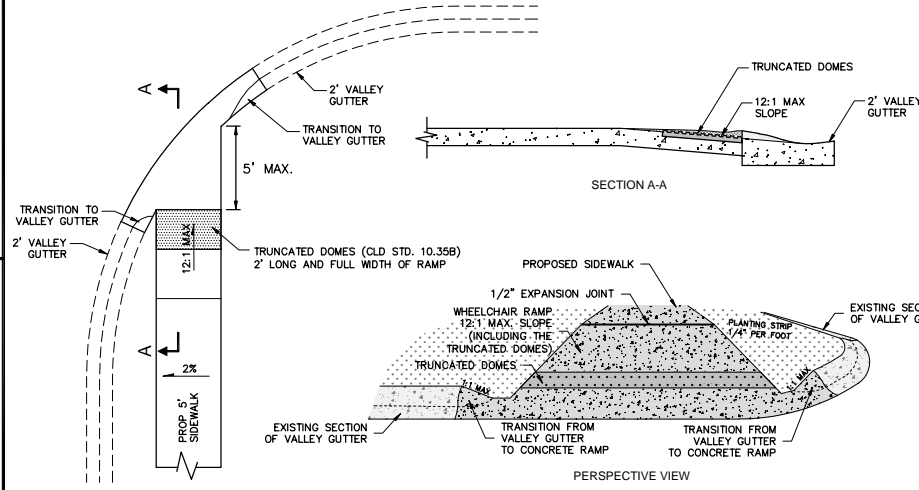
DETAIL 3 - SIDEWALK TRANSITION
NTS



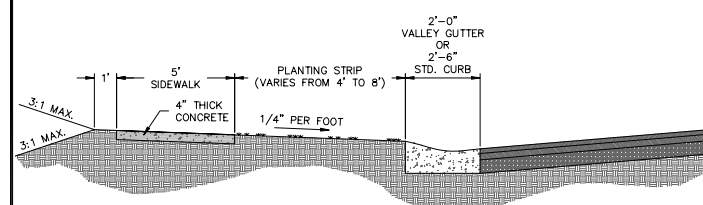
DETAIL 2 - SIDEWALK WIDENING AT MANHOLE / UTILITY POLE
NTS



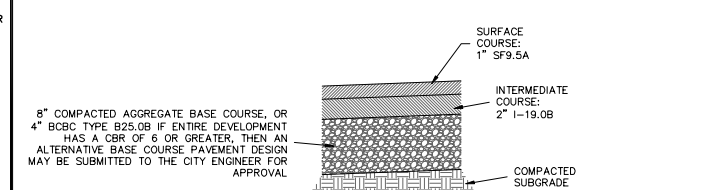
DETAIL 4 - TYPICAL LABELING FOR SIDEWALK TAPERS
NTS



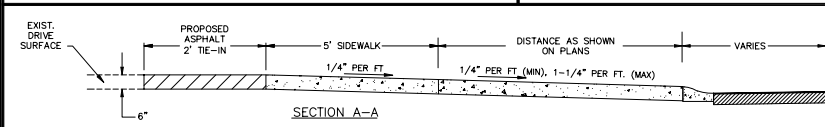
DETAIL 5 - DIRECTIONAL RAMP AT 2'-0" VALLEY GUTTER
NTS



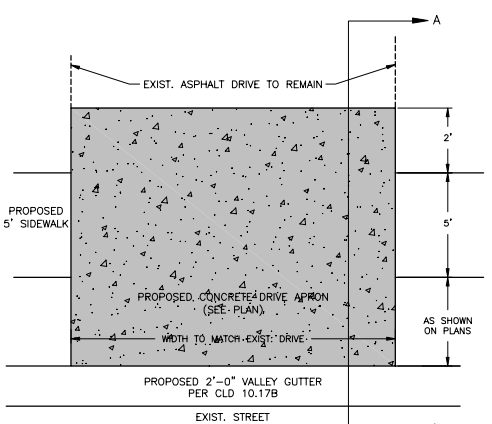
DETAIL 6 - TYPICAL SECTION OF PROJECT
N.T.S



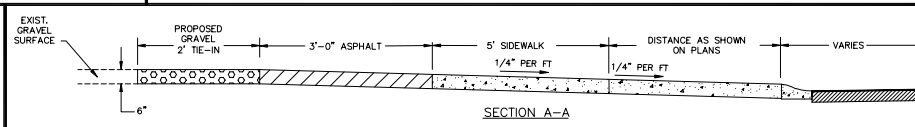
DETAIL 7 - PAVEMENT SECTION
N.T.S



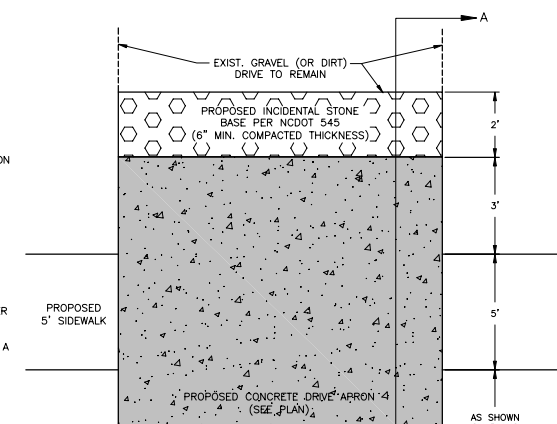
- NOTES:**
1. THE ELEVATION OF THE SIDEWALK SHALL BE NOT LESS THAN SIX INCHES NOR MORE THAN EIGHTEEN INCHES ABOVE THE ROADWAY CROWN. THIS ELEVATION DIFFERENTIAL SHALL BE CONSISTENT WITHIN EACH BLOCK.
 2. ALL CONCRETE TO BE 3600 PSI STRENGTH.
 3. ALL CONSTRUCTION PRACTICES, INCLUDING COMPACTION, CURING, FINISHING, ETC. SHALL BE IN ACCORDANCE WITH THE NCDOT STANDARD SPECIFICATION FOR ROADS AND STRUCTURES.
 4. THE DRIVEWAY SHALL BE GRADED WITH A CROSS SLOPE BETWEEN 1/2 IN PER FOOT AND 1-1/4 IN. PER FOOT EXCEPT WHERE EXCESSIVE NATURAL GRADES MAKE THIS REQUIREMENT IMPRACTICAL. IN SUCH CASES, THE COUNTY/CITY ENGINEER MAY AUTHORIZE A SUITABLE GRADE.
 5. ALL DRIVEWAYS MUST MEET THE CURRENT CITY DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS, INCLUDING, BUT NOT LIMITED TO SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.



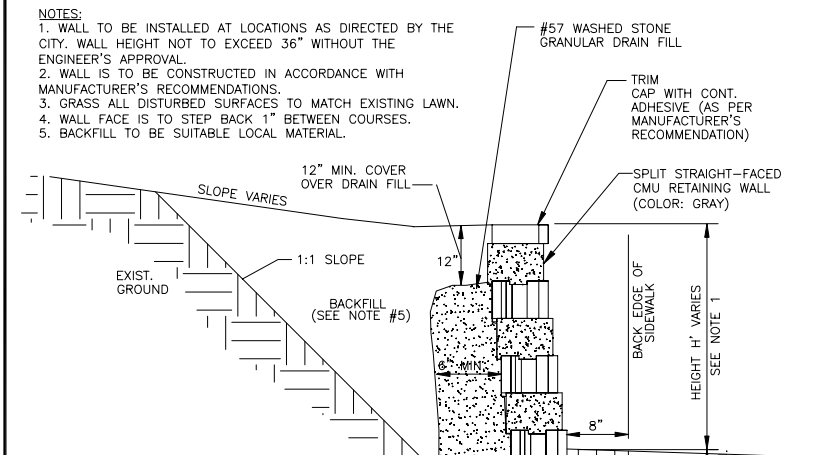
DETAIL 8 - PROPOSED ASPHALT DRIVE TIE-IN
NTS



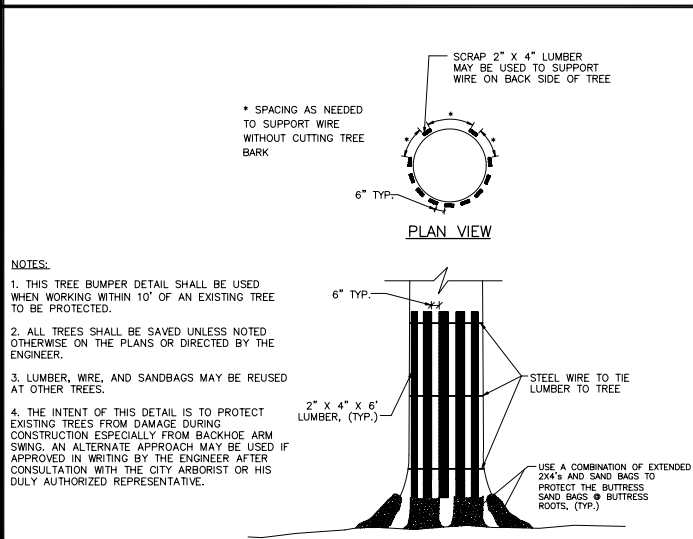
- NOTES:**
1. THE ELEVATION OF THE SIDEWALK SHALL BE NOT LESS THAN SIX INCHES NOR MORE THAN EIGHTEEN INCHES ABOVE THE ROADWAY CROWN. THIS ELEVATION DIFFERENTIAL SHALL BE CONSISTENT WITHIN EACH BLOCK.
 2. ALL CONCRETE TO BE 3600 PSI STRENGTH.
 3. ALL CONSTRUCTION PRACTICES, INCLUDING COMPACTION, CURING, FINISHING, ETC. SHALL BE IN ACCORDANCE WITH THE NCDOT STANDARD SPECIFICATION FOR ROADS AND STRUCTURES.
 4. THE DRIVEWAY SHALL BE GRADED WITH A CROSS SLOPE BETWEEN 1/2 IN PER FOOT AND 1-1/4 IN. PER FOOT EXCEPT WHERE EXCESSIVE NATURAL GRADES MAKE THIS REQUIREMENT IMPRACTICAL. IN SUCH CASES, THE COUNTY/CITY ENGINEER MAY AUTHORIZE A SUITABLE GRADE.
 5. ALL DRIVEWAYS MUST MEET THE CURRENT CITY DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS, INCLUDING, BUT NOT LIMITED TO SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.



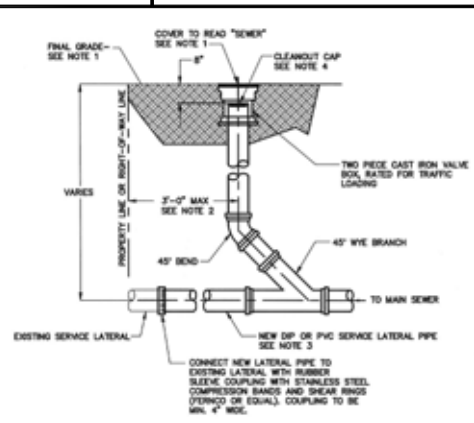
DETAIL 9 - PROPOSED GRAVEL DRIVE TIE-IN
NTS



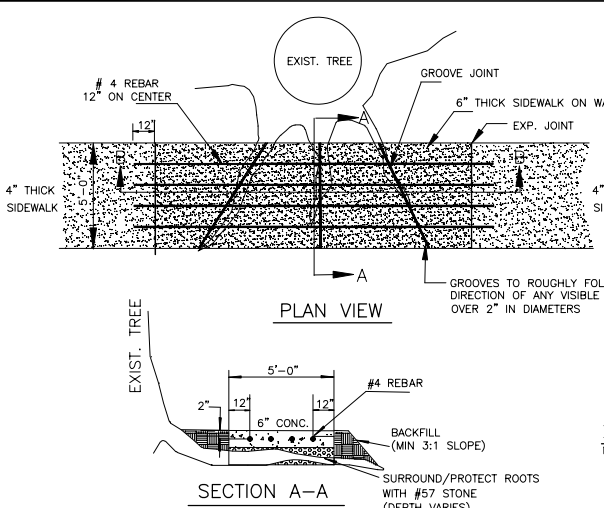
DETAIL 10 - RETAINING WALL
NTS



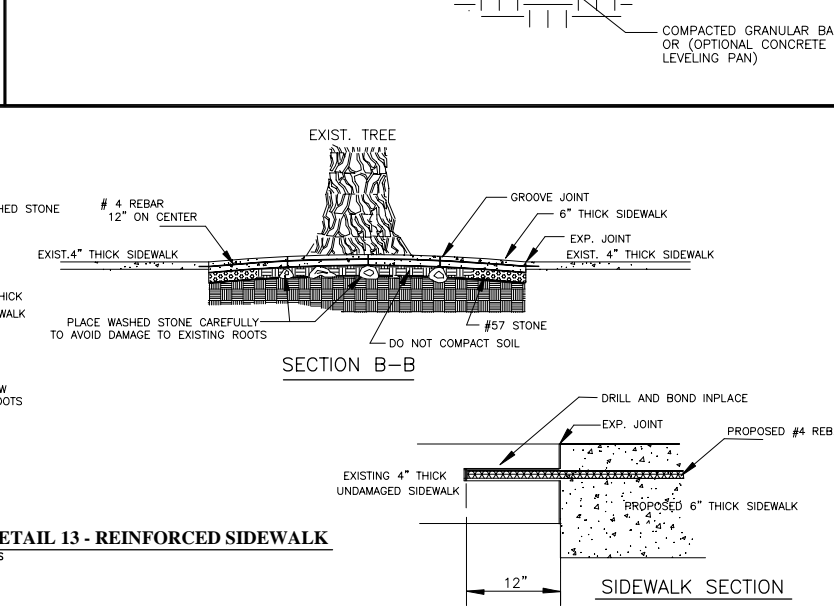
DETAIL 11 - PROPOSED TREE PROTECTION
NTS



DETAIL 12 - SANITARY SEWER CLEANOUT
NTS



DETAIL 13 - REINFORCED SIDEWALK
NTS



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NO.	DATE	BY	DESCRIPTION

AS SHOWN	SCALE	CMJ	CHECKED BY	DATE
07001	AS SHOWN	CMJ	01/09/09	
07001 - East Forest NIP VAC (cont. sheet)				

07001	JOB NO.	GRP	PREPARED BY	APPROVED BY
07001 - East Forest NIP VAC (cont. sheet)				



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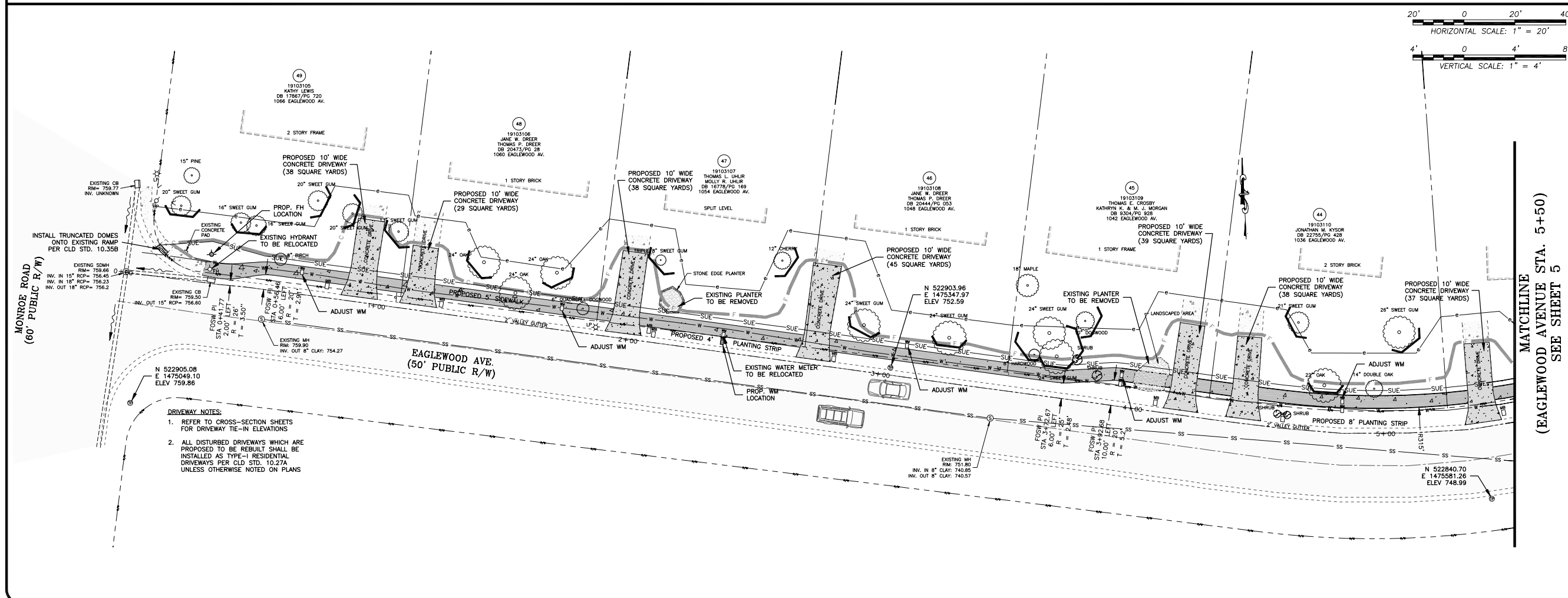
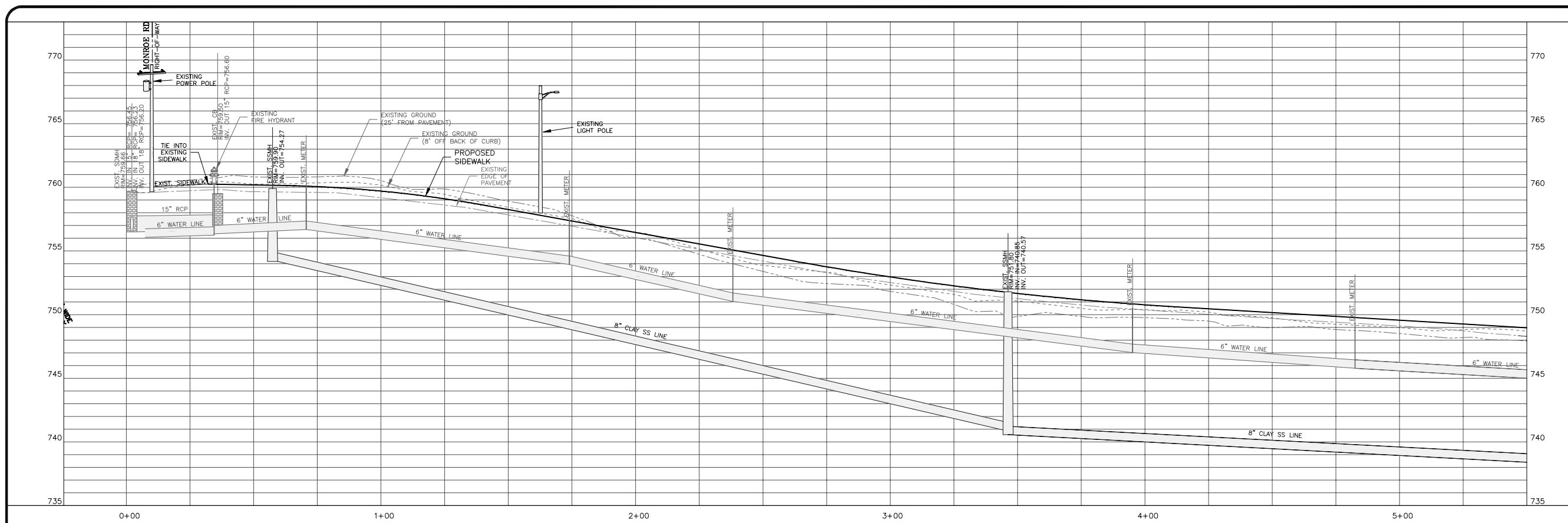


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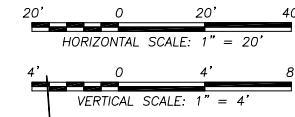


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PREPARED BY	CRP
CHECKED BY	CMJ
APPROVED BY	01/09/09
DATE	

SHEET	4
OF	70
EAST FOREST N.I.P.	PLAN & PROFILE
EAGLEWOOD AVENUE	STA. 0+00 - 5+50



- DRIVEWAY NOTES:**
1. REFER TO CROSS-SECTION SHEETS FOR DRIVEWAY TIE-IN ELEVATIONS
 2. ALL DISTURBED DRIVEWAYS WHICH ARE PROPOSED TO BE REBUILT SHALL BE INSTALLED AS TYPE-1 RESIDENTIAL DRIVEWAYS PER CLD STD. 10.27A UNLESS OTHERWISE NOTED ON PLANS





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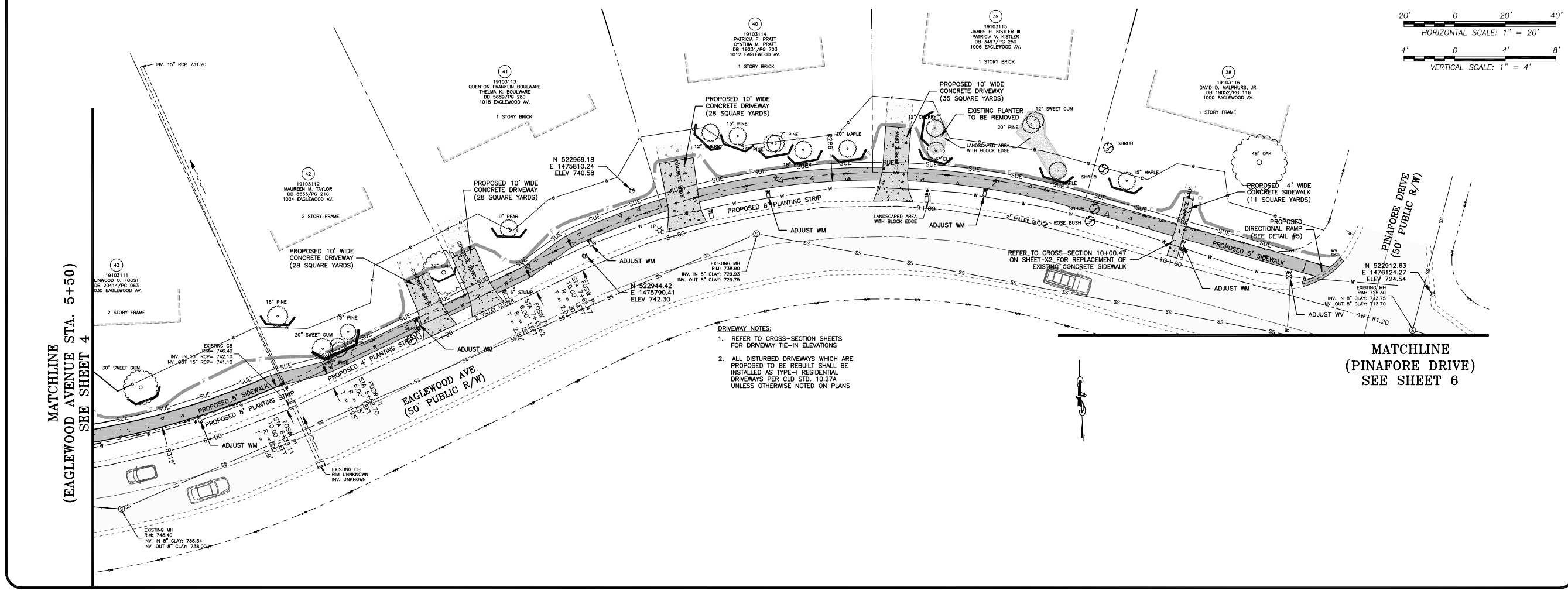
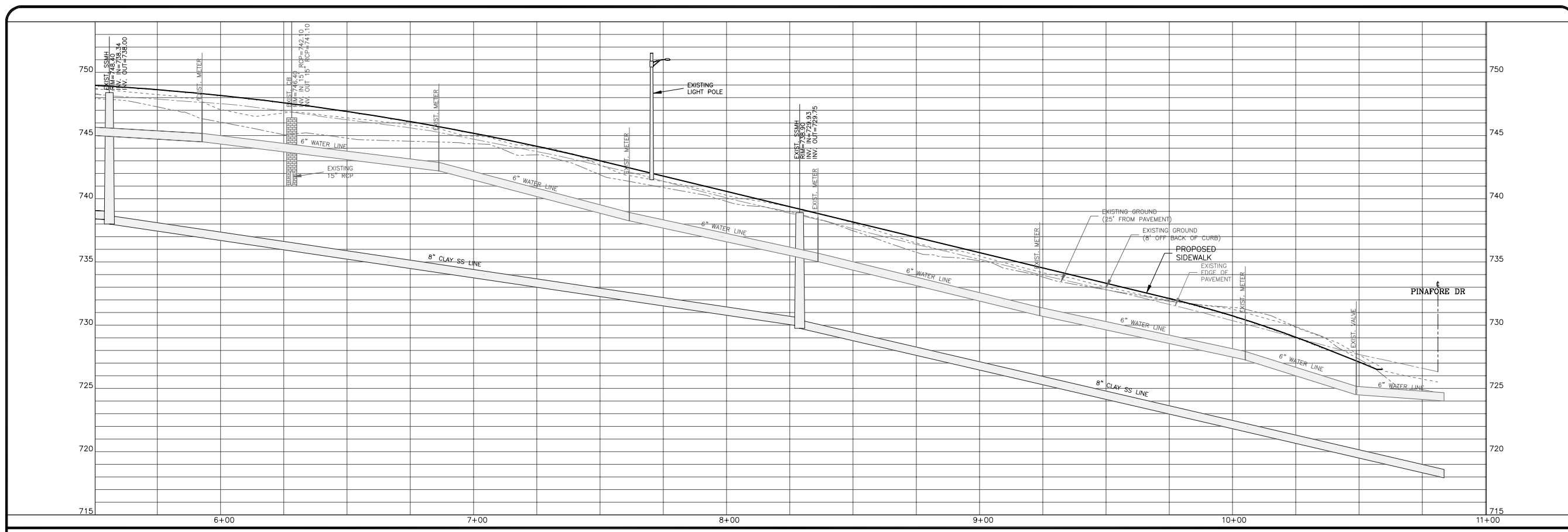
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EAST FOREST N.I.P.
PLAN & PROFILE
EAGLEWOOD AVENUE
STA. 5+50 - 11+00

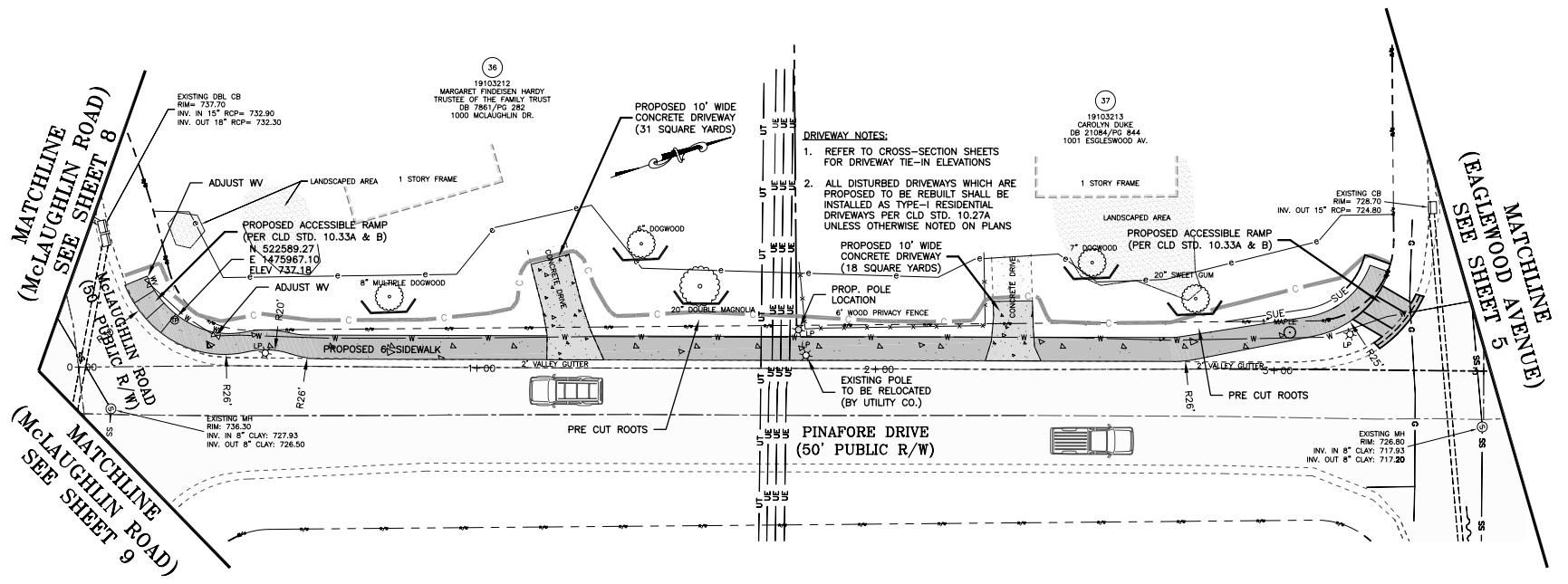
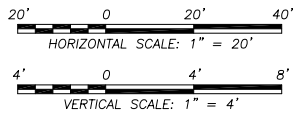
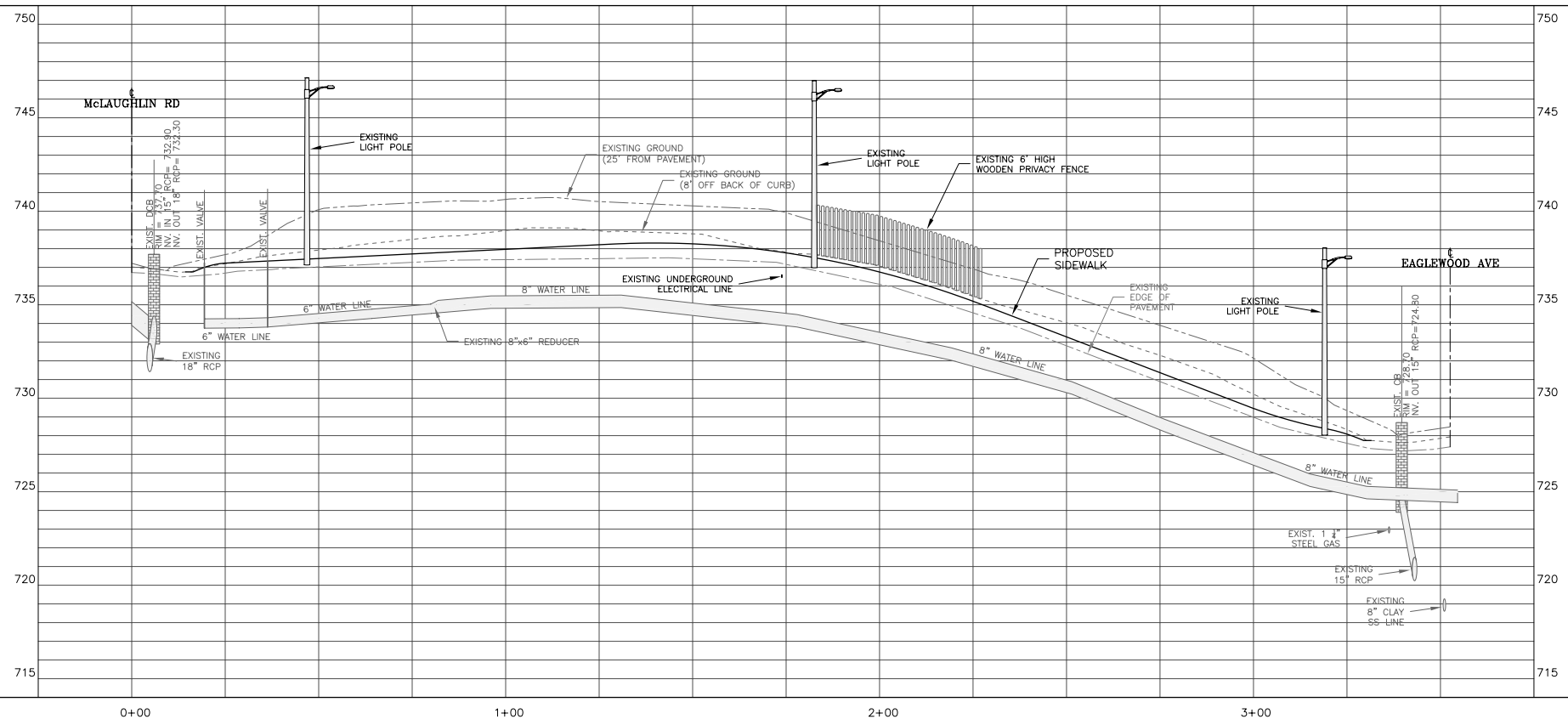
SHEET **5** OF **70**



- DRIVEWAY NOTES:**
- REFER TO CROSS-SECTION SHEETS FOR DRIVEWAY TIE-IN ELEVATIONS
 - ALL DISTURBED DRIVEWAYS WHICH ARE PROPOSED TO BE REBUILT SHALL BE INSTALLED AS TYPE-I RESIDENTIAL DRIVEWAYS PER CLD STD. 10.27A UNLESS OTHERWISE NOTED ON PLANS

MATCHLINE
(PINAFORE DRIVE)
SEE SHEET 6

MATCHLINE
(EAGLEWOOD AVENUE STA. 5+50)
SEE SHEET 4



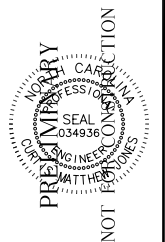
- DRIVEWAY NOTES:**
1. REFER TO CROSS-SECTION SHEETS FOR DRIVEWAY TIE-IN ELEVATIONS
 2. ALL DISTURBED DRIVEWAYS WHICH ARE PROPOSED TO BE REBUILT SHALL BE INSTALLED AS TYPE-1 RESIDENTIAL DRIVEWAYS PER CLD STD. 10.27A UNLESS OTHERWISE NOTED ON PLANS



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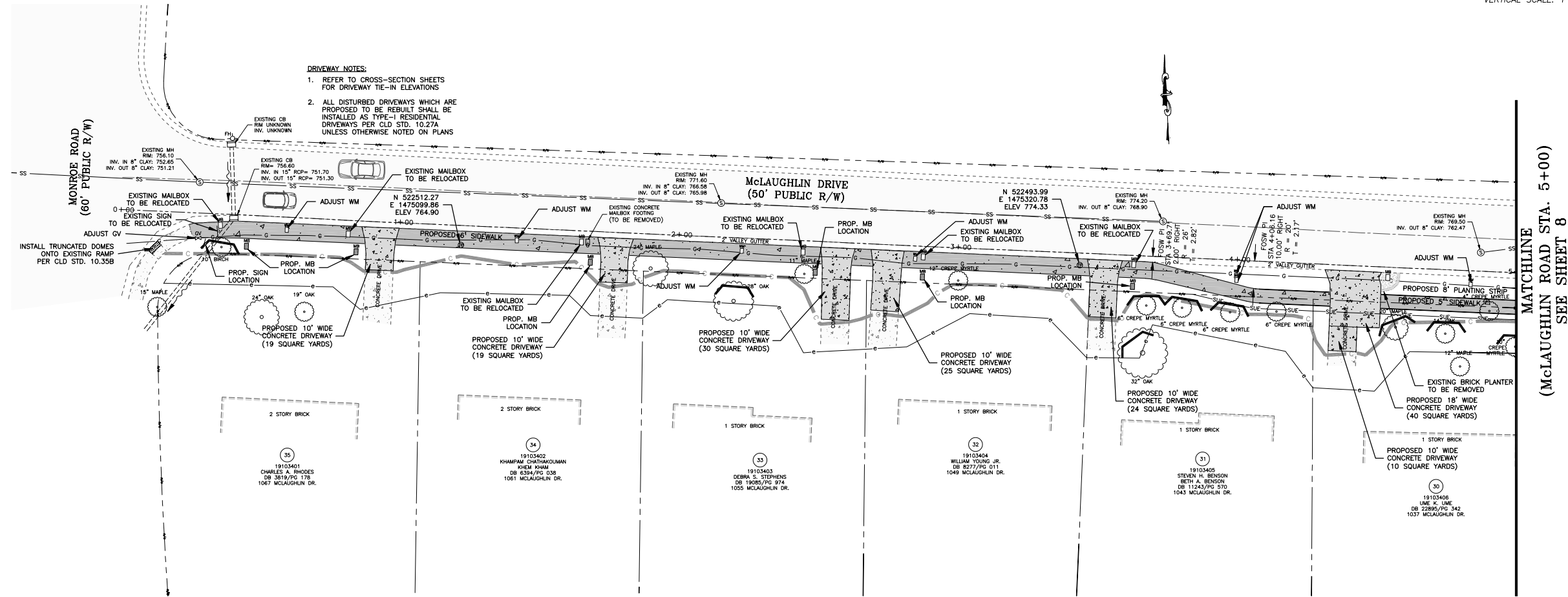
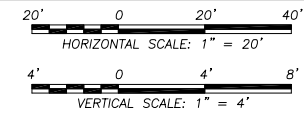
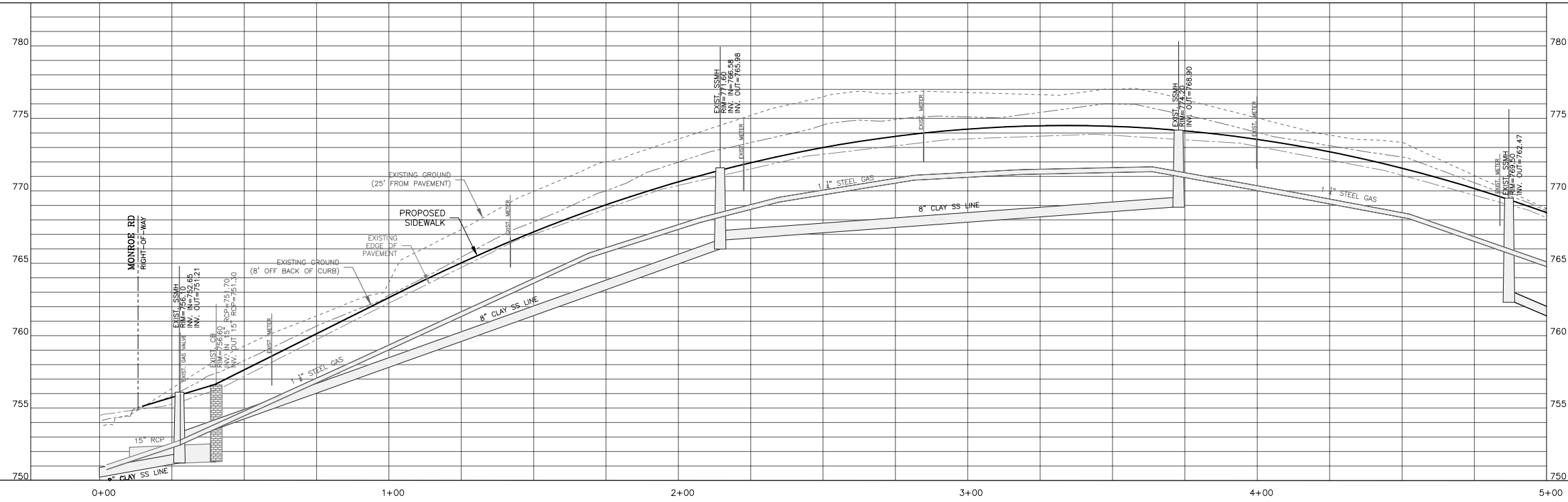


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	PREPARED BY	
	CHECKED BY	
	DATE	01/09/09

EAST FOREST N.I.P.
PLAN & PROFILE
PINAFORE DRIVE
STA. 0+00 - 3+75



- DRIVEWAY NOTES:**
1. REFER TO CROSS-SECTION SHEETS FOR DRIVEWAY TIE-IN ELEVATIONS
 2. ALL DISTURBED DRIVEWAYS WHICH ARE PROPOSED TO BE REBUILT SHALL BE INSTALLED AS TYPE-1 RESIDENTIAL DRIVEWAYS PER CLD STD. 10.27A UNLESS OTHERWISE NOTED ON PLANS



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NO.	DATE	DESCRIPTION



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07001	

JOB NO.	SCALE
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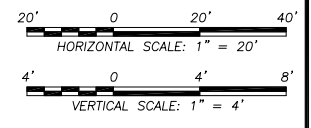
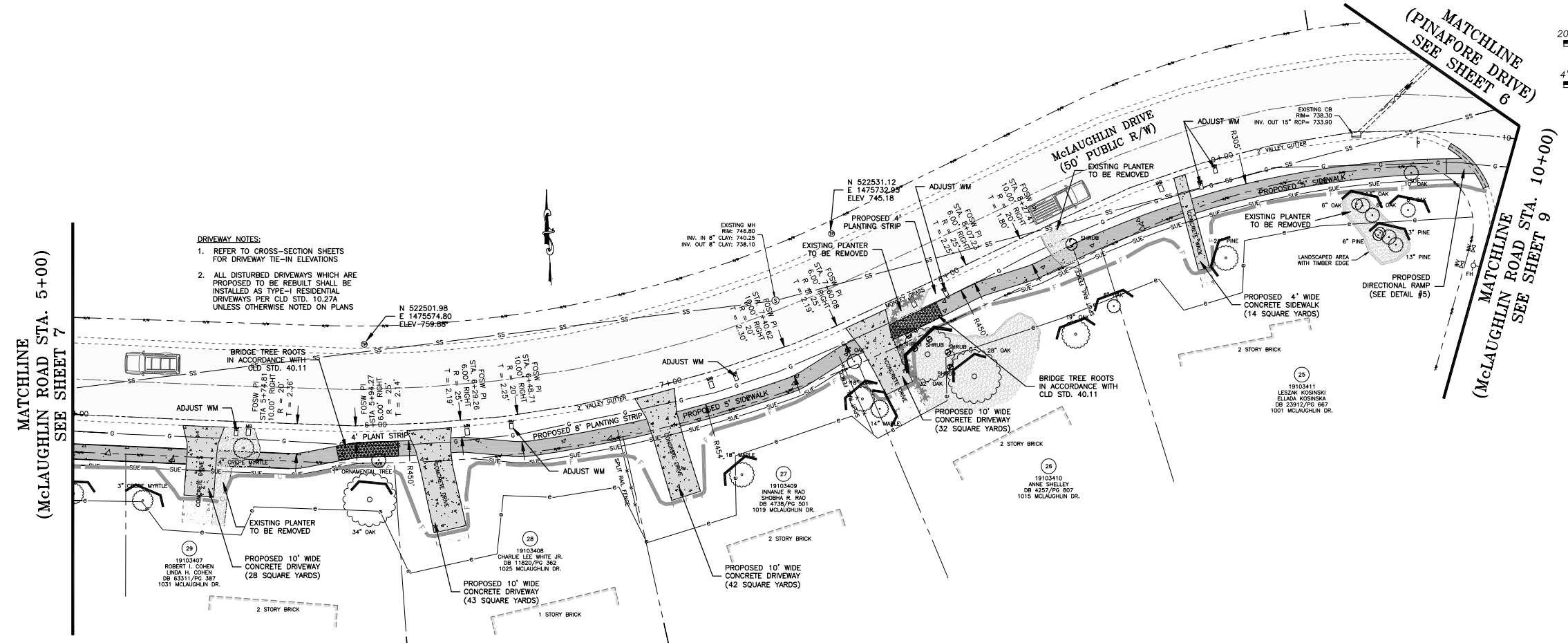
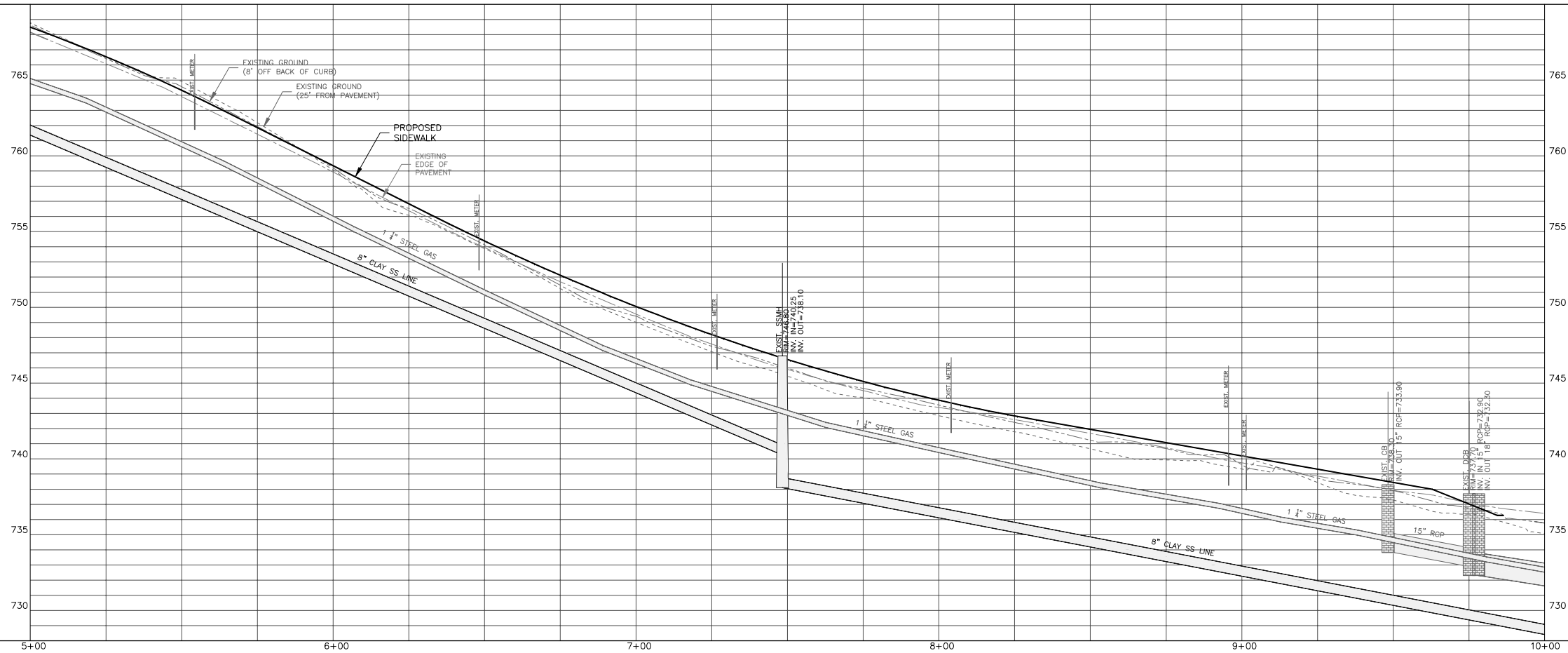
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EAST FOREST N.I.P.
PLAN & PROFILE

McLAUGHLIN DRIVE
STA. 0+00 - 5+00

SHEET **7** OF **70**



SEE SCALE	SCALE
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CHECKED BY	CMJ
APPROVED BY	01/09/09
DATE	

EAST FOREST N.P.A.
PLAN & PROFILE
McLAUGHLIN DRIVE
STA. 5+00 - 10+00

SHEET **8** OF **70**



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