

# DR. KUMAR MEDICAL OFFICE

## MELBOURNE, FLORIDA

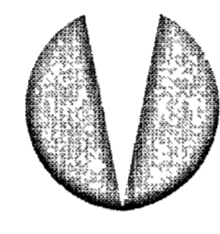
DATE:

MARCH 17, 2011

PREPARED FOR:

DR. KUMAR

PREPARED BY:



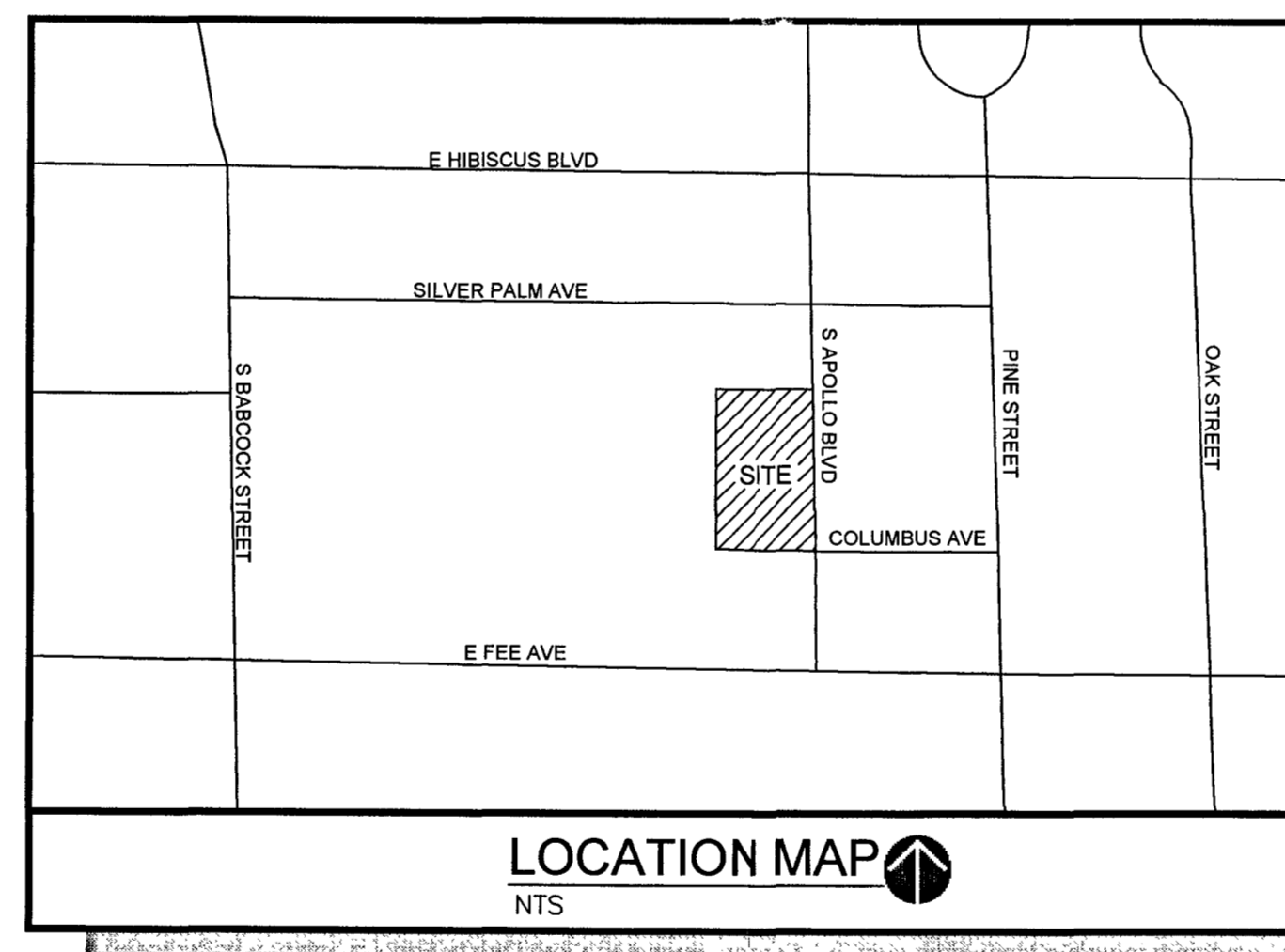
**CONSTRUCTION ENGINEERING GROUP**  
consulting engineers

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melbourne, fl 32935

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fax. 321.253.3123  
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license #0008097

LEGAL DESCRIPTION:

LOTS 1-6, ARMSTRONG SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 4, PAGE 20, AND LOT 5, MAPLE COURT, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 4, PAGE 22, ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.



CONTRACTOR SIGN-OFF / ACKNOWLEDGEMENT:

CONTRACTOR'S CERTIFICATION		
I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE SITE IDENTIFIED AS PART OF THIS CERTIFICATION.		
SIGNATURE: _____ NAME: _____ DATE: _____	COMPANY NAME AND ADDRESS: _____ COMPANY ADDRESS: _____ PHONE: _____	RESPONSIBLE FOR: _____ GENERAL CONTRACTOR
SIGNATURE: _____ NAME: _____ DATE: _____	COMPANY: _____ ADDRESS: _____ PHONE: _____	TEMPORARY AND PERMANENT STABILIZATION
SIGNATURE: _____ NAME: _____ DATE: _____	COMPANY: _____ ADDRESS: _____ PHONE: _____	STABILIZED CONSTRUCTION ENTRANCE, EARTH DIKES, SEDIMENT BASIN

SITE DATA:

**1 GENERAL STATEMENT:**  
THIS PROJECT CONSISTS OF MASTER STORMWATER, SITE AND UTILITY INFRASTRUCTURE FOR THE PHASED CONSTRUCTION OF TWO SEPARATE 3,500 SF MEDICAL OFFICE BUILDINGS ON A 1.20 ACRE SITE. THE STORMWATER/RUN-OFF CREATED BY THE NEW IMPERVIOUS WITHIN THE PROJECT BOUNDARY IS PROPOSED TO BE TREATED BY A DRY RETENTION SYSTEM. THERE IS WATER AND SEWER ADJACENT TO THE SITE TO SUPPORT THE IMPROVEMENTS. PHASE I STORMWATER TREATMENT IMPROVEMENTS HAVE BEEN DESIGNED AND SPECIFIED SEPARATELY TO MEET ALL STATE AND LOCAL REQUIREMENTS.

**2 OWNER:**  
NK SOUL, LLC  
NAVEEN KUMAR  
5462 EMMA COURT, MELBOURNE FL 32934

**ENGINEER:**  
CONSTRUCTION ENGINEERING GROUP  
ERIN L. JACKSON, P.E.  
2615 EAU GALIE BLVD., SUITE A  
MELBOURNE, FLORIDA 32935  
TEL: (321) 253-1221  
FAX: (321) 253-3123  
E-MAIL: EJACKSON@CEENGINEERING.COM

**SURVEYOR:**  
AAL LAND SURVEYING SERVICES, INC.  
3970 MINTON ROAD  
WEST MELBOURNE, FL 32904  
TEL: (321) 768-8110  
FAX: (321) 952-9771

**LOCATION:**  
TOWNSHIP 28  
RANGE 37  
SECTION 03

**3 SITE CHARACTERISTICS:**  
ZONING: C-1A  
PARCEL ID#: 28-37-03-29-00000.0-0005.00  
ADDRESS: 1616 S. APOLLO BOULEVARD, MELBOURNE FL 32901

PHASE I CALCULATED LOT COVERAGES:	SQ. FOOTAGE	ACREAGE	PERCENT
BUILDING COVER:	3,500	0.08	11
OTHER IMPERVIOUS:	10,373	0.24	33
TOTAL IMPERVIOUS AREA:	13,873	0.32	44
PERVIOUS AREA:	12,802	0.29	40
DRY RETENTION POND:	5,124	0.12	16
TOTAL AREA:	31,799	0.73	100

PHASE II LOT COVERAGES:	SQ. FOOTAGE	ACREAGE	PERCENT
BUILDING COVER:	7,000	0.16	13
OTHER IMPERVIOUS:	18,092	0.42	35
TOTAL IMPERVIOUS AREA:	25,092	0.58	48
PERVIOUS AREA:	18,639	0.42	36
DRY RETENTION POND:	8,328	0.19	16
TOTAL AREA:	52,059	1.19	100

SETBACKS:	REQUIRED	PROPOSED PH I	PROPOSED PH II
FRONT:	25 FT	87.5 FT	87.5 FT
SIDE INTERIOR:	0 FT	174.4 FT	39.4 FT
SIDE CORNER:	20 FT	56.1 FT	-
REAR:	20 FT	35.4 FT	35.4 FT

DIRECTION	ZONING
NORTH	C-1
SOUTH	C-1A
EAST	ROW
WEST	I-1

BUILDING HEIGHT MAX: 40'  
PROPOSED PHASE I BUILDING HEIGHT: SINGLE STORY ±20'  
ACCORDING TO F.I.R.M. #12009C 0528 E, DATED APRIL 3, 1989, THIS PROPERTY IS LOCATED WITHIN FLOOD ZONE X.

**4 PARKING SPACE CALCULATIONS:**  
PHASE I:  
3,500 SF MEDICAL OFFICE  
10% STORAGE REDUCTION (350 SF) = 3,150 SF  
MEDICAL OFFICE:  
3,150 SF / 175 = 18 SPACES REQUIRED  
TOTAL REQUIRED PARKING SPACES = 18 PARKING SPACES INCLUDING 1 HANDICAP PARKING SPACE  
TOTAL PROVIDED PARKING SPACES = 19 PARKING SPACES INCLUDING 2 HANDICAP PARKING SPACES

PHASE II (BUILD-OUT):  
7,000 SF MEDICAL OFFICE  
10% STORAGE REDUCTION (700 SF) = 6,300 SF  
MEDICAL OFFICE:  
6,300 SF / 175 = 36 SPACES REQUIRED  
TOTAL REQUIRED PARKING SPACES = 36 PARKING SPACES INCLUDING 2 HANDICAP PARKING SPACES  
TOTAL PROVIDED PARKING SPACES = 36 PARKING SPACES INCLUDING 3 HANDICAP PARKING SPACES

NOTE THAT THE NUMBER OF PARKING SPACES PROVIDED WILL SUPPORT TWO DOCTORS IN EACH BUILDING OR A TOTAL OF FOUR DOCTORS BETWEEN THE TWO BUILDINGS.

**5 FIRE FLOW CALCULATIONS:**  
PHASE I:  
3,500 SF BUILDING; C=1.0  
EXPOSURE DISTANCE: WEST = 85 LF (10%)  
TOTAL FLOW: (3,500 SF \* 0.5)(18)(0.8) = 852 GPM  
10% x 852 = 86 + 852 = 938 GPM  
1 HYDRANTS REQUIRED  
1 EXISTING FIRE HYDRANT (SEE DRAWING C-1 FOR DISTANCE)

PHASE II (BUILD-OUT):  
3,500 SF BUILDING; C=1.0  
EXPOSURE DISTANCE: WEST = 85 LF (10%), NORTH = 63 LF (10%)  
TOTAL FLOW: (3,500 SF \* 0.5)(18)(0.8) = 852 GPM  
20% x 852 = 170 + 852 = 1022 GPM  
1 HYDRANTS REQUIRED  
1 EXISTING FIRE HYDRANT (SEE DRAWING C-1 FOR DISTANCE)

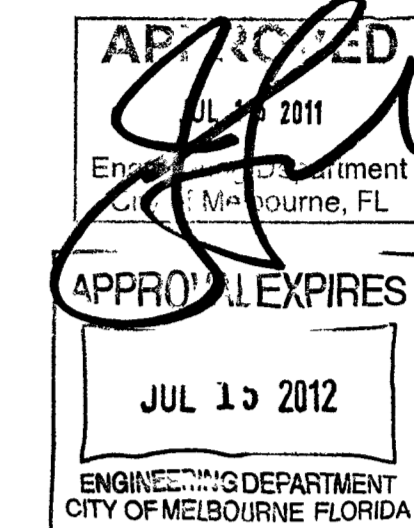
Plans Approved as Noted:

The construction plans received June 23, 2011 for Dr. Kumar Medical Office - City project #IF-11-05, at 1616 S. Apollo Blvd., have been approved with the following stipulation:

If the sidewalk is constructed on private property a sidewalk easement shall be provided required prior to issuance of the Certificate of Occupancy.

Any changes to these plans must first be approved by the City Engineer.

This approval shall be construed to be a permit to proceed with the work and shall not be construed as authority to violate, cancel, alter or set aside any of the provisions of city codes, nor shall such issuance of this approval prevent the City Engineer from thereafter requiring a correction of errors in plans or in construction or of violations of the city codes.



CIVIL INDEX OF DRAWINGS:

G-1	CIVIL COVER SHEET
G-2	STORMWATER POLLUTION PREVENTION PLAN
C-1	EXISTING CONDITIONS AND DEMOLITION PLAN
C-2	SITE AND UTILITY PLAN
C-3	GRADING AND DRAINAGE PLAN
C-4	DETAILS
C-5	DETAILS
C-6	DETAILS
C-7	DETAILS
C-8	SPECIFICATIONS
L-1	LANDSCAPE PLAN
-	SURVEY

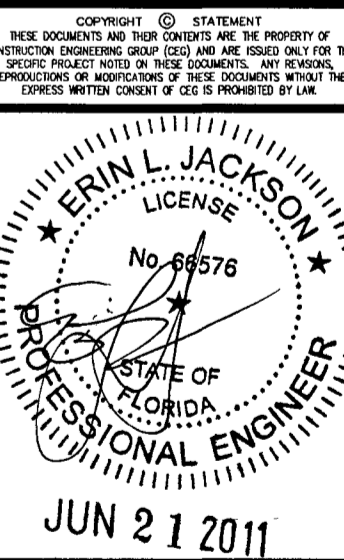
Dr. Kumar Medical Office - City project #IF-11-05

CIVIL LEGEND:

DESCRIPTION	SYMBOL
BUILDING OR STRUCTURE	[Symbol]
CONCRETE WALK OR PAD	[Symbol]
ASPHALTIC DRIVE	[Symbol]
DEMOLITION	[Symbol]
WETLAND IMPACT	[Symbol]
HANDICAP ACCESSIBLE RAMP WITH TRUNCATED DOME	[Symbol]
SILT FENCE	[Symbol]
POND	[Symbol]
SANITARY SEWER	SS
WATERLINE	W
STORM DRAIN W/ INLET	SD
SPOT ELEVATION	9.00
SWALE OR FLOW DIRECTION	[Symbol]
EXISTING ELEVATION	+27.1
EXISTING MANHOLE	[Symbol]
EXISTING WATERLINE	W
TREE TO BE REMOVED	12"
TREE TO BE PRESERVED	12"
SOIL BORING	B-1

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consulting engineers

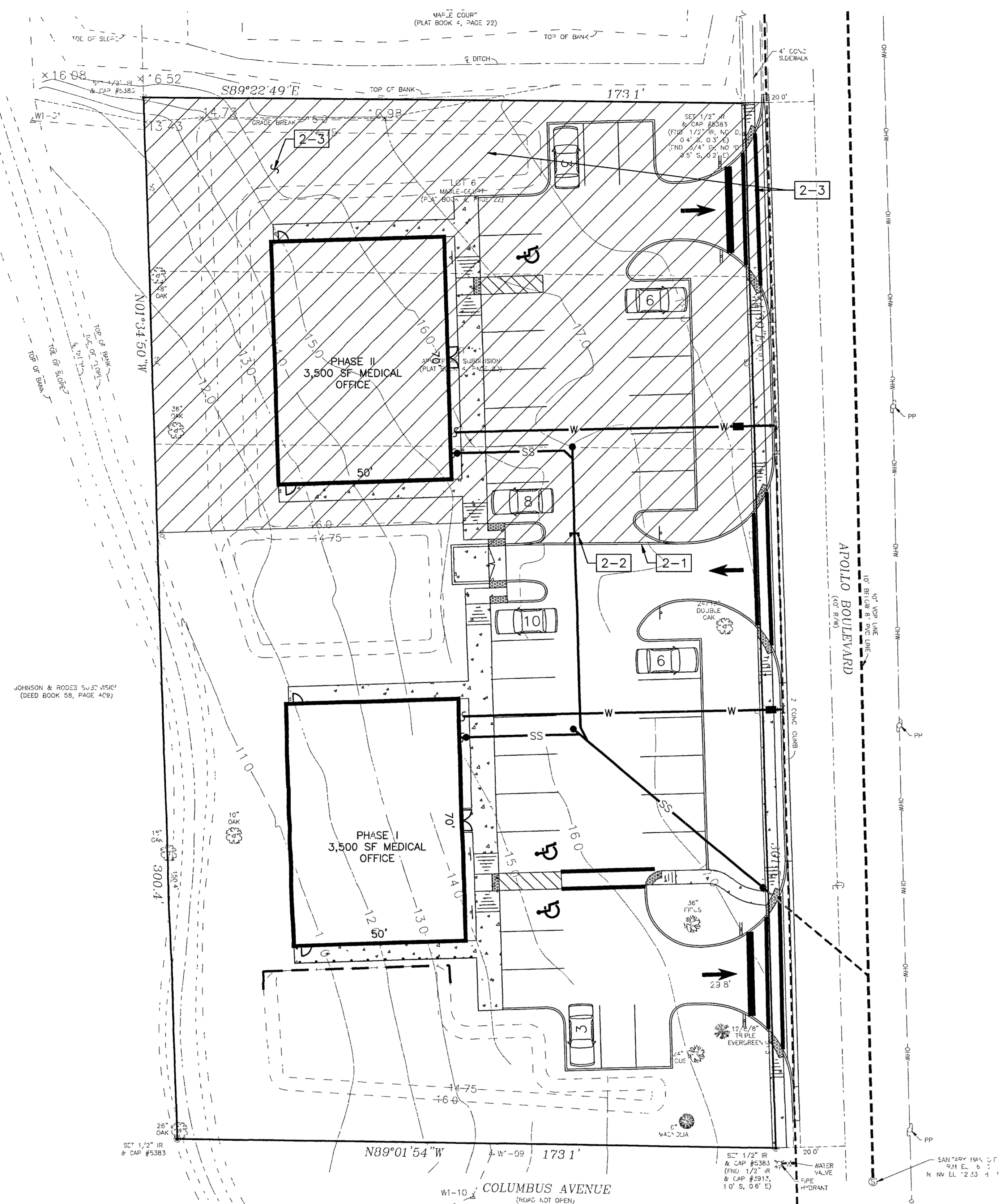
DR. KUMAR MEDICAL OFFICE  
MELBOURNE, FL  
DRAWING TITLE  
CIVIL COVER SHEET



DATE: 3-17-11  
SCALE: N.T.S.  
PROJ NO: 110025  
DESIGNED BY: ELJ  
DRAWN BY: NCW  
CHECKED BY: ELJ  
DRAWING NO:

G-1

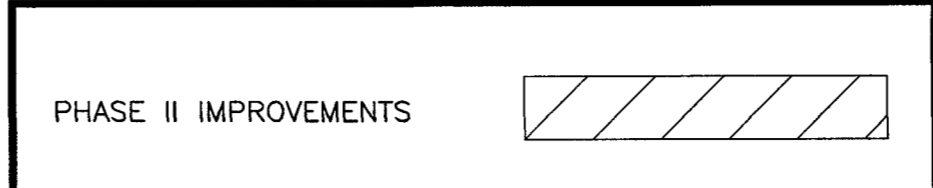




**MASTER PHASING PLAN**

1"=20'

**PHASING LEGEND:**

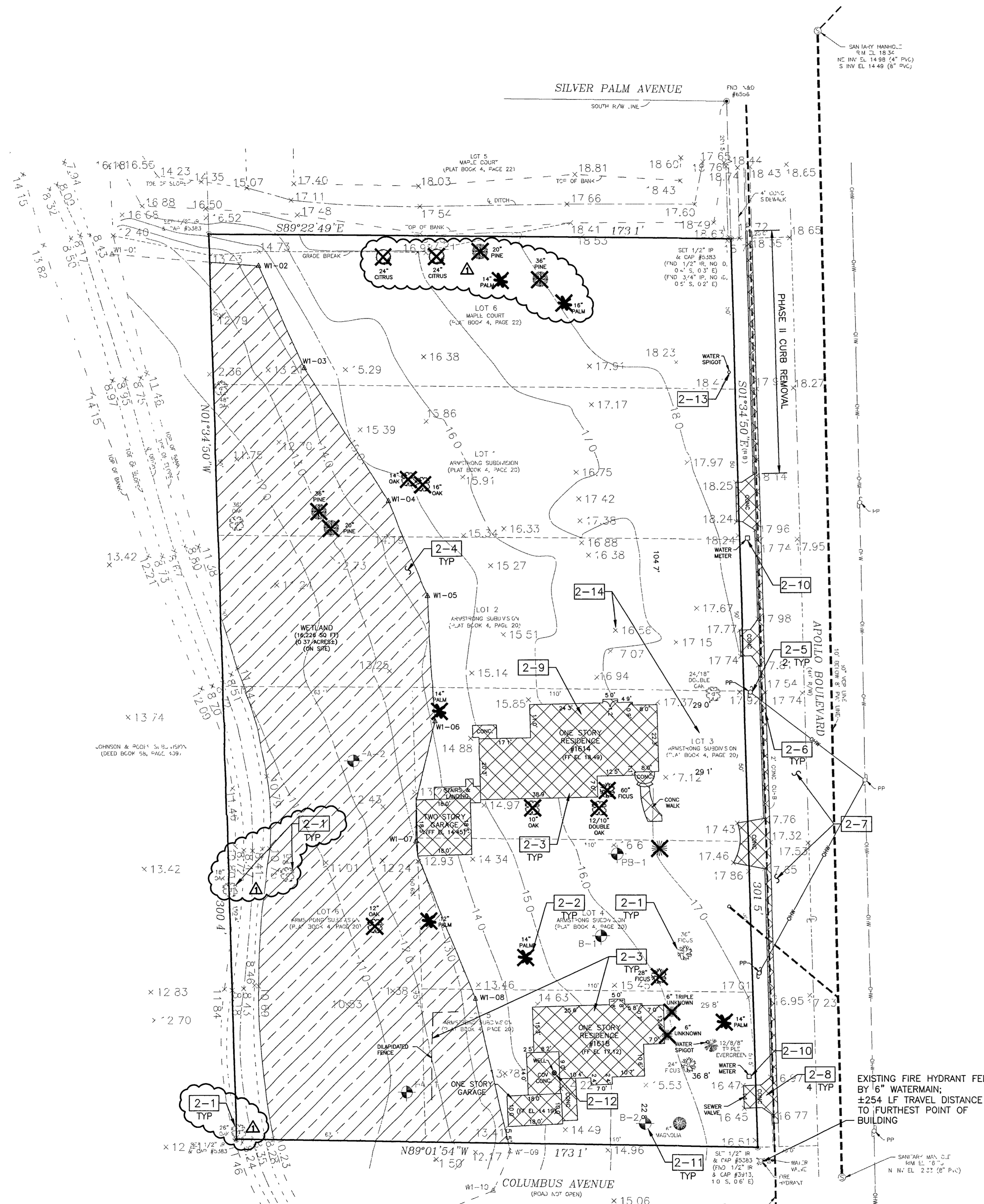


**NOTES:**

- 2-1. PROVIDE FDOT TYPE 'D' CURB IN PHASE I CONSTRUCTION BE REMOVED DURING PHASE II IMPROVEMENTS. SEE DRAWING C-2 FOR SITE SPECIFICATIONS AND DETAILS.
- 2-2. PROVIDE SANITARY SEWER STUB OUT TO NORTH PROPERTY. PROVIDE A CAP AT THE END OF THE STUB OUT TO BE REMOVED FOR CONNECTION FOR THE FUTURE PHASE. SEE DRAWING C-2 FOR SITE SPECIFICATIONS.
- 2-3. NO DEMOLITION TO OCCUR IN PHASE II AREA UNTIL OWNERS DESIRED COMMENCEMENT OF FUTURE CONSTRUCTION.

REVISION					
DATE					
REV					
<p style="font-size: small;">2651 Eau Claire Blvd, Suite 200 Melbourne, FL 32935 Tel: 321.253.1721 Fax: 321.253.3123 www.cagengineering.com License #100897</p> <p style="font-size: x-small;">CONSTRUCTION ENGINEERING GROUP consulting engineers</p>					
<p><b>DR. KUMAR MEDICAL OFFICE</b></p> <p>MELBOURNE, FL DRAWING TITLE <b>MASTER PHASING PLAN</b></p>					
<p style="font-size: x-small;">COPYRIGHT © 2011 THIS DRAWING IS THE PROPERTY OF THE ENGINEER AND SHALL BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.</p>					
<p style="font-size: x-small;">ERIN L. JACKSON LICENSE No. 198576 STATE OF FLORIDA PROFESSIONAL ENGINEER</p>					
<p><b>JUN 21 2011</b></p>					
DATE					
3-17-11					
SCALE					
1"=20'					
PROJ NO					
110025					
DESIGNED BY					
ELJ					
DRAWN BY					
NCW					
CHECKED BY					
ELJ					
DRAWING NO					
<b>G-3</b>					





**EXISTING CONDITIONS AND DEMOLITION PLAN**

1"=20'

**NOTES:**

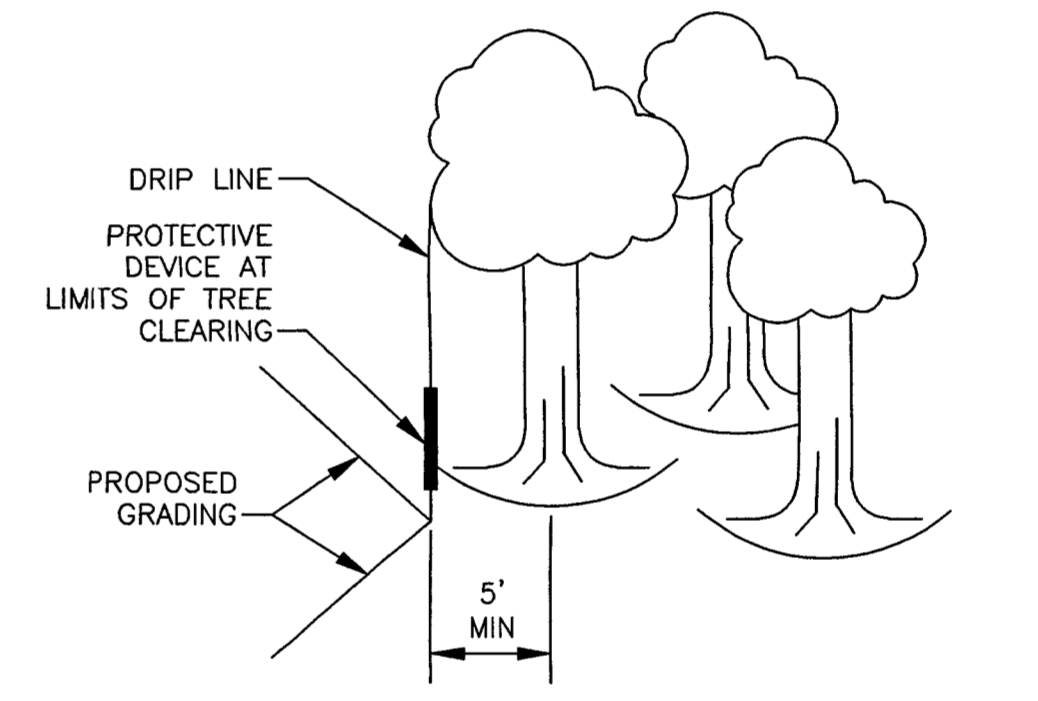
- 2-1. PRESERVE EXISTING TREE AND PROVIDE TREE PROTECTION PER TYPICAL DETAIL.
- 2-2. REMOVE EXISTING TREE AND ROOT SYSTEM IN ITS ENTIRETY.
- 2-3. REMOVE ALL EXISTING ABOVE GROUND STRUCTURES ON-SITE.
- 2-4. ALL ON-SITE WETLANDS SHALL BE IMPACTED UP TO DITCH TOP OF BANK. DO NOT DISTURB DITCH. OVEREXCAVATE AND REMOVE ALL ORGANICS AND MUCK SITE WIDE.
- 2-5. CONTRACTOR SHALL COORDINATE WITH FPL AND OWNER THE REMOVAL OF POWER POLE, OVERHEAD WIRE AND GUY WIRE.
- 2-6. REMOVE EXISTING CURB AND GUTTER FROM NEAREST JOINT TO NEAREST JOINT TO THE EXTENT THAT NO REMAINING SECTION SHALL BE LESS THAN 5' AS NECESSARY FOR THE PROPOSED IMPROVEMENTS, SAWCUT FOR SMOOTH STRAIGHT EDGE. DO NOT DISTURB MAINLINE BASE.
- 2-7. PROVIDE MAINTENANCE OF TRAFFIC FOR VEHICLES PER TYPICAL DETAILS FOR ALL WORK IN RIGHT OF WAY. SEE TYPICAL DETAIL.
- 2-8. REMOVE EXISTING DRIVEWAY. SAWCUT FOR SMOOTH STRAIGHT EDGE. DO NOT DISTURB MAINLINE BASE.
- 2-9. CUT AND CAP EXISTING SANITARY SEWER SERVICE TO THE EXISTING STRUCTURE AT PROPERTY LINE WITH WATER TIGHT CAP. REMOVE EXTENT OF SERVICE LINE LOCATED ON-SITE TO RESIDENCE. LOCATION WILL NEED TO BE EXPOSED FOR THE CITY INSPECTOR TO CHECK IF THEY HAVE WATER TIGHT CAPS.
- 2-10. CUT AND CAP ALL EXISTING WATER SERVICE AT CORPORATION STOP AT THE MAIN TO THE SITE AT PROPERTY LINE WITH WATER TIGHT CAP. TURN OFF VALVE TO LINE IF EXISTS. REMOVE EXTENT OF SERVICE LINE LOCATED ON-SITE. LOCATION WILL NEED TO BE EXPOSED FOR THE CITY INSPECTOR TO CHECK IF THEY HAVE WATER TIGHT CAPS. CONTRACTOR TO RETURN WATER METER TO CITY AND PROVIDE OWNER WITH ANY REFUND RECEIVED.
- 2-11. APPROXIMATE LOCATION OF SOIL BORINGS COMPLETED BY KELLER, SCHLEICHER & MACWILLIAMS ENGINEERING AND TESTING, INC. ON MARCH 15, 2011.
- 2-12. GROUT AND CAP EXISTING WELL PER FDEP REQUIREMENTS. CONTRACTOR TO COMPLETE WORK MUST BE A LICENSED CONTRACTOR AND MUST OBTAIN ALL PERMIT APPROVALS. NOTIFY ENGINEERING IF CONTRACTOR WANTS TO USE FOR IRRIGATION.
- 2-13. REMOVE OR RELOCATE EXISTING WATER SPIGOT PER OWNERS' SPECIFICATIONS.
- 2-14. SEE DRAWING G-3 FOR PHASING NOTES.

**SURVEYOR'S NOTES**

- 1. THIS SURVEY AND DRAWING HAVE BEEN PREPARED TO CONFORM WITH APPLICABLE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 61G17- 6, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
- 2. THIS SURVEY IS FOR THE SOLE BENEFIT OF THE PARTIES NAMED HEREON AND FOR THE SPECIFIC PURPOSE NOTED, AND SHOULD NOT BE RELIED UPON BY ANY OTHER ENTITY, AND IS NOT TRANSFERABLE UNDER ANY CIRCUMSTANCES.
- 3. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF THE FLORIDA LICENSED SURVEYOR, AND REPRODUCTION OF THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE SURVEYOR IS HEREBY FORBIDDEN.
- 4. NO OPINION OF TITLE OR OWNERSHIP IS HEREBY EXPRESSED OR IMPLIED BY THE SURVEYOR.
- 5. THIS SURVEY WAS PREPARED FROM INFORMATION FURNISHED TO THE SURVEYOR BY THE CLIENT, AND MAY BE SUBJECT TO EASEMENTS OR LIMITATIONS EITHER RECORDED OR IMPLIED.
- 6. BEARINGS ARE BASED ON ASSUMED DATUM AND ON THE LINE SHOWN AS BEING THE BASIS OF BEARINGS.
- 7. NO UNDERGROUND IMPROVEMENTS HAVE BEEN LOCATED UNLESS OTHERWISE SHOWN.
- 8. ELEVATIONS, IF SHOWN, ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929, UNLESS OTHERWISE NOTED.

**SURVEYOR'S NOTES**

- (P) - PLAT
- (M) - MEASURED
- (D) - DEED
- FND. - FOUND
- I.R. - IRON ROD
- I.P. - IRON PIPE
- C.M. - CONCRETE MONUMENT
- C. - CENTERLINE
- R/W - RIGHT OF WAY
- P - PUBLIC
- U - UTILITY
- D - DRAINAGE
- E - EASEMENT
- FF - FINISH FLOOR
- EL - ELEVATION
- D - DELTA
- R - RADIUS
- L - ARC LENGTH
- (B.B.) - BASIS OF BEARING
- (N.R.) - NON RADIAL
- N&D - NAIL AND DISK
- CONC. - CONCRETE
- ASPH. - ASPHALT
- P.O.L. - POINT ON LINE
- PRM - PERMANENT REFERENCE MARKER



NOTE: PROVIDE PROTECTIVE DEVICES WHICH WILL EFFECTIVELY PROTECT THE ROOTS, TRUNK, AND TOPS OF TREES RETAINED ON-SITE. THIS DEVICE SHALL BE FIELD FENCE, BOARD FENCE, CORD FENCE OR EQUAL AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

**TYPICAL TREE PROTECTION DETAIL**

NTS

REVISION	DATE	CITY OF MELBOURNE COMMENTS
1	05/09/11	

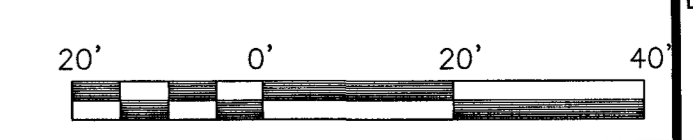
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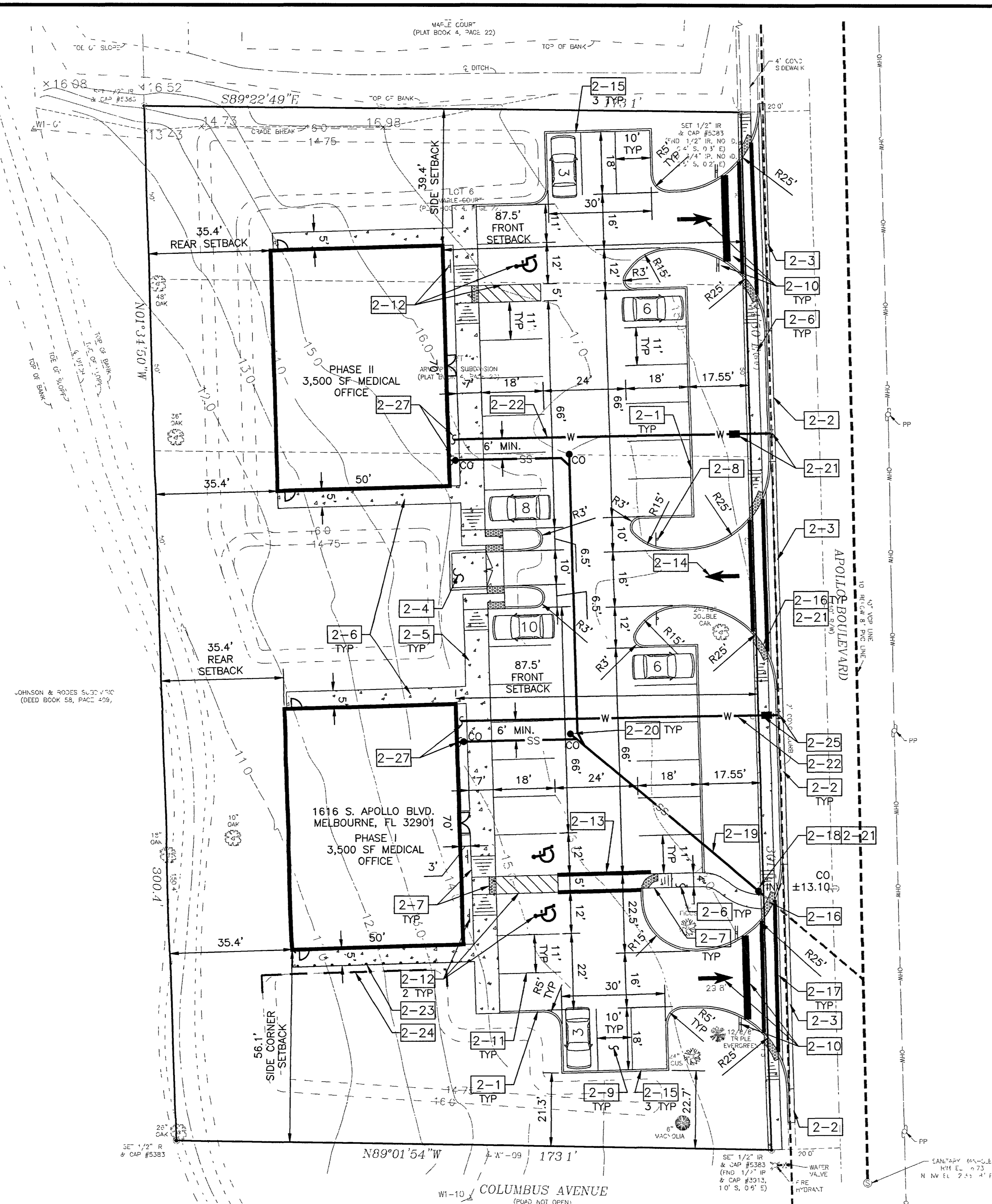
**CONSTRUCTION ENGINEERING GROUP**  
consulting engineers

**DR. KUMAR MEDICAL OFFICE**

MELBOURNE, FL  
DRAWING TITLE  
**EXISTING CONDITIONS AND DEMOLITION PLAN**

DATE	3-17-11
SCALE	1"=20'
PROJ NO	110025
DESIGNED BY	ELJ
DRAWN BY	NCW
CHECKED BY	ELJ
DRAWING NO	C-1





### SITE AND UTILITY PLAN

1"=20'

#### NOTES:

- 2-1. PROVIDE FDOT TYPE 'D' CURB PER FDOT INDEX NO. 300. SEE TYPICAL DETAIL.
- 2-2. PROVIDE FDOT TYPE 'F' CURB PER FDOT INDEX NO. 300. SEE TYPICAL DETAIL.
- 2-3. PROVIDE VALLEY GUTTER. SEE TYPICAL DETAIL.
- 2-4. PROVIDE FENCED DUMPSTER ENCLOSURE. SEE TYPICAL DETAIL.
- 2-5. PROVIDE RAISED CONCRETE SIDEWALK. SEE TYPICAL DETAIL.
- 2-6. PROVIDE CONCRETE SIDEWALK. SEE TYPICAL DETAIL.
- 2-7. PROVIDE 6' LONG MINIMUM 6" RISE HANDICAP ACCESSIBLE RAMP WITH BRICK RED TRUNCATED DOMES. SEE TYPICAL DETAIL.
- 2-8. PROVIDE 'DO NOT ENTER' SIGN PER MUTCD R5-1.
- 2-9. PROVIDE ON-SITE CONCRETE PAVEMENT. SEE TYPICAL DETAIL.
- 2-10. PROVIDE 30"x30" STOP SIGN PER MUTCD R1-1 WITH 30"x30" 'DO NOT ENTER' SIGN PER MUTCD R5-1 ON BACK OF STOP SIGN ON EACH SIDE OF DRIVEWAY. WHITE THERMOPLASTIC 24" WIDE STOP BAR AND DIRECTIONAL ARROWS PER FDOT INDEX NO. 17346. SEE TYPICAL DETAIL.
- 2-11. PROVIDE 4" PAINTED WHITE STRIPE PER FDOT INDEX NO. 17346.
- 2-12. PROVIDE HANDICAP PARKING SPACE. SEE TYPICAL DETAIL.
- 2-13. PROVIDE PAINTED WHITE CROSSWALK ON-SITE WITH 12" WIDE PARALLEL STRIPES PER FDOT INDEX NO. 17346.
- 2-14. PROVIDE THERMOPLASTIC WHITE DIRECTIONAL ARROW PER FDOT INDEX NO. 17346.
- 2-15. PROVIDE EMPLOYEE PARKING ONLY PAINTED ON FACE OF CURB.
- 2-16. PROVIDE TRUNCATED DOMES BRICK RED IN COLOR. SEE TYPICAL DETAIL.
- 2-17. PROVIDE THERMOPLASTIC WHITE CROSSWALK IN RIGHT-OF-WAY WITH 12" WIDE PARALLEL STRIPES PER FDOT INDEX NO. 17346.
- 2-18. TIE INTO EXISTING SANITARY SEWER LINE. CONTRACTOR SHALL INSTALL NEW SANITARY SEWER CLEANOUT AT PROPERTY LINE. REPLACE EXISTING SANITARY SEWER LINE TO PROPERTY LINE. CONTRACTOR SHALL FIELD VERIFY SANITARY SEWER LINE LOCATION AND ELEVATIONS PRIOR TO MATERIAL ORDER. CONTACT THE ENGINEER OF RECORD WITH ANY LOCATION OR ELEVATION CHANGES.

- 2-19. PROVIDE ± 229 LF OF 4" PVC SANITARY SEWER LINE AT MINIMUM 1% SLOPE.
- 2-20. PROVIDE SANITARY SEWER CLEANOUTS AT A MAXIMUM 75' O.C. PROVIDE TRAFFIC BEARING COVER FOR ALL CLEANOUTS IN PAVEMENT. SEE TYPICAL DETAIL.
- 2-21. CITY OF MELBOURNE POINT OF ACCEPTANCE WILL BE THE CLEANOUT AT THE PROPERTY LINE. ON-SITE SANITARY SEWER SYSTEM IS PRIVATELY MAINTAINED.
- 2-22. PROVIDE 494 LF OF 2" PVC POTABLE WATER LINE PER CITY OF MELBOURNE REQUIREMENTS.
- 2-23. PROVIDE HANDRAIL. SEE TYPICAL DETAIL.
- 2-24. PROVIDE 65 LF OF RETAINING WALL. SEE TYPICAL DETAIL.
- 2-25. PROVIDE 6"x2" WET TAP, 2" GATE VALVE WITH 2" REDUCED PRESSURE BACKFLOW PREVENTER AND 1.5" WATER METER PER CITY OF MELBOURNE REQUIREMENTS. SEE TYPICAL DETAILS. PROVIDE 2" COPPER WATER LINE FROM THE WET TAP AT THE CITY OF MELBOURNE WATER MAIN TO THE METER.
- 2-26. END OF PHASE I SIDEWALK. REMAINDER OF SIDEWALK TO THE NORTH TO BE CONSTRUCTED AT TIME OF FUTURE PHASE.
- 2-27. SEE PLUMBING DRAWINGS FOR CONTINUATION.

#### GENERAL NOTES: (ALL DRAWINGS)

1. SEE TYPICAL DETAILS ON FOLLOWING SHEETS FOR ADDITIONAL CONSTRUCTION DETAIL INFORMATION.
2. CONTRACTOR SHALL BECOME FAMILIAR AND COMPLY WITH ALL PERMITS AND PERMIT CONDITIONS. CONTRACTOR SHALL OBTAIN FROM CEG OR ALL PERMIT AGENCIES IDENTIFIED IN SPECIFICATIONS PRIOR TO COMMENCING SITE WORK.
3. ALL AREAS DISTURBED OFF-SITE SHALL BE RESTORED TO EQUAL OR BETTER CONDITION THAN PRE-CONSTRUCTION WITH SAME TYPE OF SOD AS EXISTING.
4. CONTRACTOR SHALL COMPLY WITH ALL RECOMMENDATIONS OF KSM EXPLORATION REPORT FOR THIS SITE. CONTRACTOR SHALL OBTAIN FROM CEG OR THE GEOTECHNICAL COMPANY.
5. SLOPE ALL SIDEWALKS TO FLOW AWAY FROM BUILDING WITH MAXIMUM 2% CROSS SLOPE.
6. PROVIDE CONSTANT SLOPE BETWEEN ALL SPOT ELEVATIONS.
7. UTILITY LENGTHS ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AS-BUILT DRAWINGS. CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, DEPTH, AND MATERIAL OF EXISTING UTILITIES. PROVIDE ADDITIONAL PIPING AND FITTINGS AS NECESSARY. NOTIFY ENGINEER OF SIGNIFICANT INCREASES.
8. NOTIFY ENGINEER MINIMUM 72 HOURS (WEEKDAYS) PRIOR TO MAKING UTILITY CONNECTIONS OR BACK FILLING UTILITY TRENCHES FOR INSPECTION. IF NOT NOTIFIED CONTRACTOR SHALL EXPOSE LINES PER ENGINEER'S REQUEST FOR INSPECTIONS.
9. ALL TRAFFIC SIGNS SHALL BE INSTALLED PER STANDARD FDOT INDEX NOS. 11865 AND 17302.
10. ALL RADII ARE 5' UNLESS IDENTIFIED OTHERWISE.
11. PROVIDE 36" LONG TRANSITION WITH CONSTANT SLOPE FROM TOP OF CURB TO GRADE AT TERMINATION POINT OF CURBS.
12. ALL DIMENSIONS ARE TO FACE OF CURB.
13. CONTRACTOR SHALL CLEAR AND GRUB ALL VEGETATION ON-SITE EXCEPT TREES SHOWN TO REMAIN ON DWG C-1, L-1.
14. PROVIDE SILT FENCE PER FDOT INDEX NO. 102 ALONG ENTIRE PERIMETER OF PROJECT AREA EXCLUDING ENTRANCE DRIVEWAYS.
15. ALL WASTE SHALL BE DISPOSED OF OFF-SITE IN A SAFE AND LEGAL MANNER UNLESS OWNER SPECIFICALLY REQUESTS OTHERWISE.
16. FOR DEMOLITION OF ALL ASPHALT AND CONCRETE MATERIALS, SAWCUT EDGES FOR SMOOTH STRAIGHT EDGE. ALSO SAWCUT ALL EXISTING PAVEMENT EDGES FOR SMOOTH STRAIGHT EDGE AT ALL TIE-IN POINTS WITH NEW PAVEMENT OR CONCRETE.
17. PROVIDE HANDICAP ACCESSIBLE CONNECTION WITH TRUNCATED DOMES AT TERMINATION POINT OF ALL SIDEWALKS ADJACENT TO DRIVING LANES/PARKING PLACES PER FDOT STANDARD INDEX NO. 304.
18. CONTRACTOR SHALL VERIFY ON-SITE PRIOR TO BIDDING WORK THE FULL EXTENT OF DEMOLITION REQUIRED BASED ON SITE PLAN CONSTRUCTION DRAWINGS. ALL ITEMS SHALL BE INCLUDED IN BASE BID.
19. REMOVE ALL ABOVE GROUND IMPROVEMENTS IN AREAS SHOWN FOR DEMOLITION UNLESS SPECIFICALLY IDENTIFIED OTHERWISE.
20. SEE ARCHITECTURAL DRAWINGS FOR BUILDING LAYOUTS AND MECHANICAL/PLUMBING DWGS FOR EXACT UTILITY CONNECTION LOCATIONS.
21. ALL SLOPES 4H:1V OR STEEPER SHALL BE SODDED. ALL SLOPES STEEPER THEN 3H:1V SHALL BE SODDED AND STAKED.
22. CONTRACTOR SHALL PROVIDE ALL FITTINGS REQUIRED TO INSTALL UTILITIES PER PLAN.
23. CONTACT UNDERGROUND UTILITIES LOCATE BEFORE COMMENCING ANY DIGGING A MINIMUM OF 48 HOURS IN ADVANCE AT 1-800-432-4770.
24. VERIFY THAT THE LANDSCAPE WORK IS COORDINATED WITH ALL UTILITIES AND STORMWATER SYSTEMS. A MINIMUM OF FIVE (5) FOOT HORIZONTAL SEPARATION BETWEEN TREES AND BURIED, AERIAL, OR GRADE-MOUNTED UTILITY SYSTEMS IS REQUIRED.
25. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PUBLIC ROADWAYS, EASEMENTS, CURBS, SIDEWALKS, DRAINAGE SYSTEM, BENCHMARKS, OR UTILITIES AS A DIRECT RESULT OF CONSTRUCTION. A REGISTERED SURVEYOR SHALL RESTORE ANY DAMAGED BENCHMARKS.
26. ALL EXCAVATIONS OF GREATER DEPTH THAN 5' SHALL COMPLY WITH THE CURRENT OSHA TRENCH SAFETY STANDARDS 29 C.F.R. § 1926.650 SUBPART P. ANY EXCAVATION WITHIN THE CLEARZONE SHALL ALSO COMPLY WITH ALL WARNING AND/OR BARRIER REQUIREMENTS OF FDOT INDEX NO. 600 (SEE TYPICAL DETAIL).
27. STORM DRAIN CLEAN OUT SHALL MATCH SANITARY SEWER CLEAN OUT DETAIL.
28. CONSTRUCTION ENGINEERING GROUP DOES NOT WARRANT THE ACCURACY OF THE RECORD SURVEY. GRADING ADJACENT TO BUILDINGS SHALL BE 6" BELOW FINISHED FLOOR UNLESS IDENTIFIED OTHERWISE BY ARCHITECT OR ON GRADING PLANS.
29. ALL STOP SIGNS SHALL BE 30"x30" HIGH INTENSITY OR DIAMOND GRADE PER MUTCD R1-1. SEE TYPICAL CITY DETAIL.
30. STORMWATER PIPE JOINTS MUST BE WRAPPED WITH TYPAR WRAP WITH A MINIMUM OVERLAP OF 12". SEE TYPICAL DETAIL.
31. THERE WILL BE NO UTILITY LATERALS, METER BOXES, OR VALVE BOXES IN EXISTING OR PROPOSED SIDEWALK OR DRIVEWAY AREAS.
32. ALL WATER DISTRIBUTION CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF MELBOURNE TECHNICAL SPECIFICATIONS FOR CONSTRUCTION OF WATER DISTRIBUTION SYSTEMS (1998).
33. ALL SEWER COLLECTION CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF MELBOURNE FEBRUARY 1998 SPECIFICATIONS.
34. CONTRACTOR TO PROVIDE STABILIZED ALL-WEATHER TURNAROUND AREA DURING CONSTRUCTION FOR EMERGENCY VEHICLES.
35. ALL SIGNS TO BE SHEETED WITH HIGH-INTENSITY OR BETTER REFLECTIVE SHEETING.
36. ALL 10'-FOOT PARKING SPACES MUST BE SIGNED OR PAINTED "EMPLOYEE ONLY" ON FACE OF CURB.
37. ANY DEBRIS ENTERING THE CITY SEWER SYSTEM WILL NEED TO BE REMOVED AT THE CONTRACTOR'S EXPENSE.
38. IF THE SEPARATION BETWEEN A STORM PIPE AND SEWER LINE WITH STORM ABOVE SEWER IS LESS THAN 18", THE SEWER PIPE MUST BE UPGRADED WITH A 20' STICK OF C-900 GREEN IN COLOR. CONCRETE SADDLES MUST SUPPORT THE STORM PIPE.
39. LANDSCAPING IS REQUIRED ON THREE SIDES OF THE DUMPSTERS.
40. MAXIMUM ELEVATION CHANGE AT THE ACCESSIBLE DOORS SHALL NOT EXCEED 1/4".
41. ANY AREAS OFF-SITE MUST BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN PRE-CONSTRUCTION. MATCH EXISTING GRASS TYPE WITH NEW SOD FOR ALL DISTURBED AREAS.
42. ALL INVASIVE AND NON-NATIVE TREES MUST BE REMOVED.
43. IF 3' OF COVER CANNOT BE MAINTAINED OVER THE SANITARY SEWER LINE, THE SEWER LINE MUST BE UPGRADED TO C-900 GREEN IN COLOR.
44. THIS IS A PRIVATE SEWER SYSTEM. THE CITY'S POINT OF ACCEPTANCE IS THE CLEANOUT ON THE PROPERTY LINE.
45. ALL STREETS AND STORMWATER CONSTRUCTION SHALL BE ACCORDANCE WITH CITY OF MELBOURNE TECHNICAL SPECIFICATIONS FOR CONSTRUCTION OF STREETS, PAVING AND DRAINAGE SYSTEMS (1991).
46. ALL DRAINAGE SYSTEMS WILL BE PRIVATELY MAINTAINED ON-SITE.
47. PROVIDE TRUNCATED DOMES AND TACTILE SURFACE ON FULL LENGTH OF ALL RAMPS PER FLORIDA BUILDING CODE REQUIREMENTS. SEE TYPICAL DETAILS.
48. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES, MATERIALS, AND SIZES PRIOR TO COMMENCEMENT OF CONSTRUCTION.

REVISION	DATE	CITY OF MELBOURNE COMMENTS	
1	05/09/11		

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**CONSTRUCTION ENGINEERING GROUP**  
 consulting engineers

**DR. KUMAR**  
 MEDICAL OFFICE

MELBOURNE, FL  
 DRAWING TITLE

**SITE AND UTILITY PLAN**

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 No. 66676  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER

JUL 21 2011

DATE 3-17-11

SCALE 1"=20'

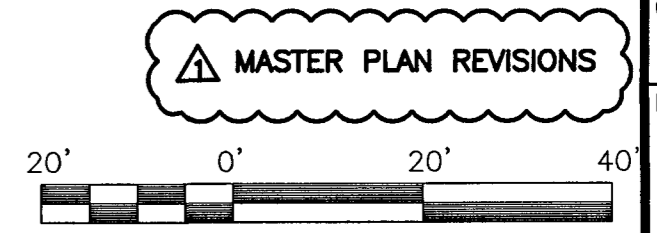
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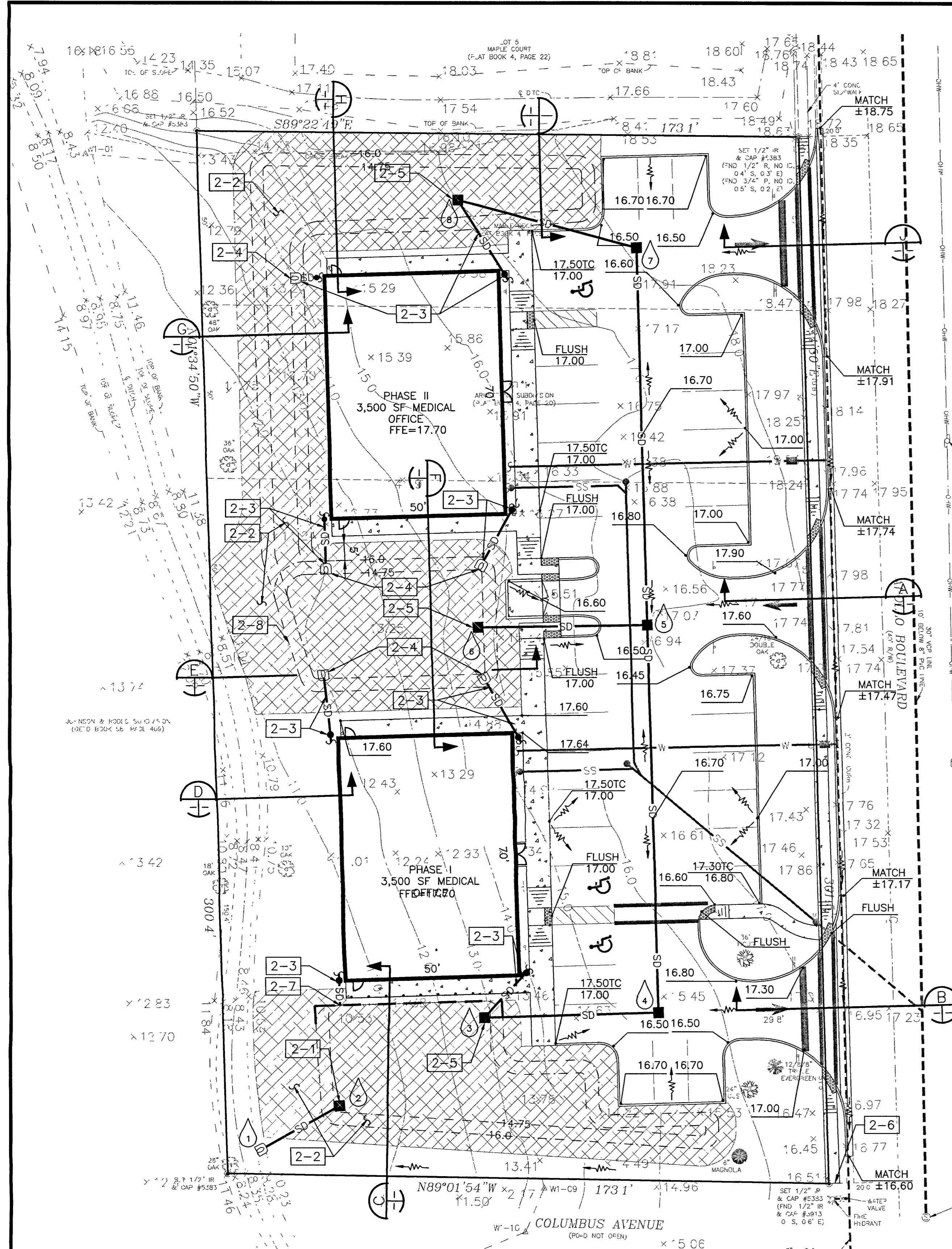
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DRAWN BY: NCW

CHECKED BY: ELJ

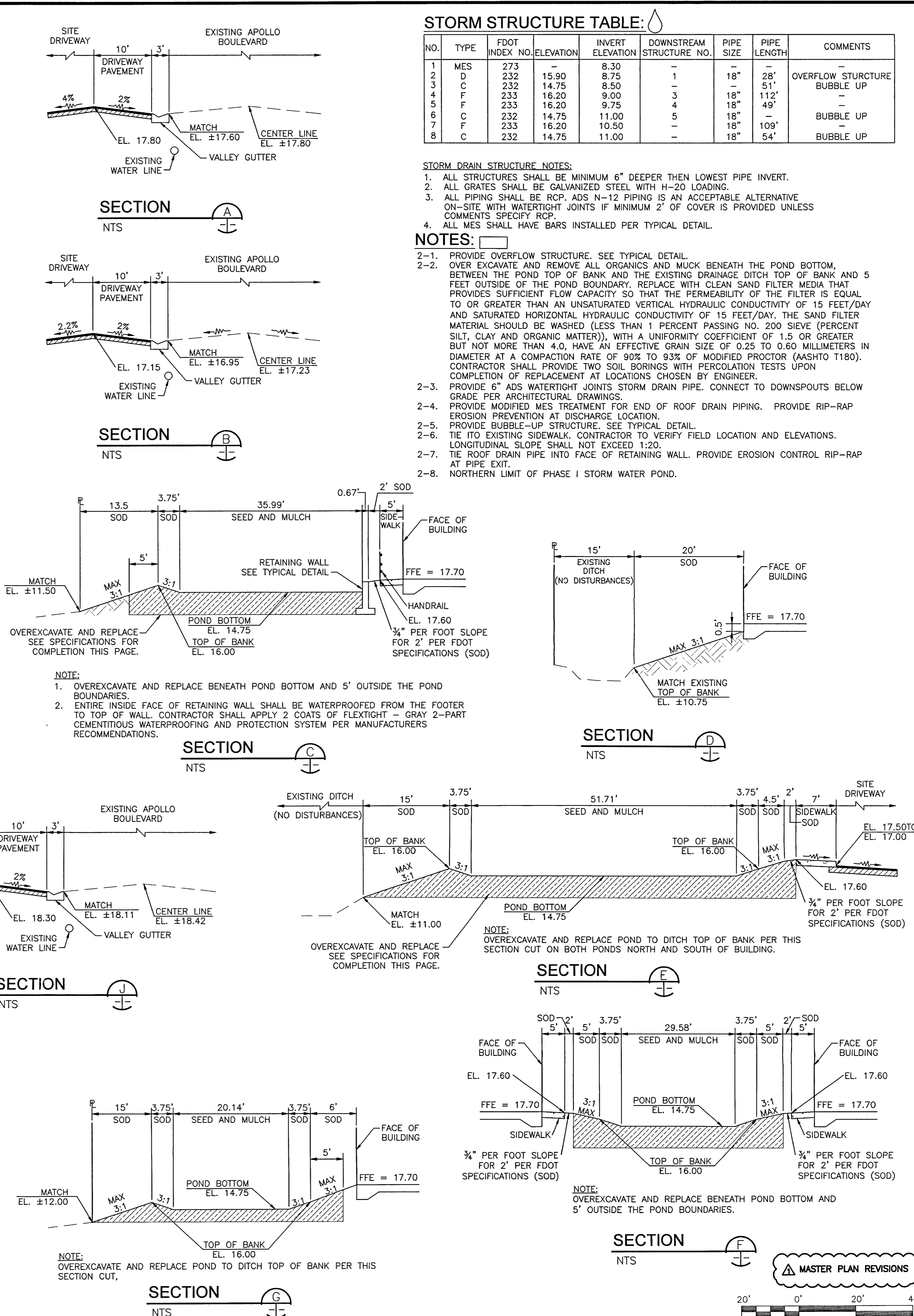
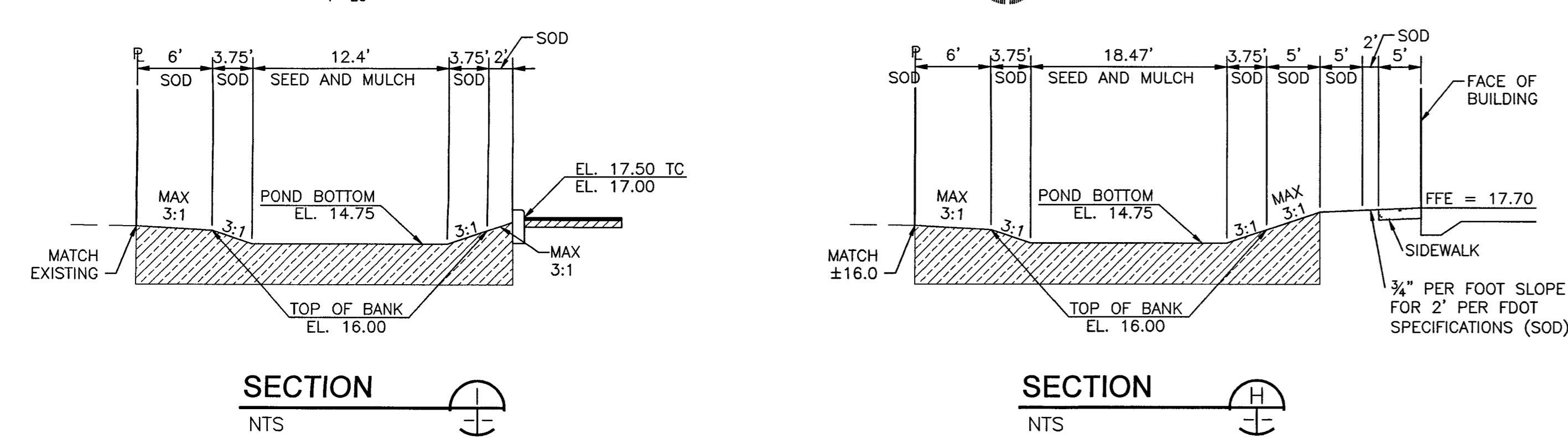
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### GRADING AND DRAINAGE PLAN

1"=20'



REVISION

DATE

05/09/11

CITY OF MELBOURNE

COMMENTS

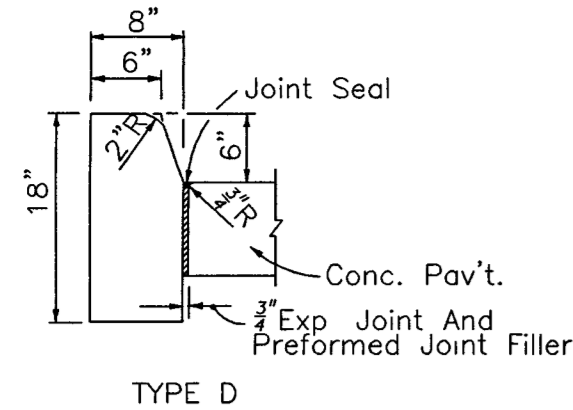
261 Eau Claire Blvd., Suite 100  
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**DR. KUMAR MEDICAL OFFICE**  
MELBOURNE, FL  
DRAWING TITLE  
**GRADING AND DRAINAGE PLAN**

DATE: 3-17-11  
SCALE: 1"=20'  
PROJ NO: 110025  
DESIGNED BY: ELJ  
DRAWN BY: NCW  
CHECKED BY: ELJ  
DRAWING NO: C-3

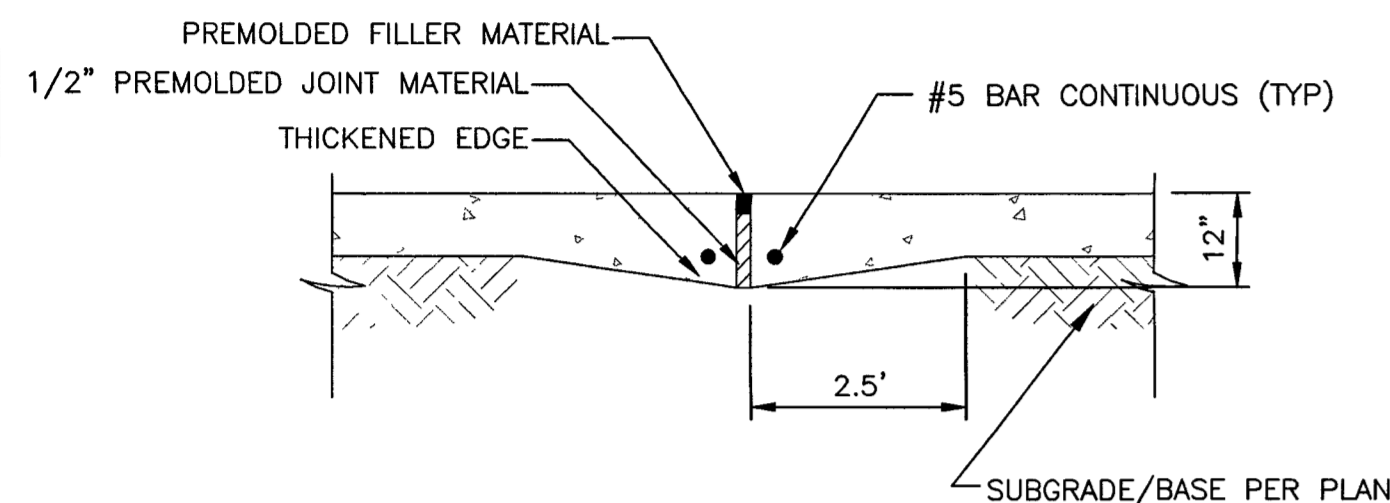
**MASTER PLAN REVISIONS**



Note: For use adjacent to concrete or flexible pavement, concrete shown Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see diagram right

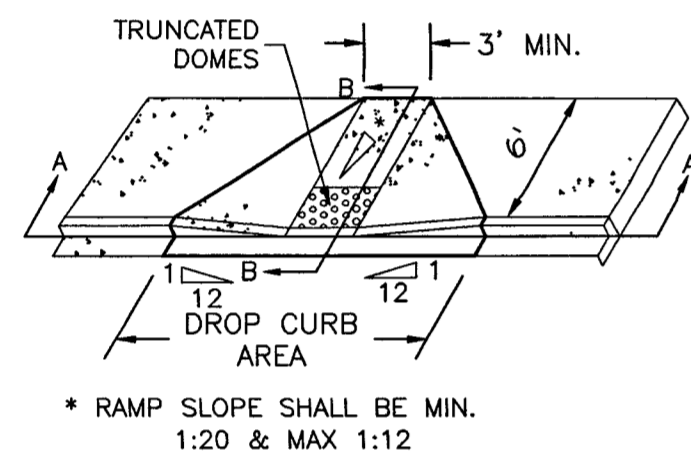
**TYPICAL FDOT TYPE 'D' CURB DETAIL**

NTS

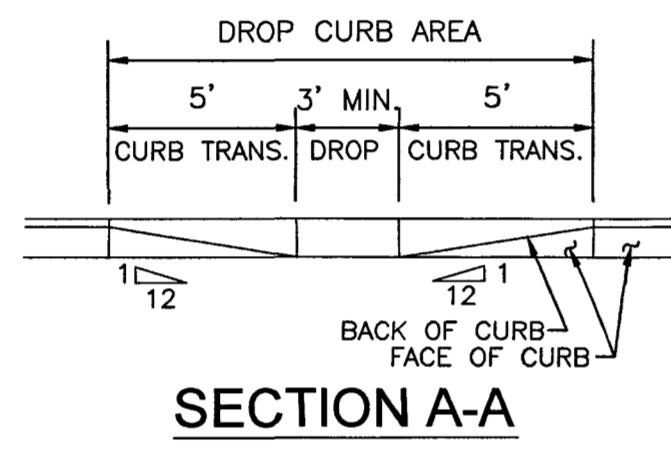


**TYPICAL EXPANSION JOINT (EJ) WITH THICKENED EDGE DETAIL**

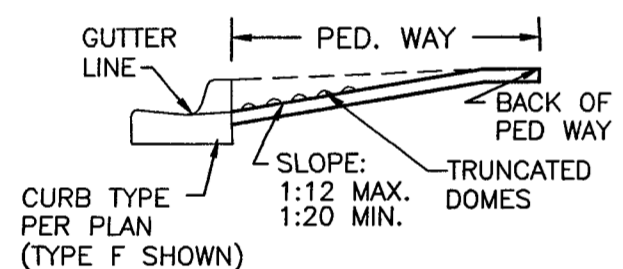
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\* RAMP SLOPE SHALL BE MIN. 1:20 & MAX 1:12



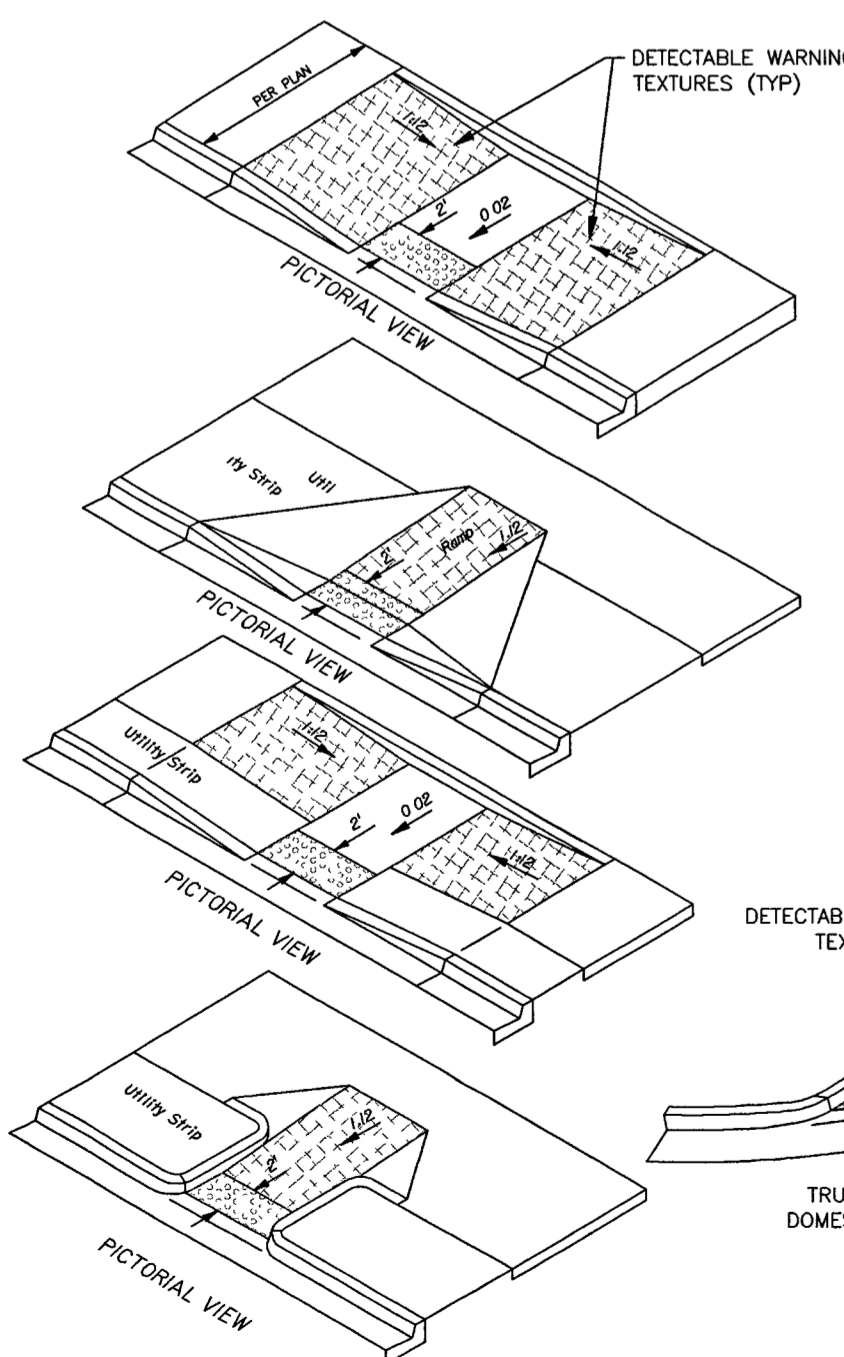
**SECTION A-A**



**SECTION B-B**

**TYPICAL HANDICAP ACCESSIBLE DROP CURB RAMP DETAIL**

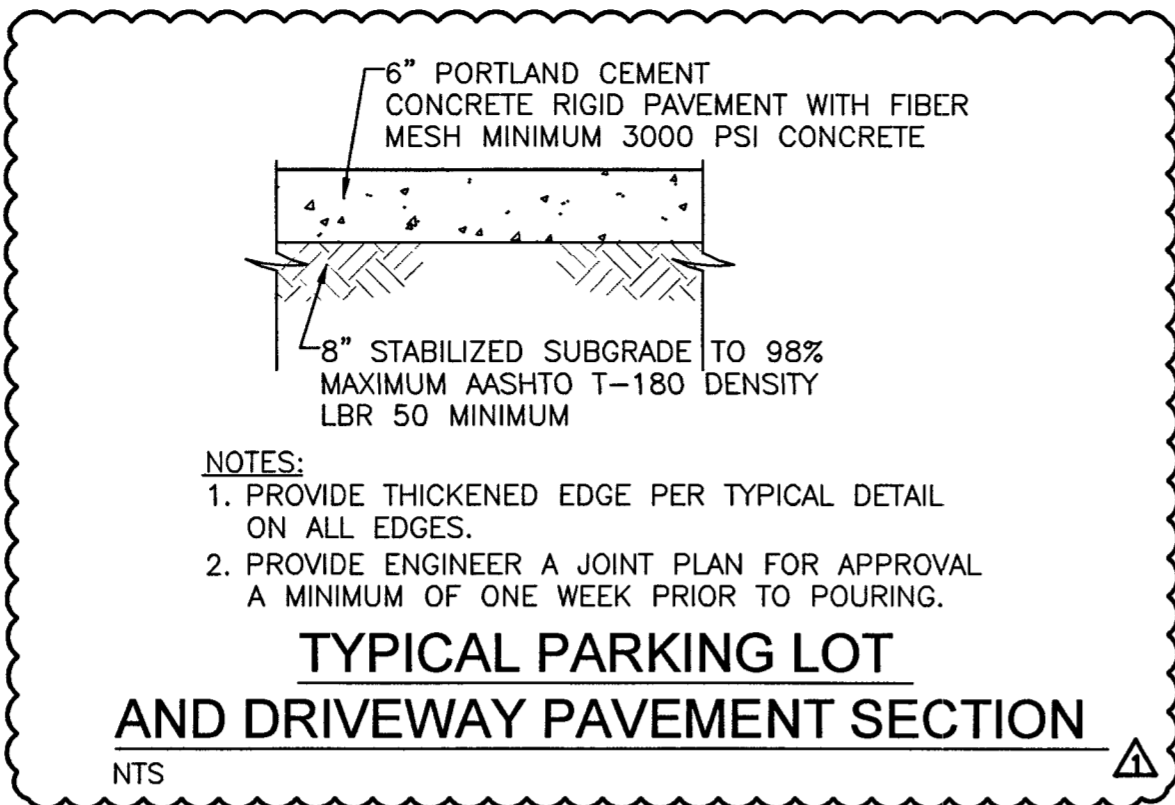
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NOTE: THE DETECTABLE WARNING TEXTURE ON WALKING SURFACES SHALL EXTEND THE FULL WIDTH AND DEPTH OF THE CURB RAMP AND CONSIST OF EXPOSED AGGREGATE CONCRETE, CUSHIONED SURFACES MADE OF RUBBER OR PLASTIC, OR RAISED STRIPES BEYOND THE TRUNCATED DOMES WHERE DOMES AREA REQUIRED. TEXTURE COLORS SHALL CONTRAST WITH THAT OF THE SURROUNDING SURFACE (TYP).

**TYPICAL TRUNCATED DOMES AND DETECTABLE WARNING DETAIL**

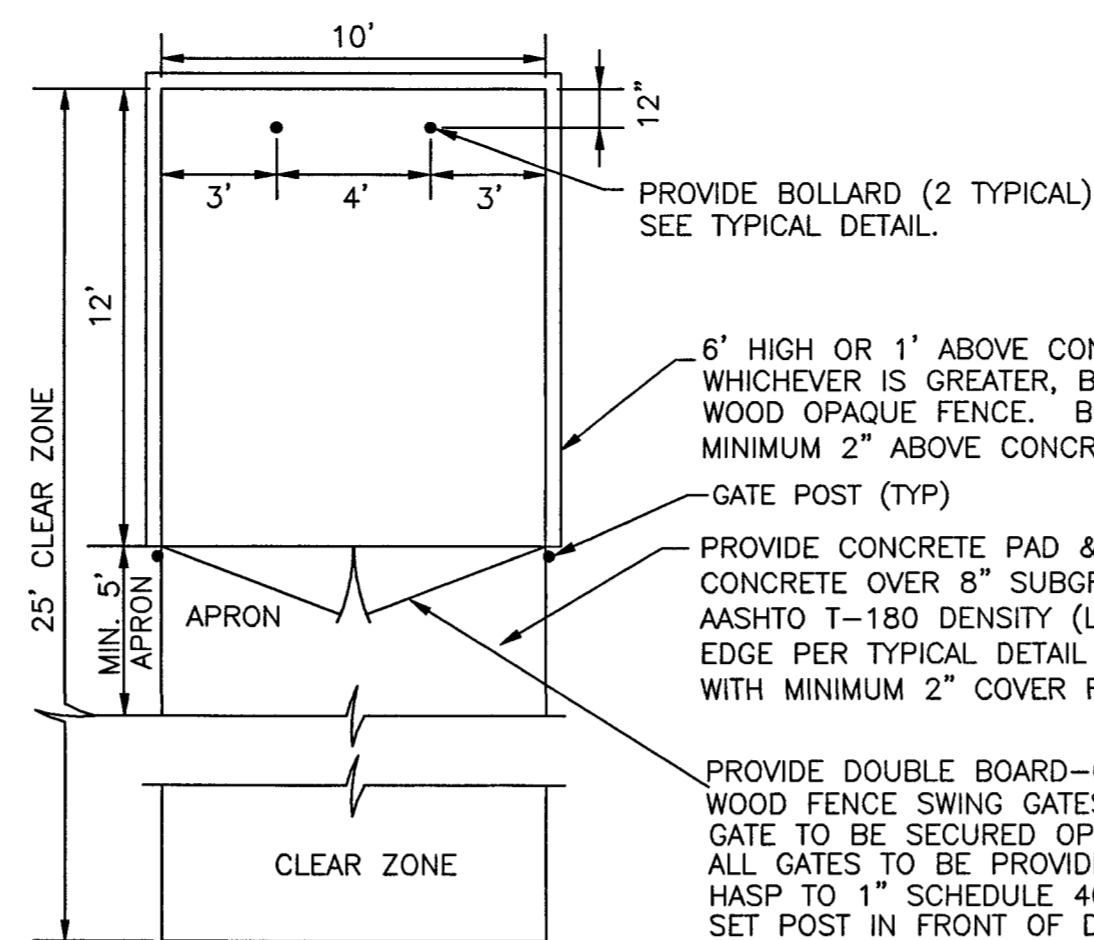
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- NOTES:
1. PROVIDE THICKENED EDGE PER TYPICAL DETAIL ON ALL EDGES.
  2. PROVIDE ENGINEER A JOINT PLAN FOR APPROVAL A MINIMUM OF ONE WEEK PRIOR TO POURING.

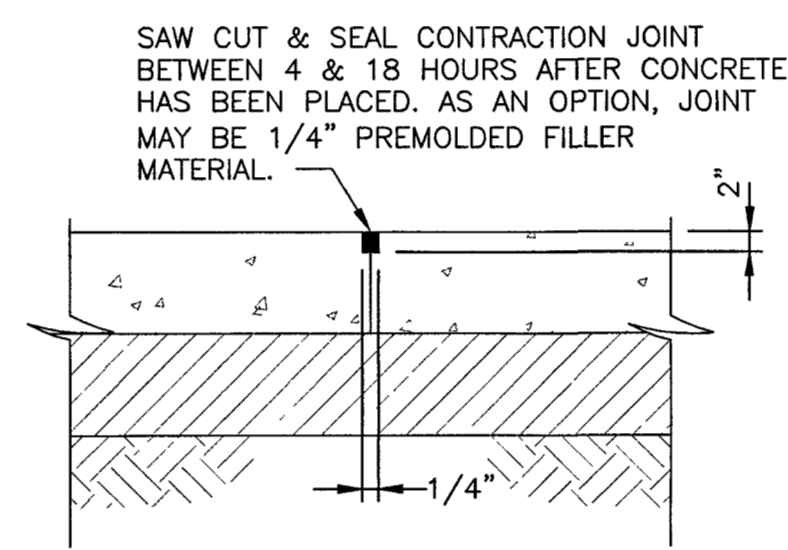
**TYPICAL PARKING LOT AND DRIVEWAY PAVEMENT SECTION**

NTS



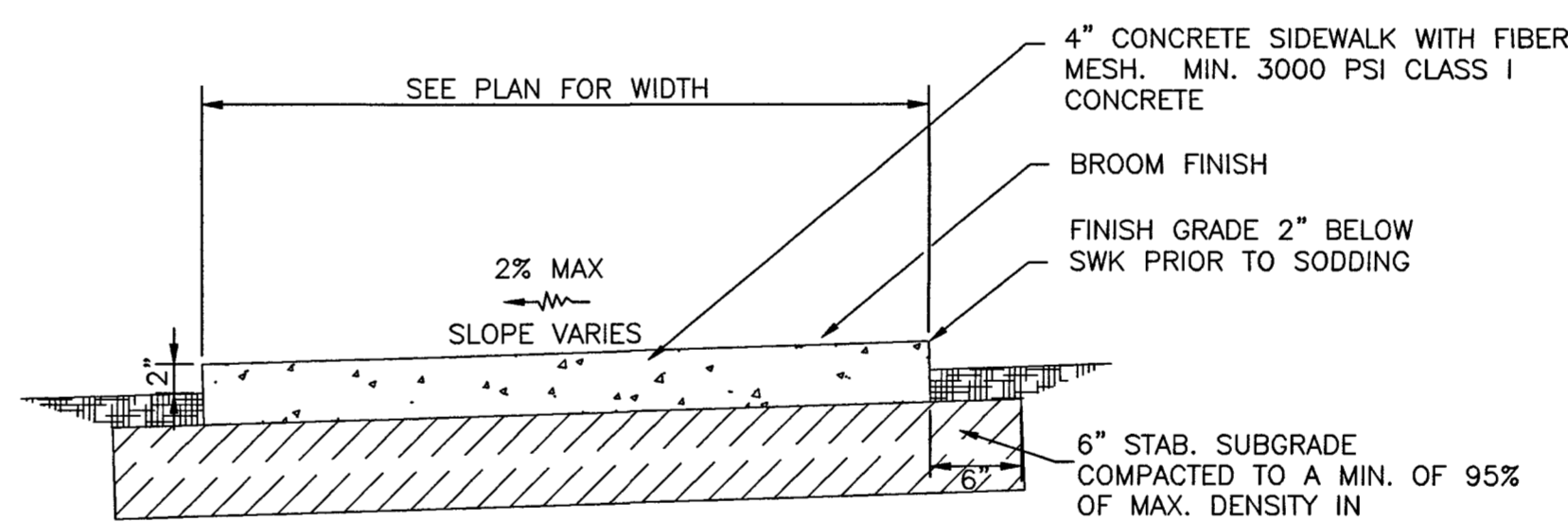
**FENCED DUMPSTER ENCLOSURE DETAIL**

NTS



**TYPICAL CONTRACTION JOINT (CJ) DETAIL**

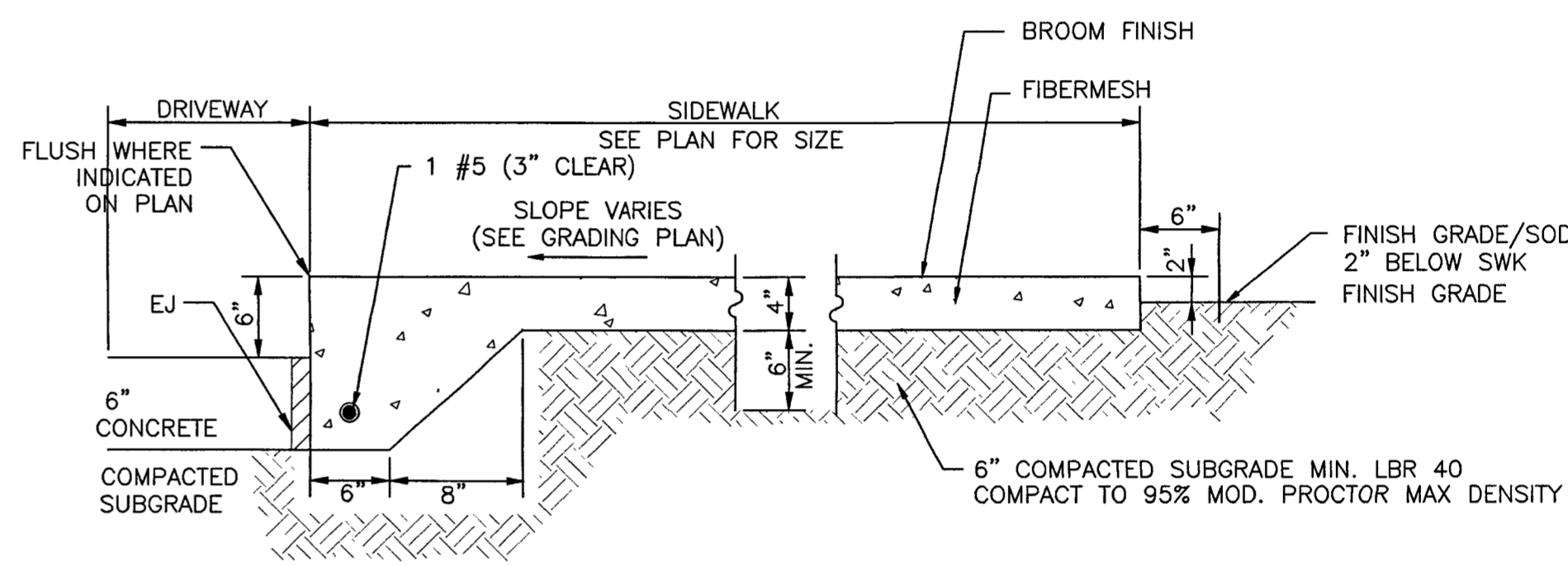
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- NOTES:
1. PROVIDE EXPANSION JOINTS AT CONNECTION POINTS OF OTHER IMPERVIOUS SURFACES INCLUDING BUT NOT LIMITED TO PAVEMENT, CURBS, OTHER SIDEWALKS, ETC. SEE TYPICAL DETAIL.
  2. PROVIDE EXPANSION AND CONTRACTION JOINTS AT LOCATIONS PER FDOT INDEX NO. 310 FOR ENTIRE LENGTH OF SIDEWALK. SEE TYPICAL DETAIL.
  3. CONSTRUCT 2' BUFFERS AT FRONT AND BACK OF SIDEWALK WITH MAX SLOPE OF 3/4" PER FOOT.

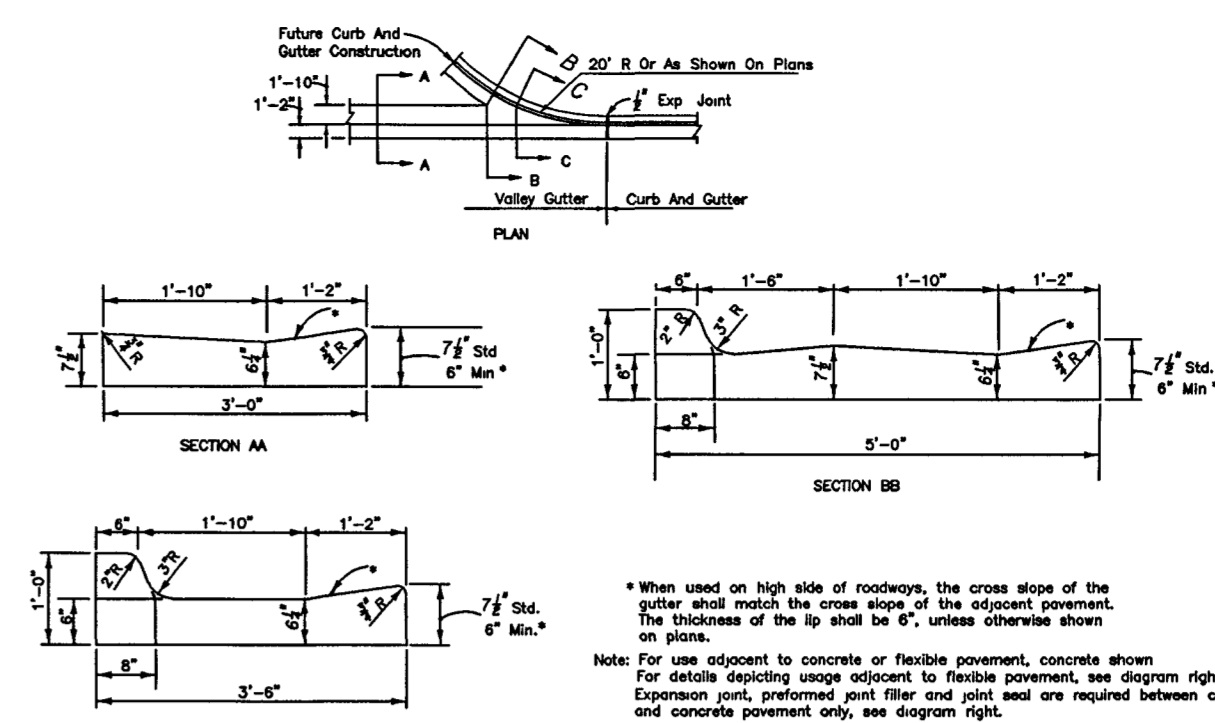
**TYPICAL CONCRETE SIDEWALK DETAIL**

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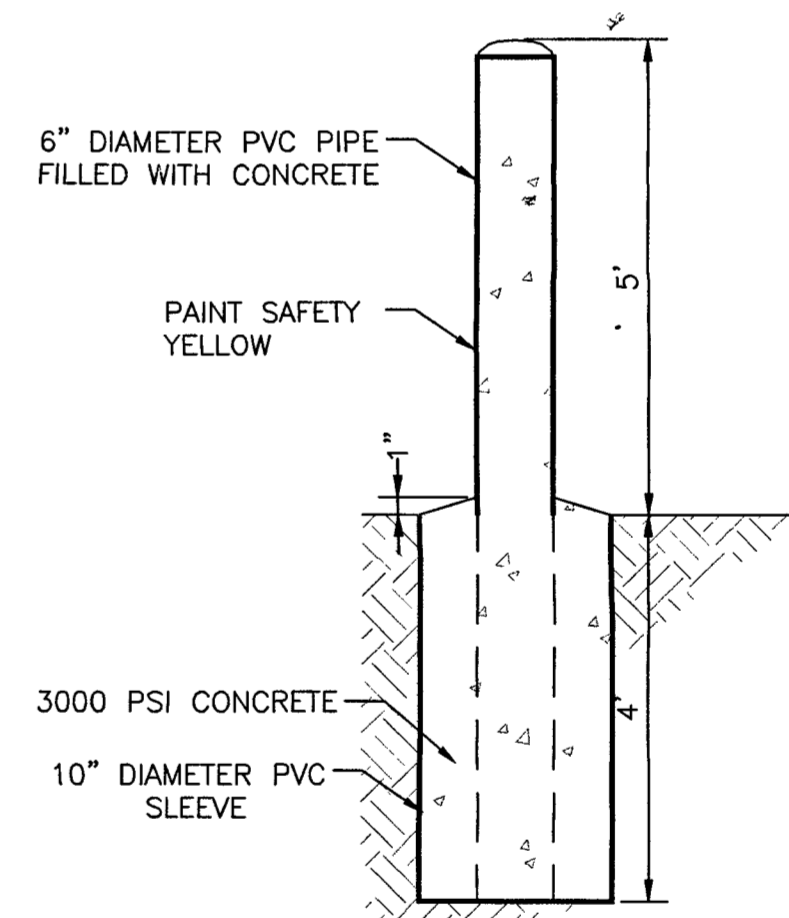
**TYPICAL RAISED CONCRETE SIDEWALK DETAIL**

NTS



**TYPICAL VALLEY GUTTER DETAIL**

NTS



**TYPICAL CONCRETE BOLLARD DETAIL**

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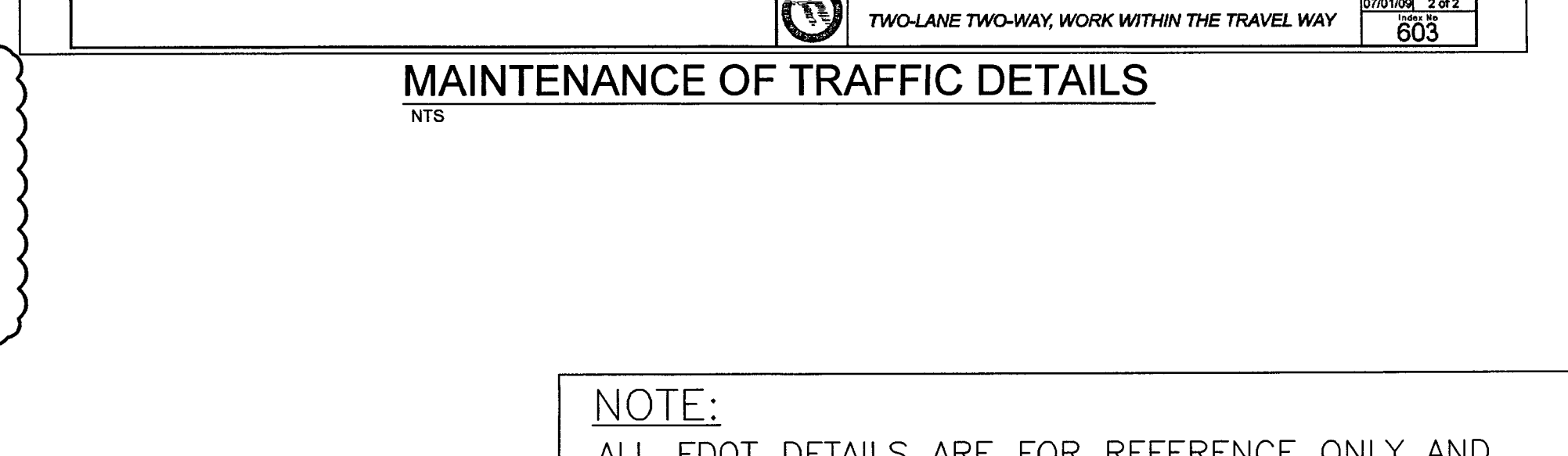
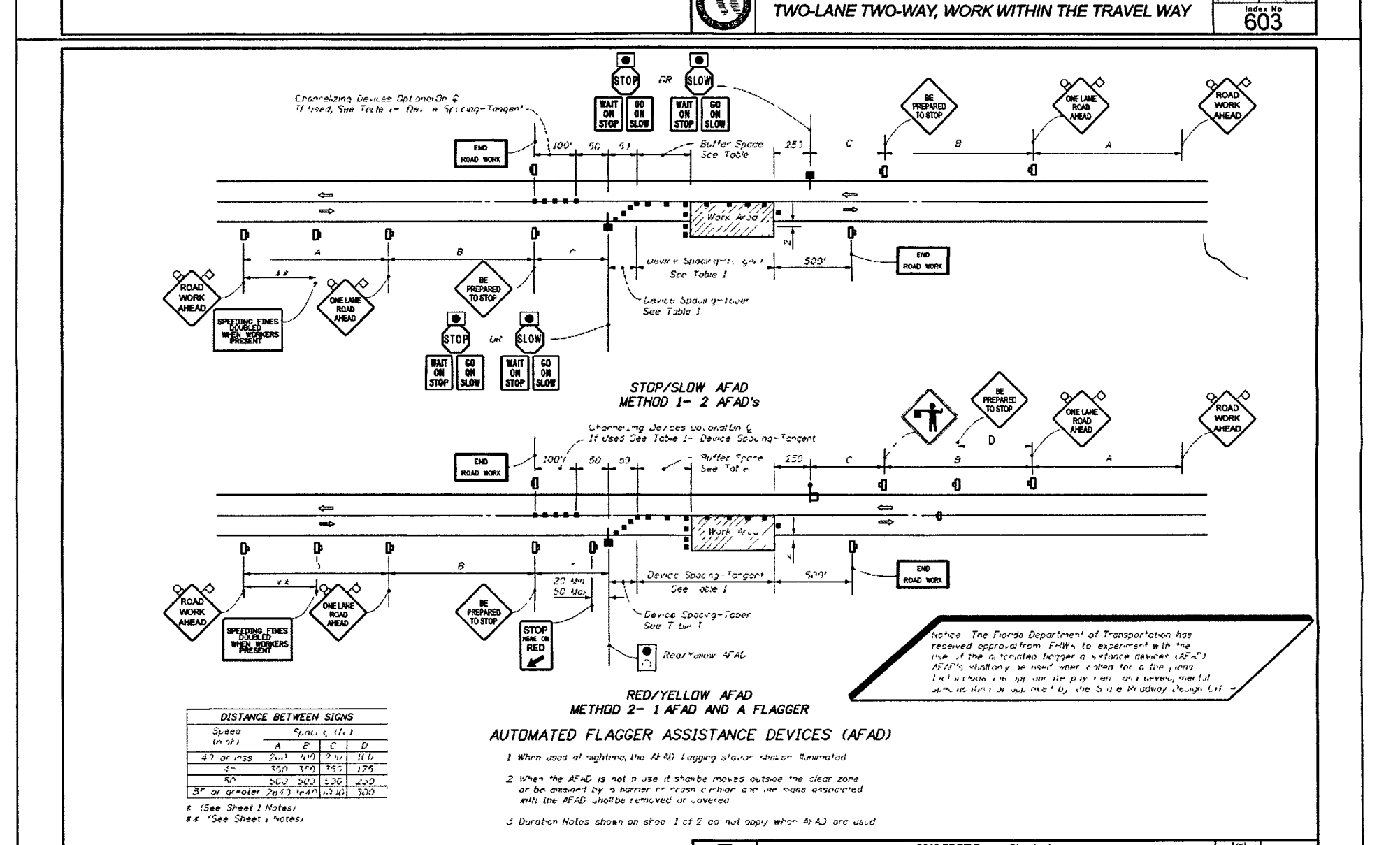
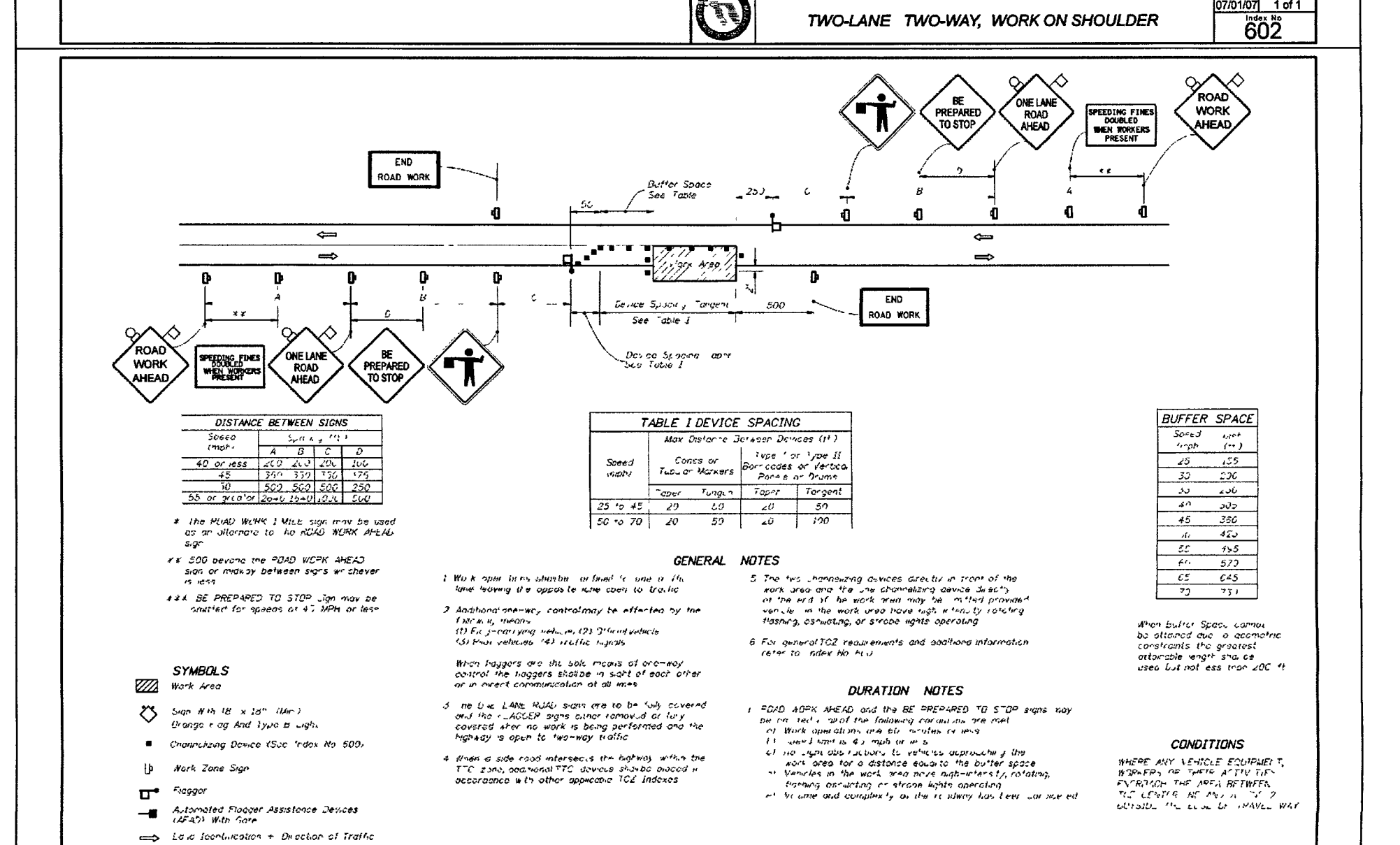
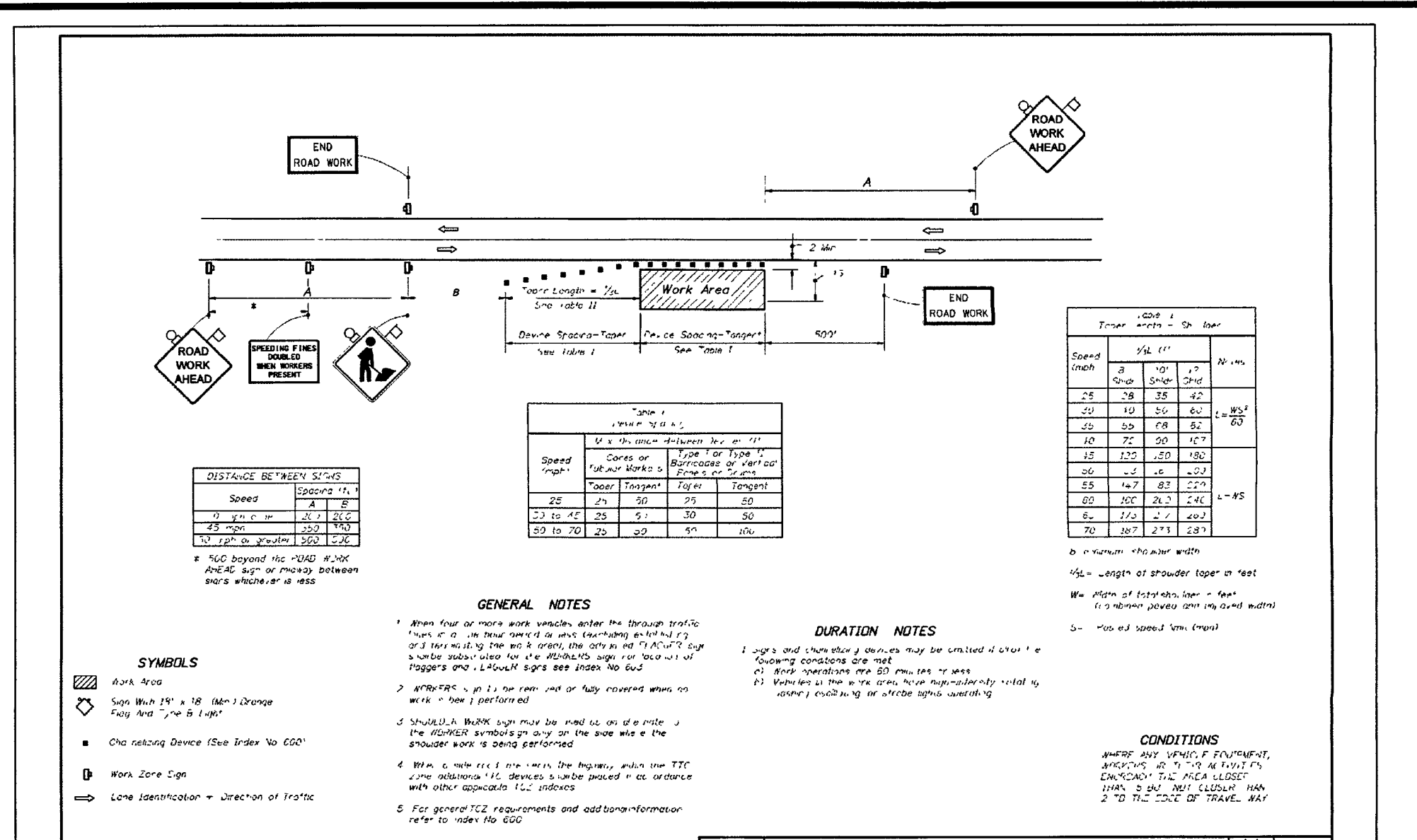
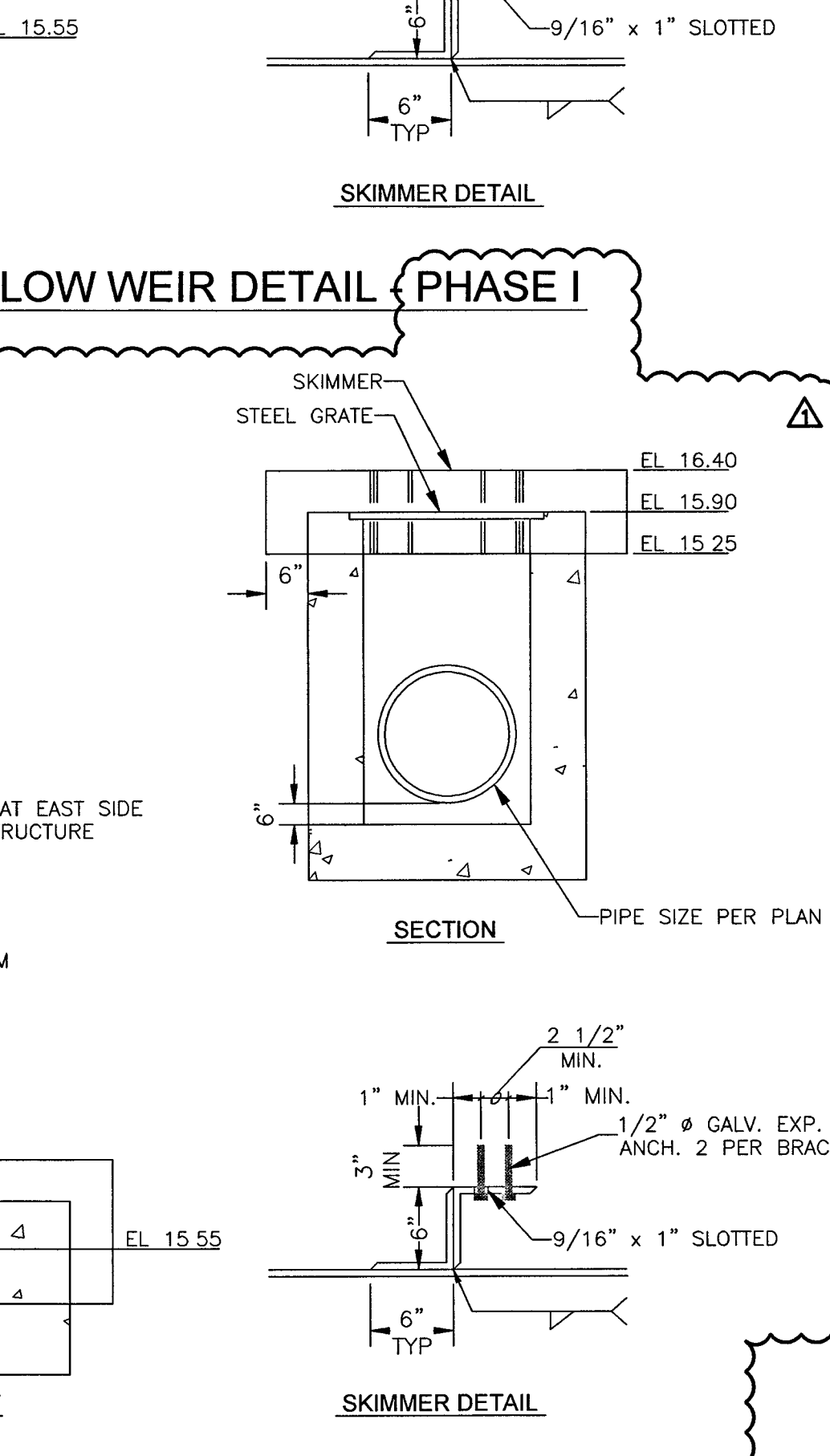
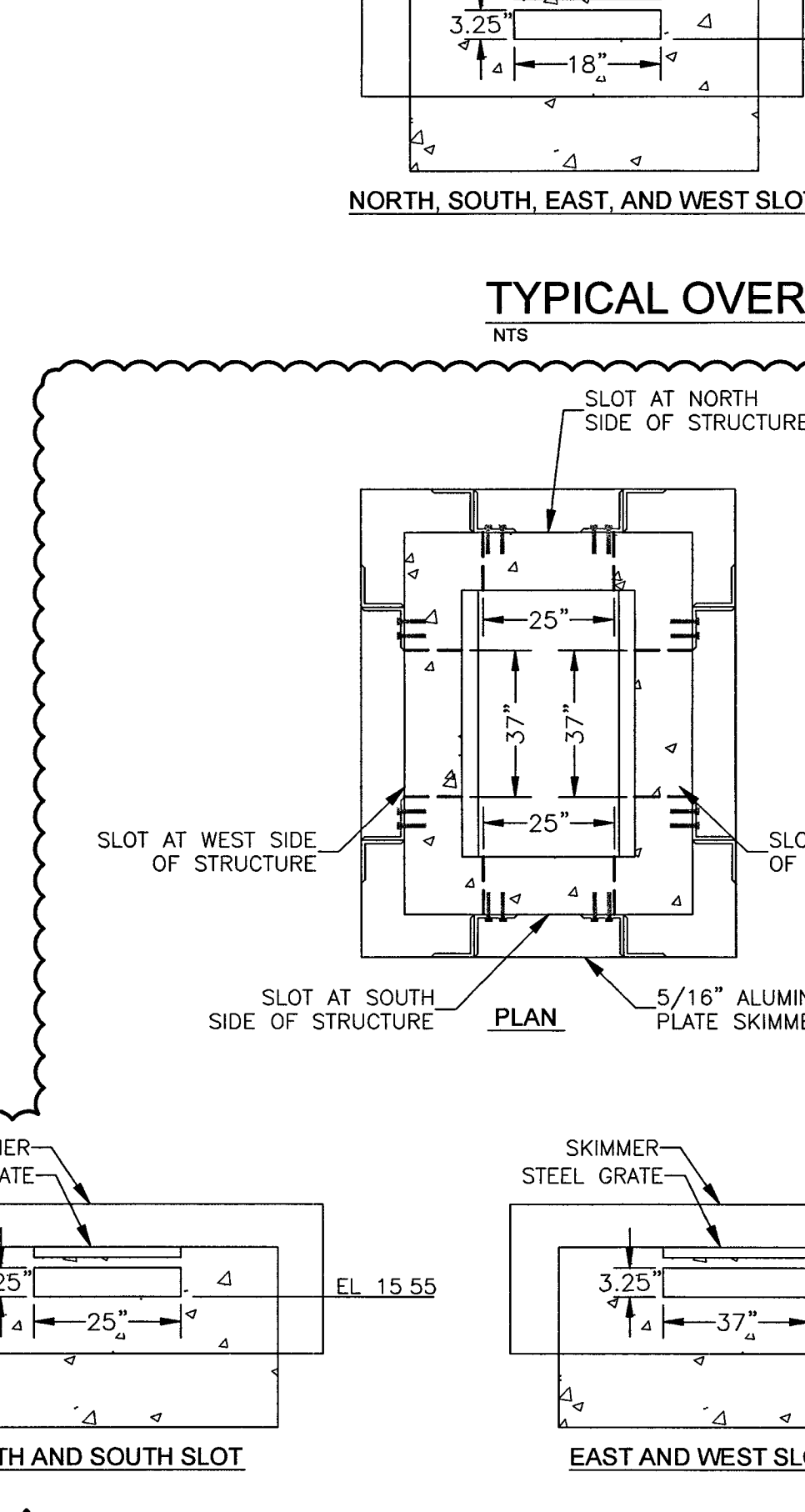
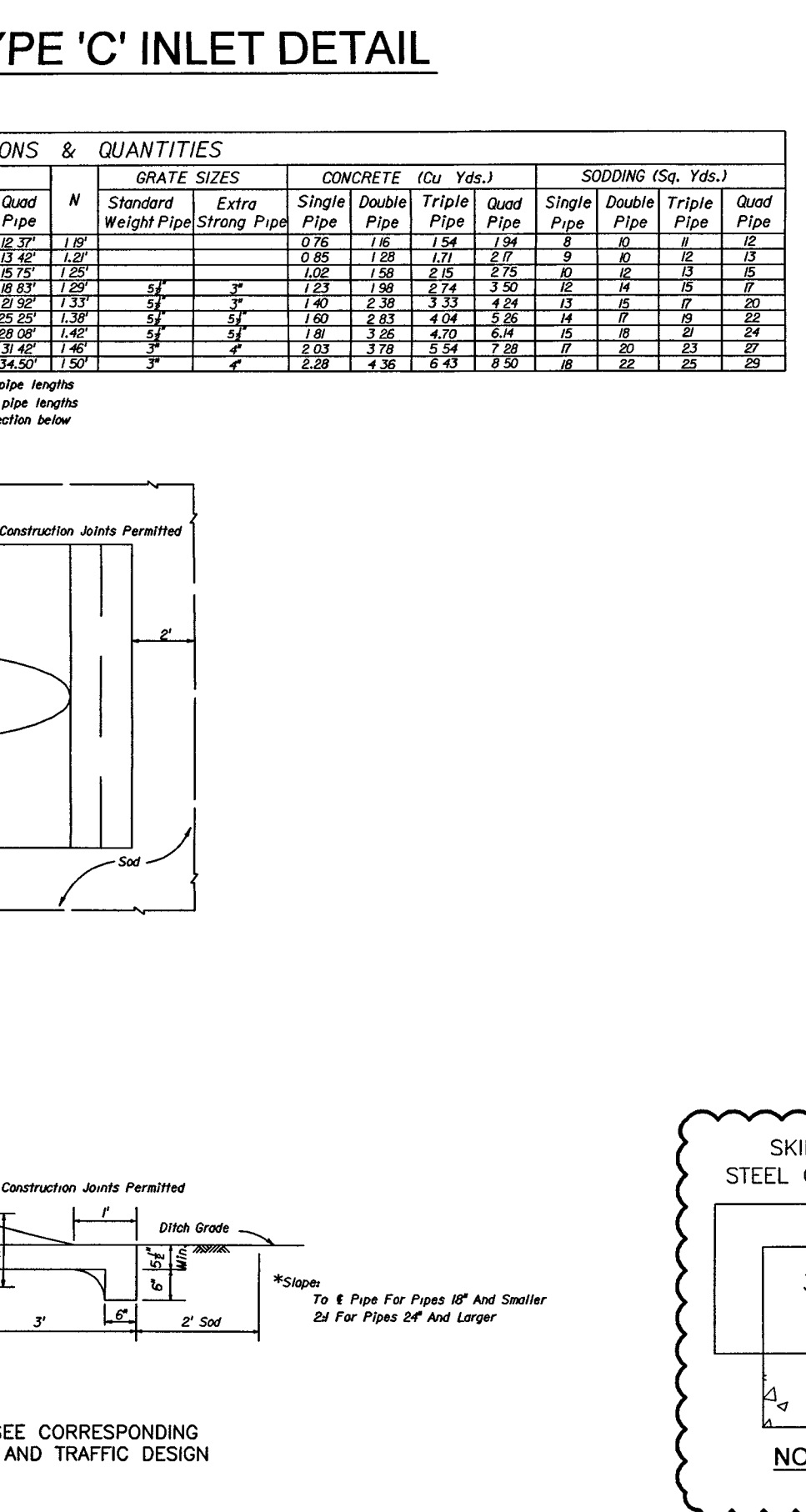
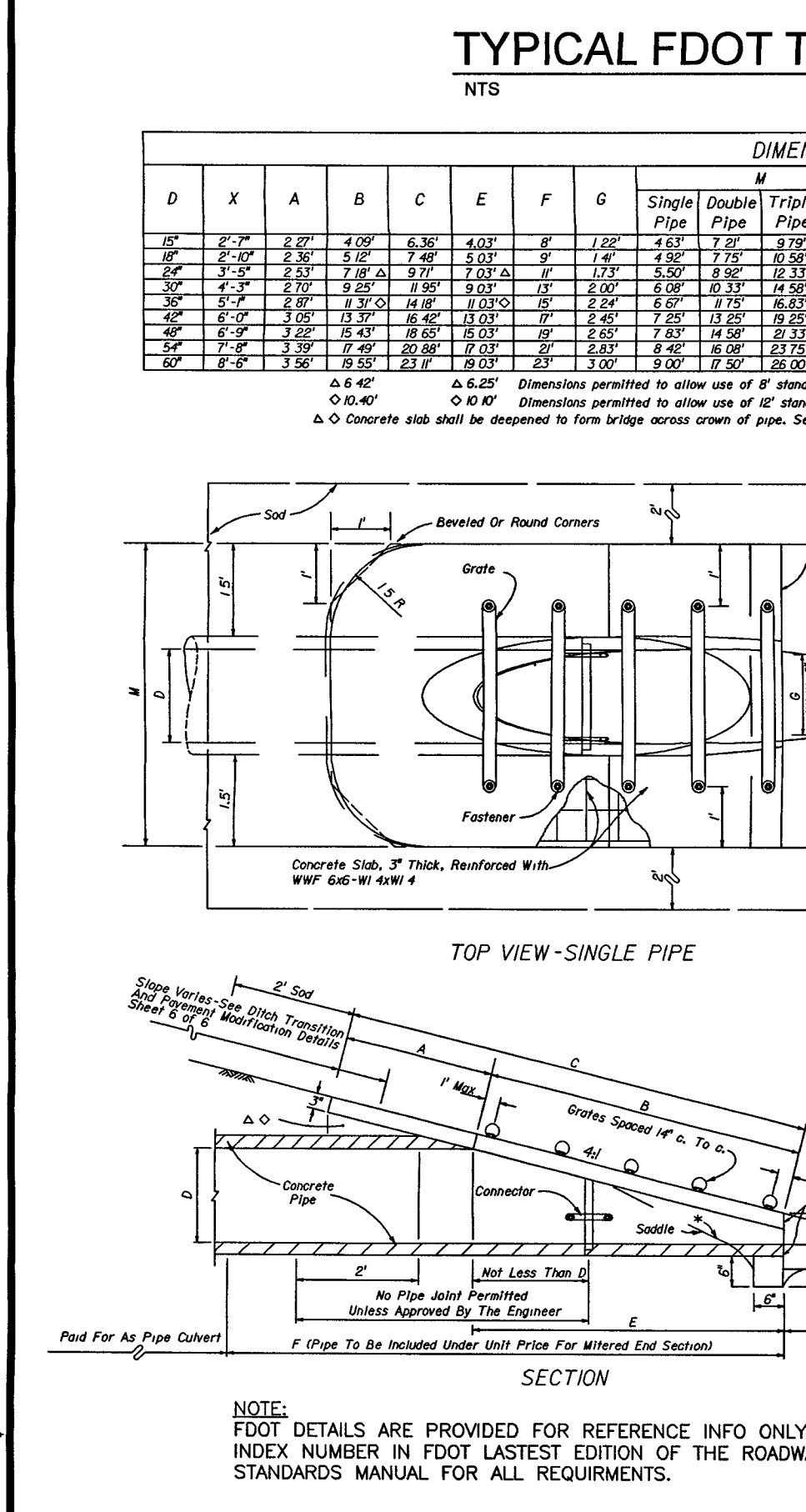
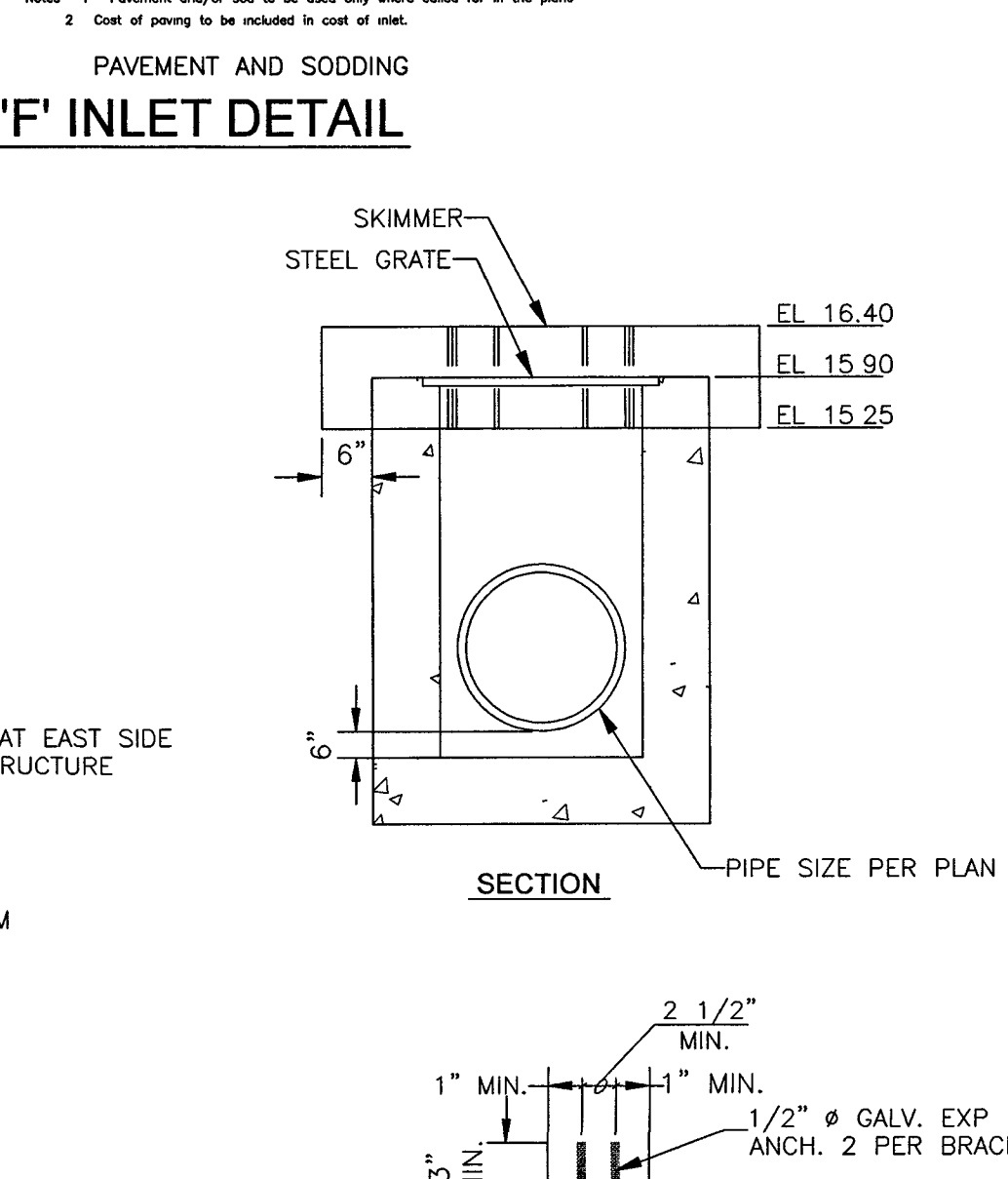
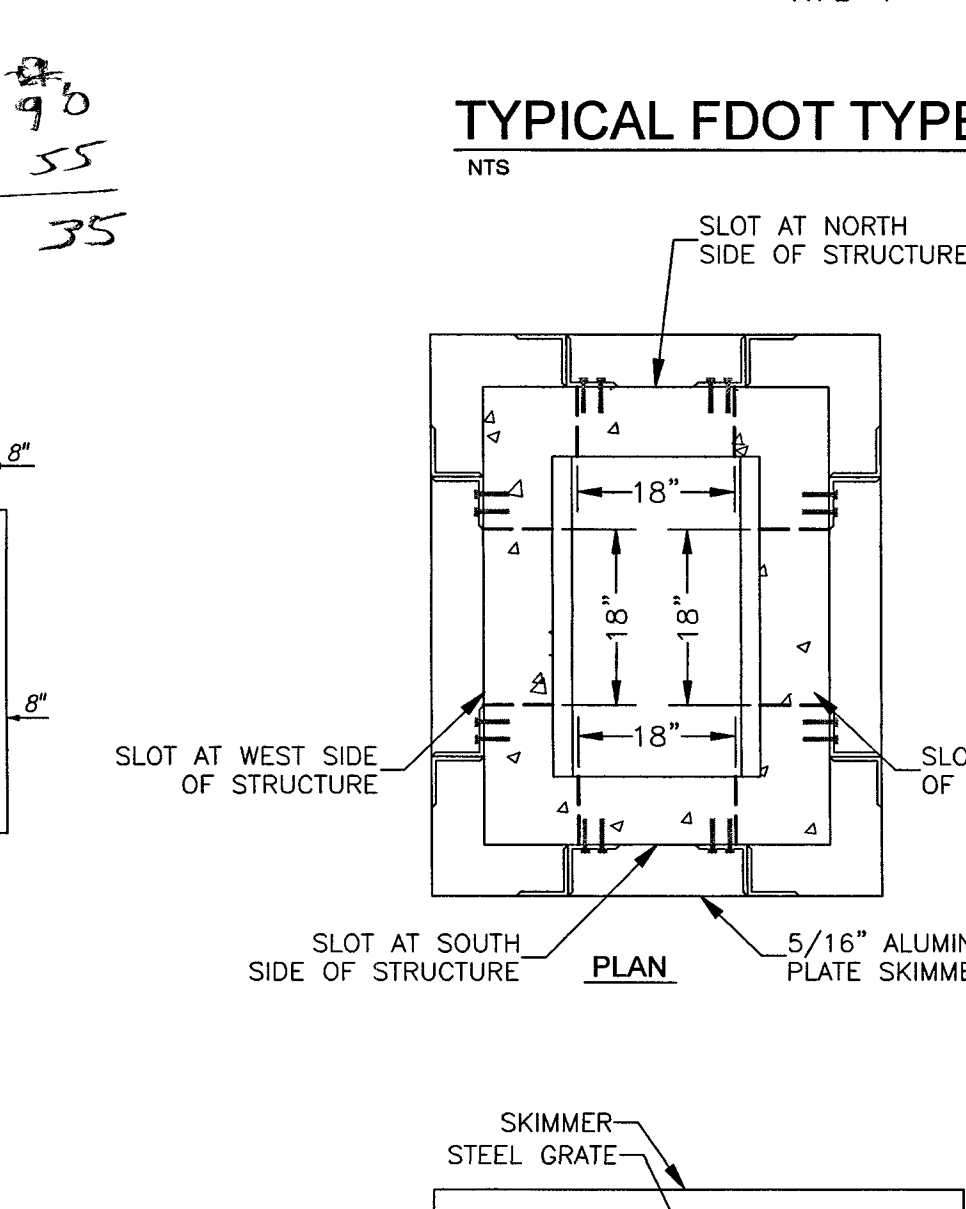
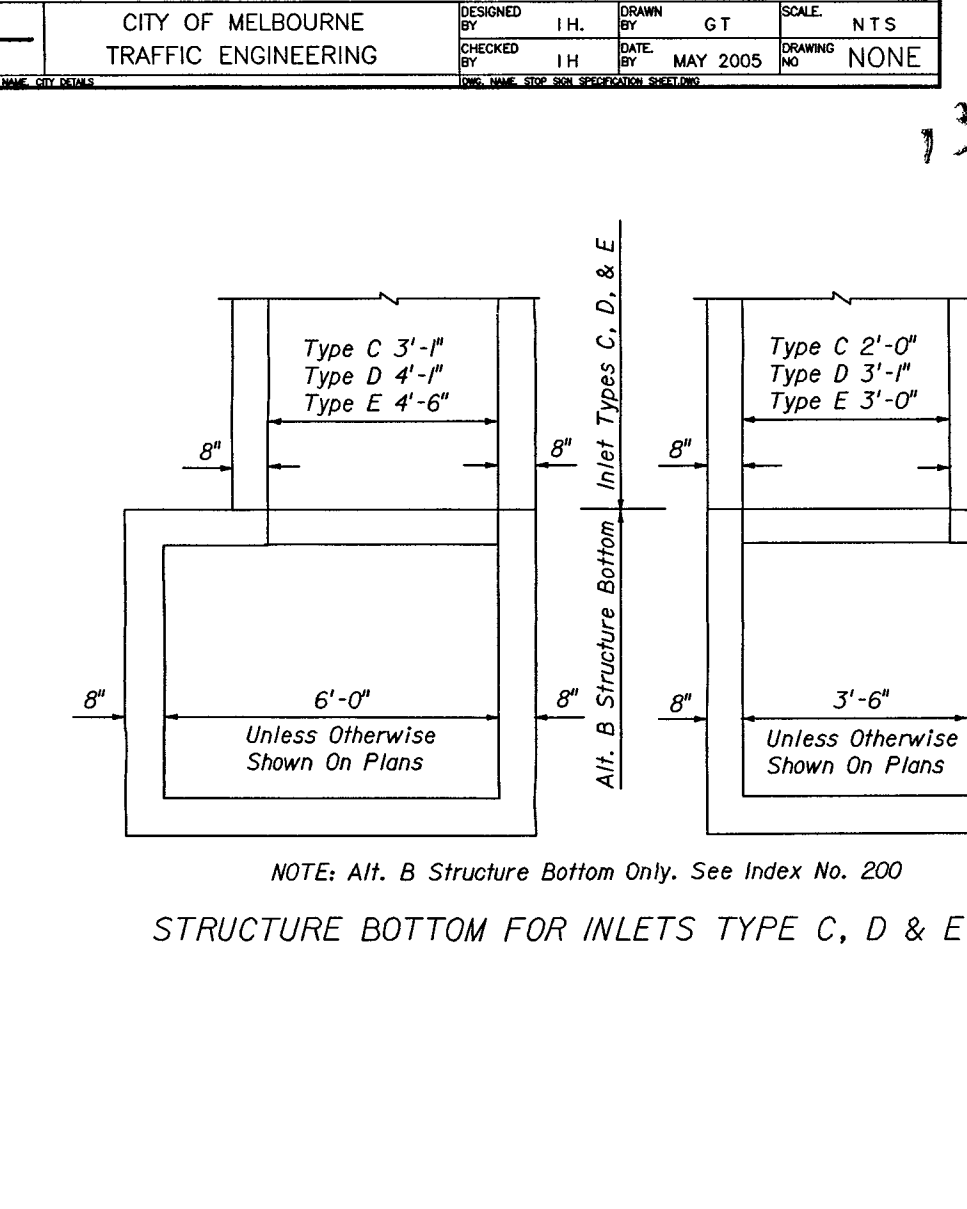
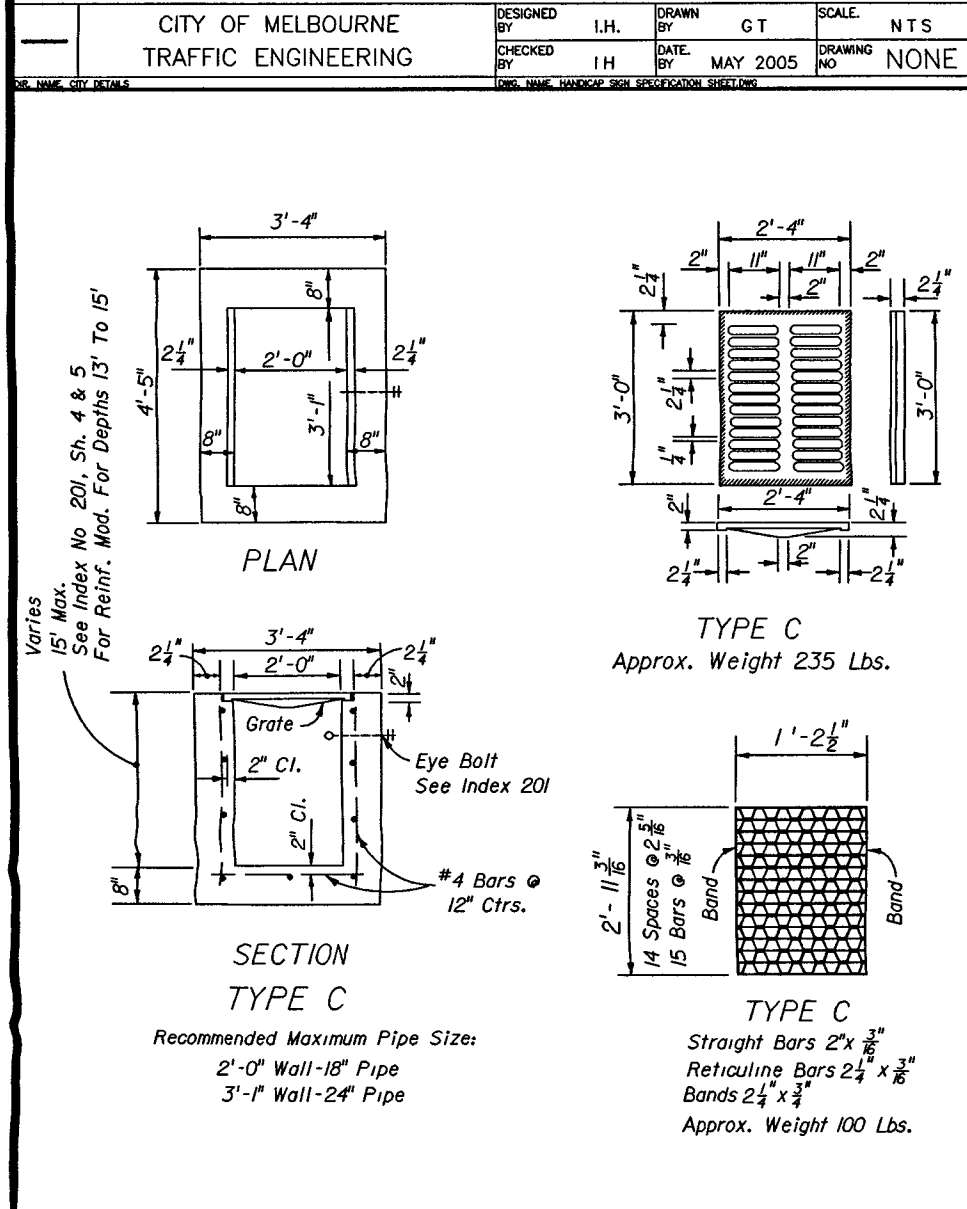
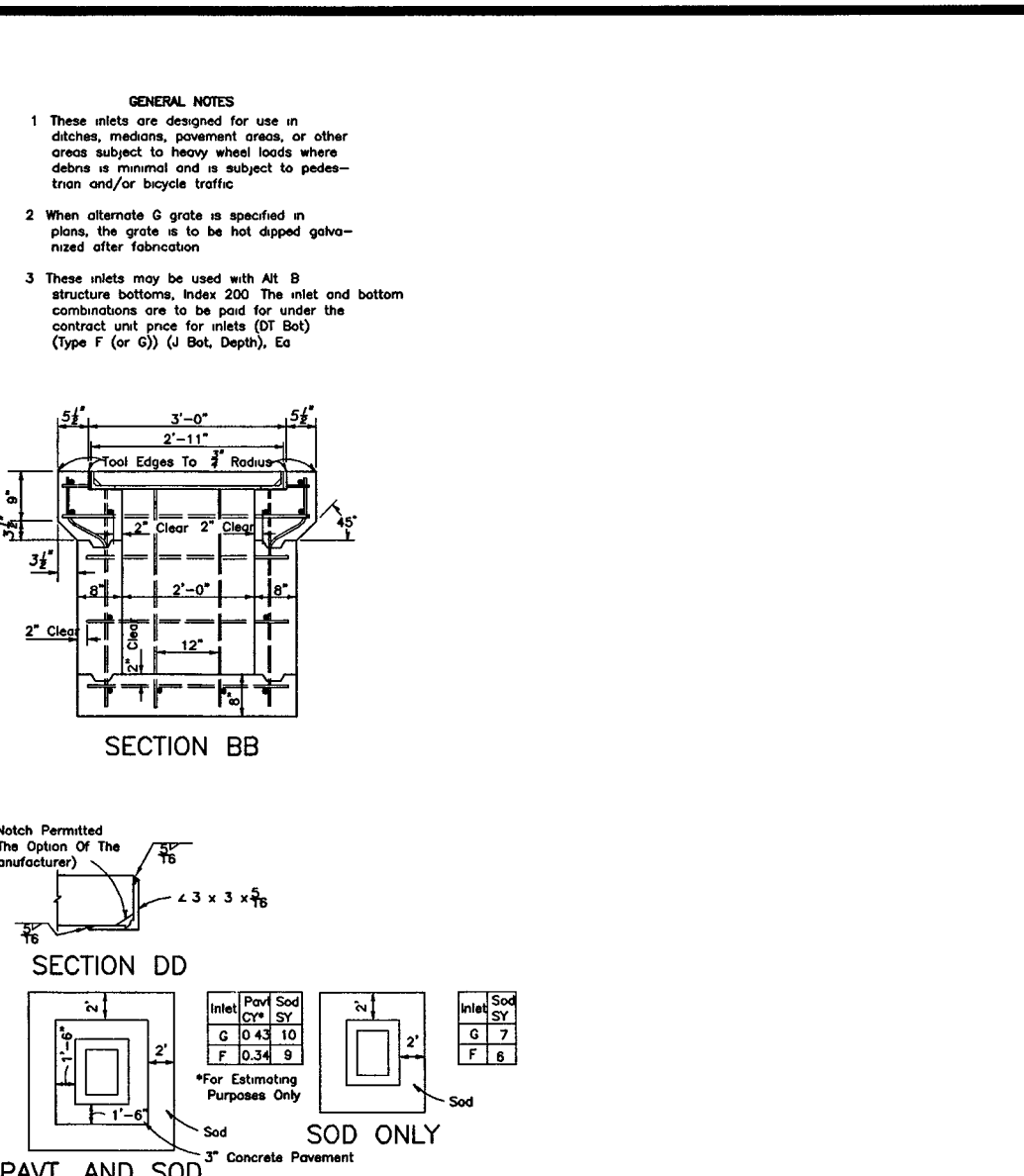
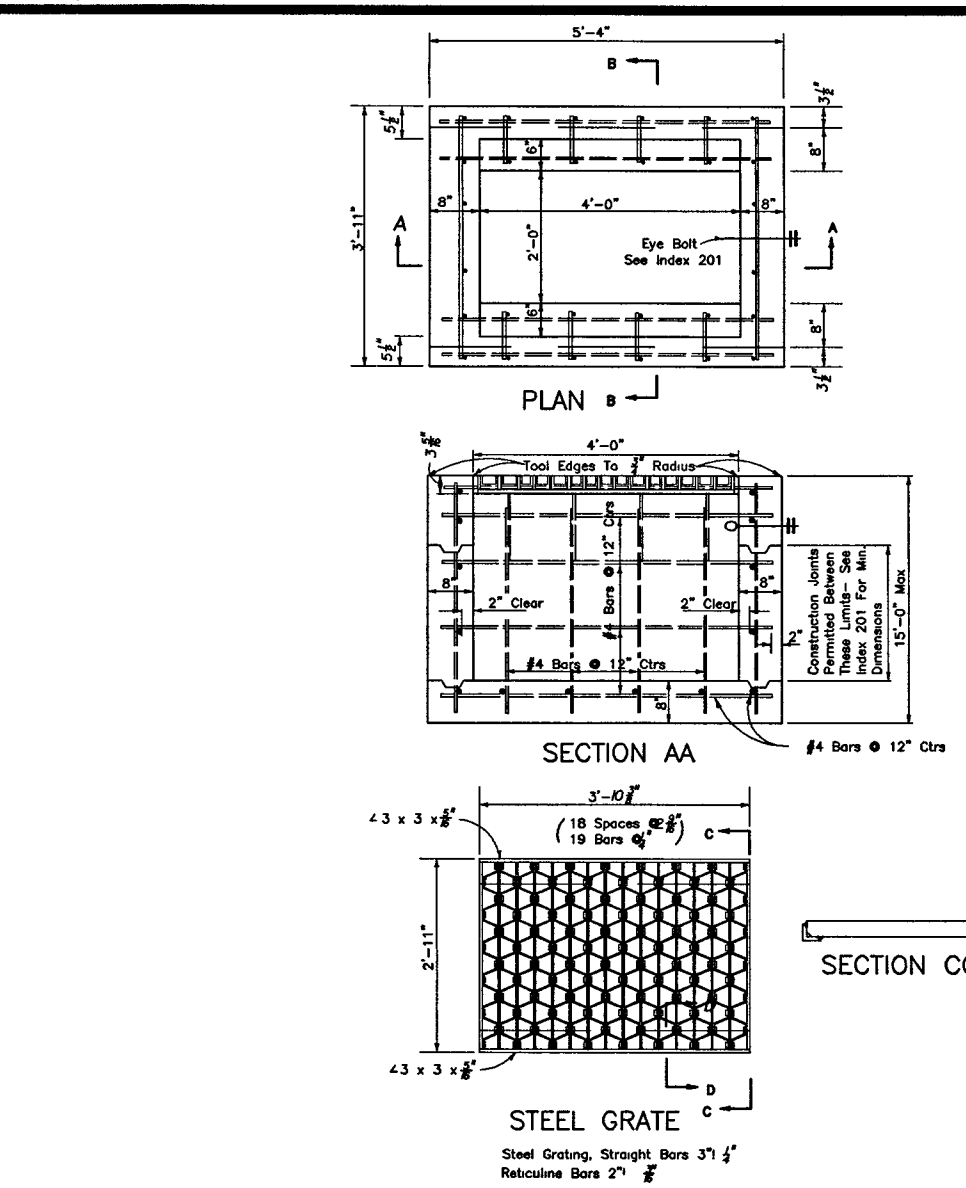
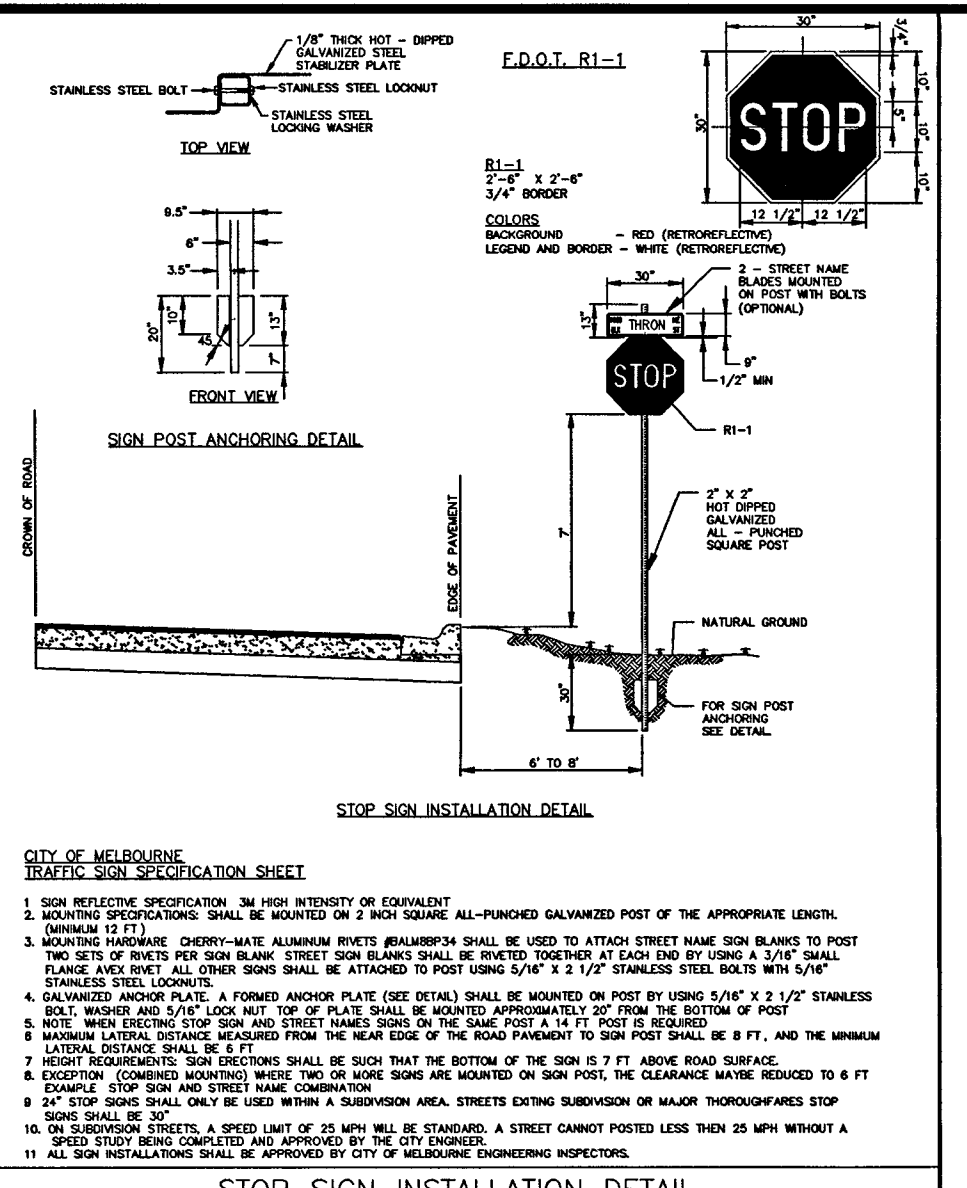
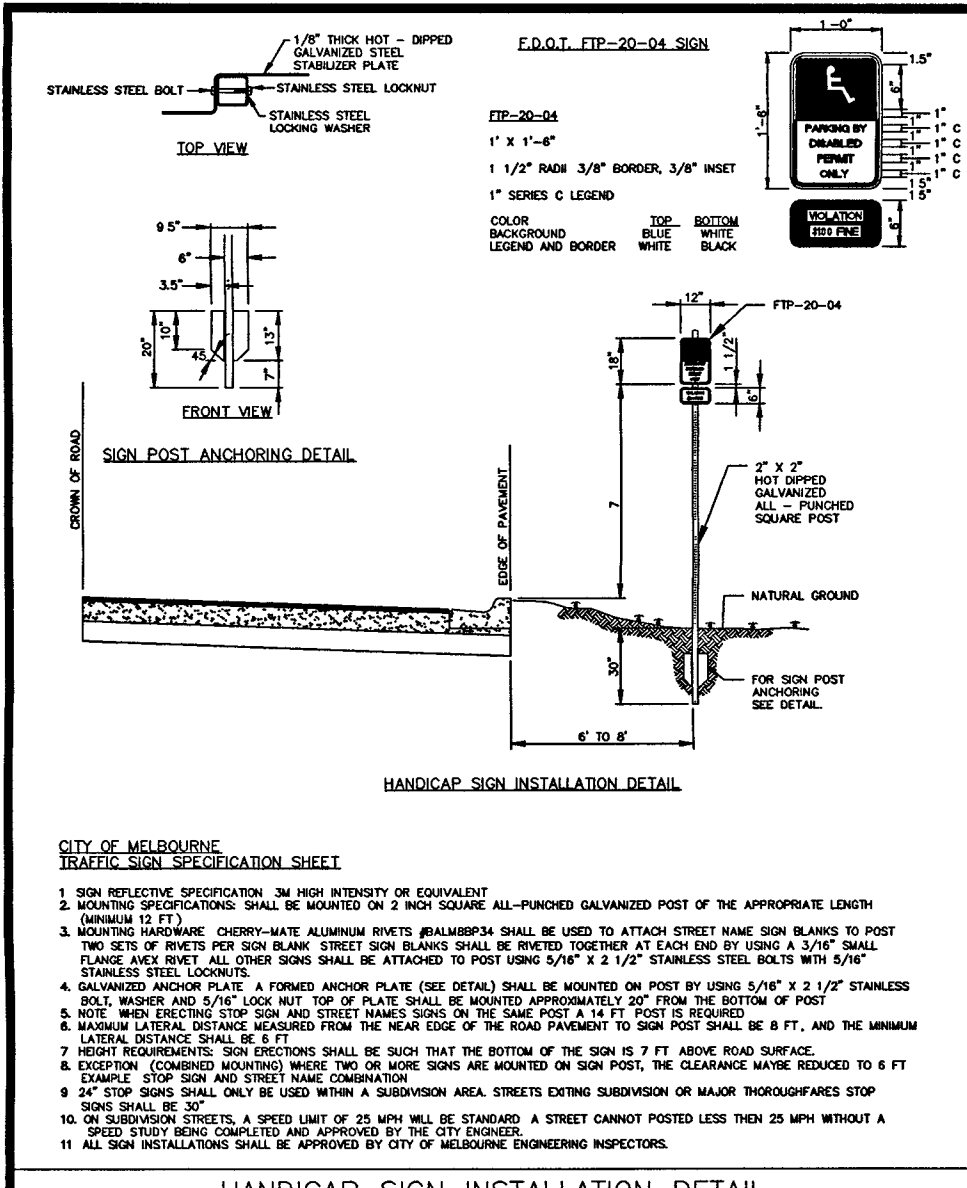
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**DR. KUMAR MEDICAL OFFICE**

MELBOURNE, FL  
DRAWING TITLE  
**DETAILS**

ERIN L. JACKSON  
LICENSED PROFESSIONAL ENGINEER  
No. 5667  
STATE OF FLORIDA  
JUN 21 2011

DATE	3-17-11
SCALE	1"=20'
PROJ NO.	110025
DESIGNED BY	ELJ
DRAWN BY	NCW
CHECKED BY	ELJ
DRAWING NO	



**TYPICAL FDOT MITERED END SECTION DETAIL**

NTS

NOTE: FDOT DETAILS ARE PROVIDED FOR REFERENCE INFO ONLY. SEE CORRESPONDING INDEX NUMBER IN FDOT LATEST EDITION OF THE ROADWAY AND TRAFFIC DESIGN STANDARDS MANUAL FOR ALL REQUIREMENTS.

**TYPICAL OVERFLOW WEIR DETAIL - PHASE II**

NTS

NOTE: FDOT DETAILS ARE PROVIDED FOR REFERENCE INFO ONLY. SEE CORRESPONDING INDEX NUMBER IN FDOT LATEST EDITION OF THE ROADWAY AND TRAFFIC DESIGN STANDARDS MANUAL FOR ALL REQUIREMENTS.

**MAINTENANCE OF TRAFFIC DETAILS**

NTS

NOTE: ALL FDOT DETAILS ARE FOR REFERENCE ONLY AND CONTRACTOR SHALL REFER TO THE LATEST FDOT DESIGN STANDARDS BOOK FOR LATEST DETAILS.

REVISION	DATE	DESCRIPTION
1	05/09/11	CITY OF MELBOURNE COMMENTS

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Melbourne, FL 32935  
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Fax: 321.453.1202  
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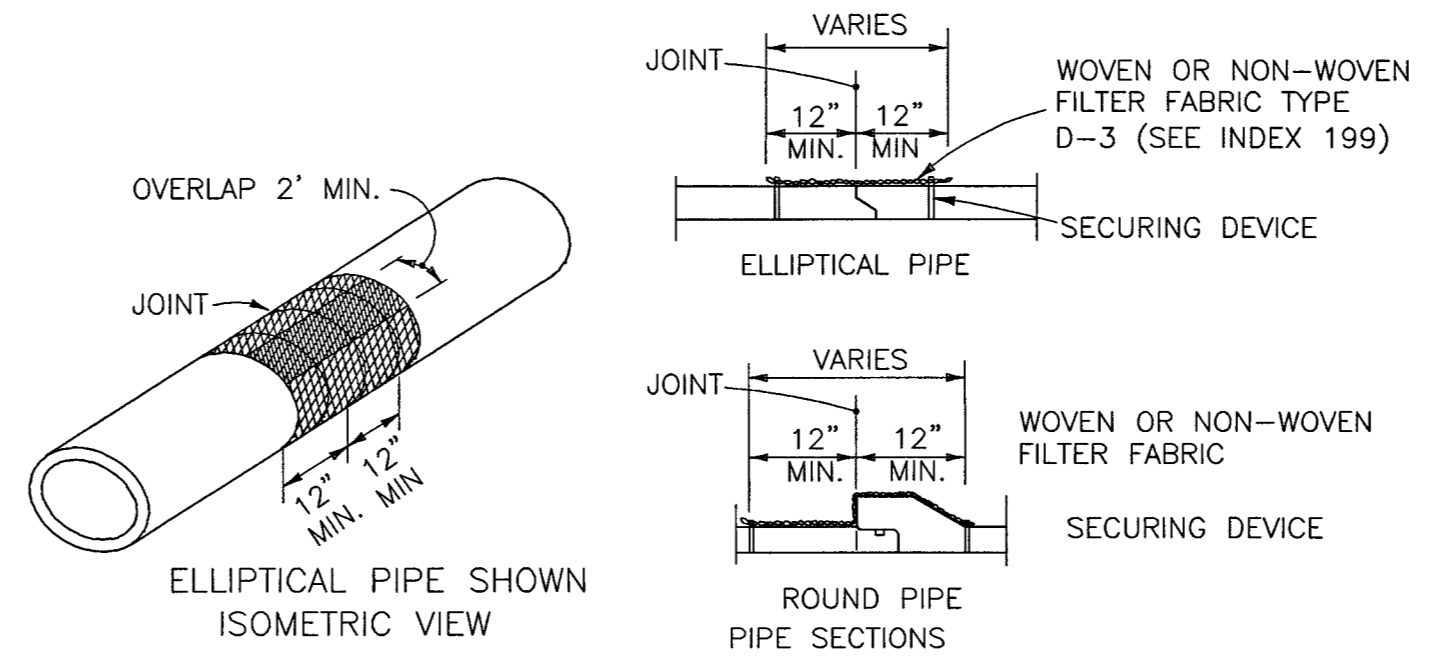
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MELBOURNE, FL  
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**DETAILS**

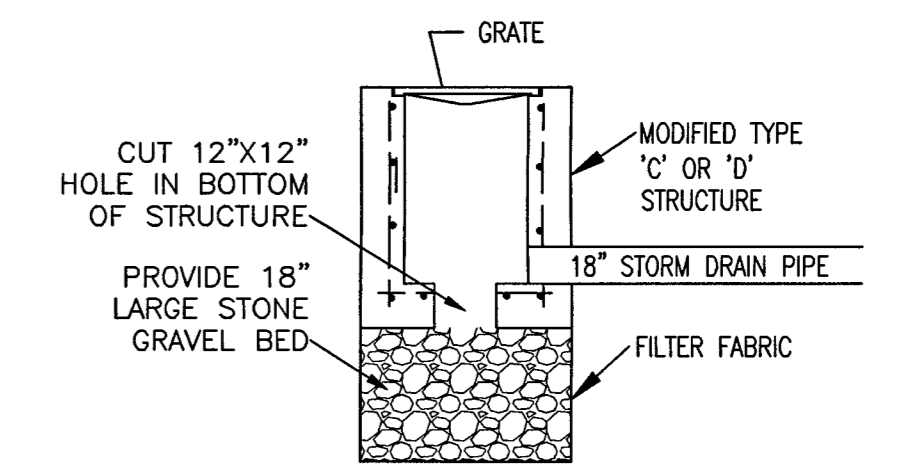
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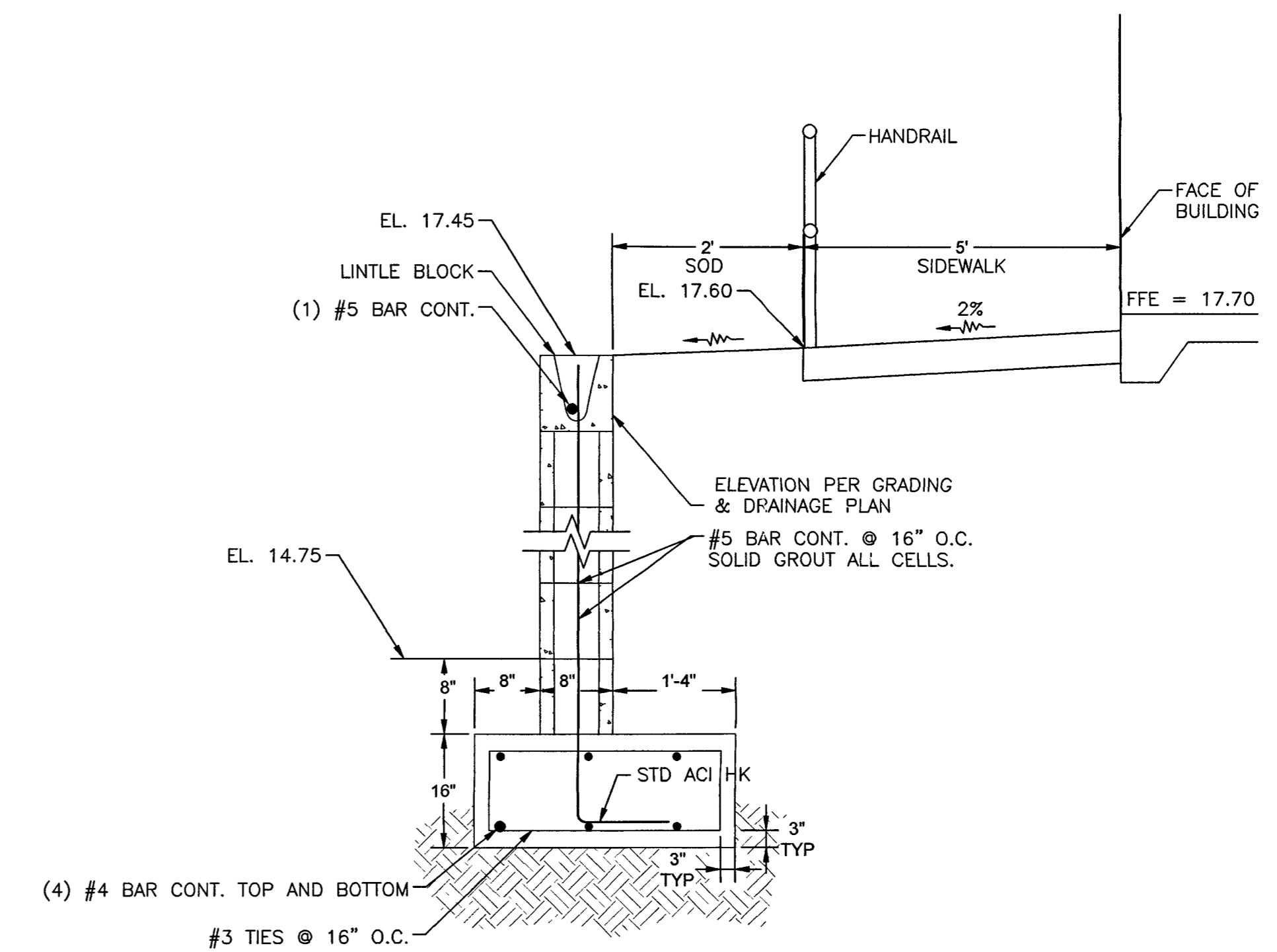


- NOTES:
1. FOR ALL PIPE TYPES - CONCRETE PIPE SHOWN
  2. PROVIDE ON ALL STORM DRAIN PIPE JOINTS.

**TYPICAL FILTER FABRIC JACKET DETAIL**  
NTS

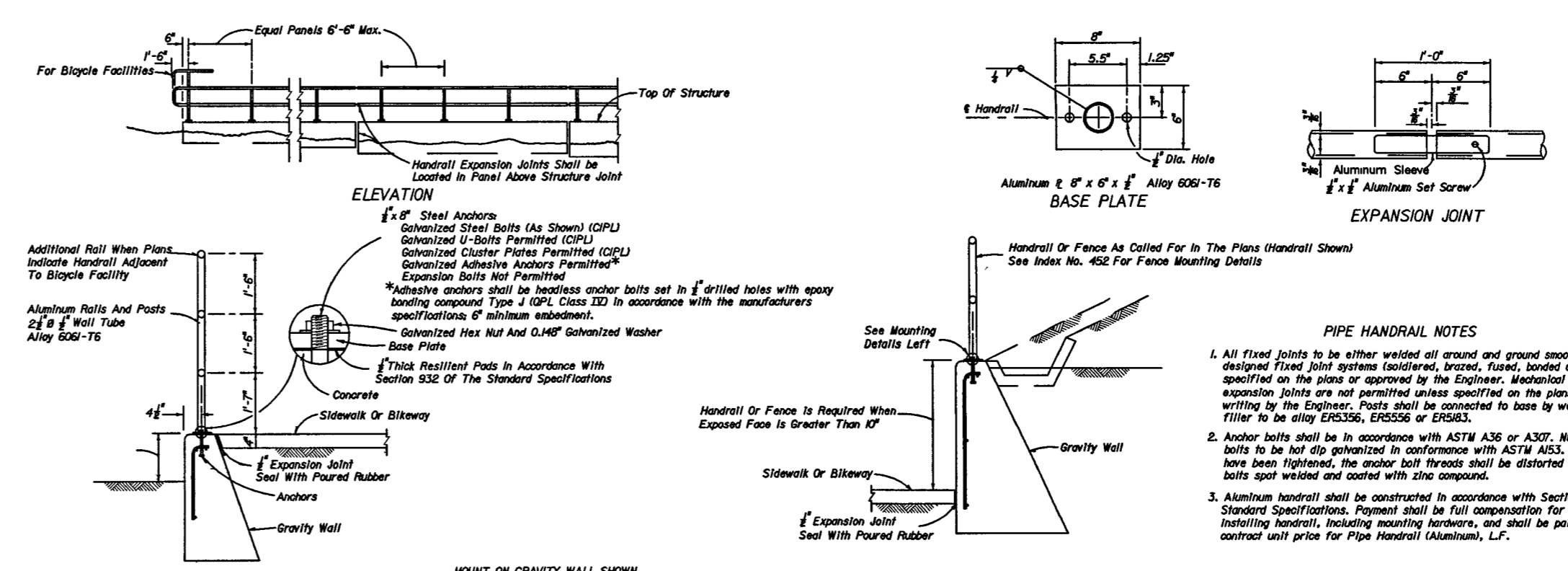


**TYPICAL BUBBLE UP DETAIL**  
NTS



NOTE: CONTROL JOINTS ALONG WALL @ 20'-0" O.C. MAX ALONG FULL LENGTH OF WALL.

**RETAINING WALL WITH CEMENT BLOCK DETAIL**  
NTS



**TYPICAL FDOT ALUMINUM PIPE HANDRAIL DETAIL**  
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1	05/09/11	CITY OF MELBOURNE COMMENTS

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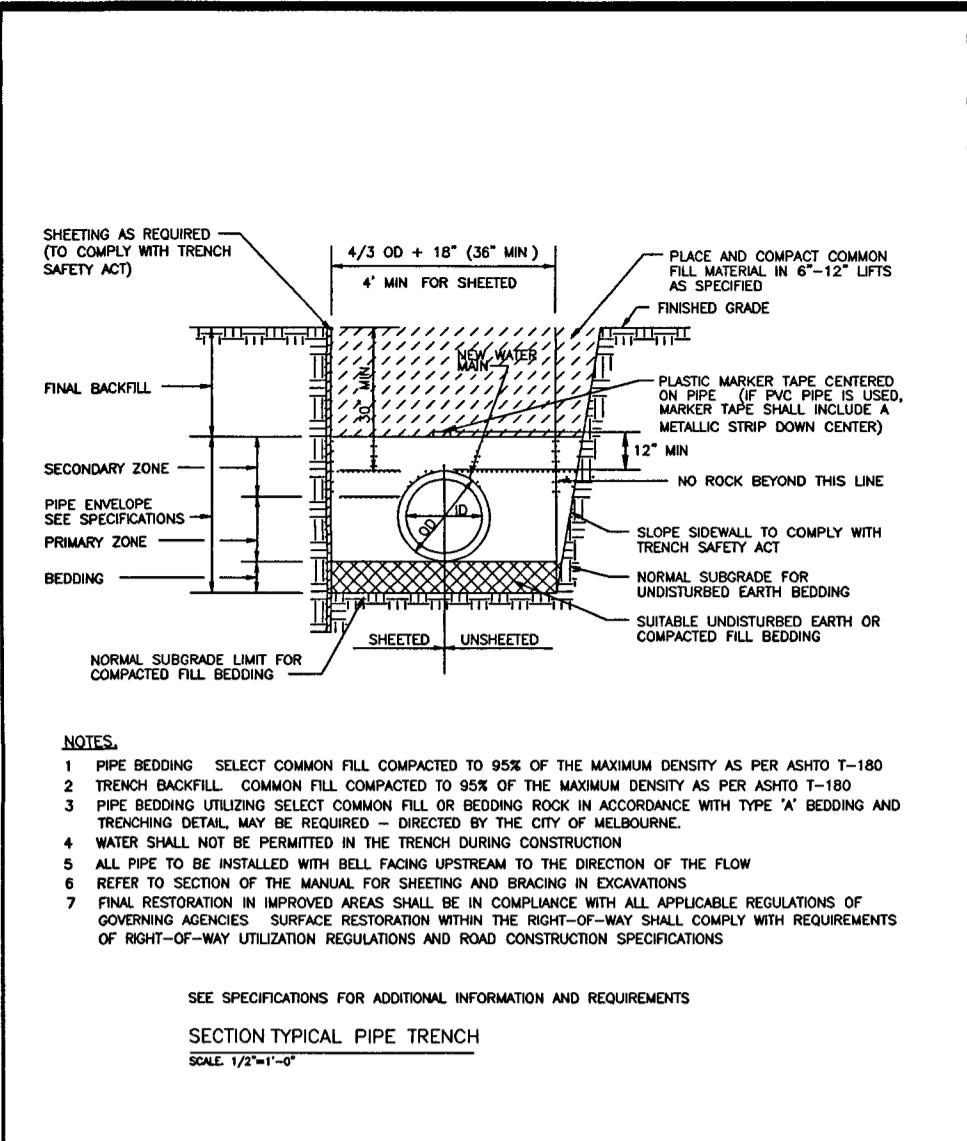
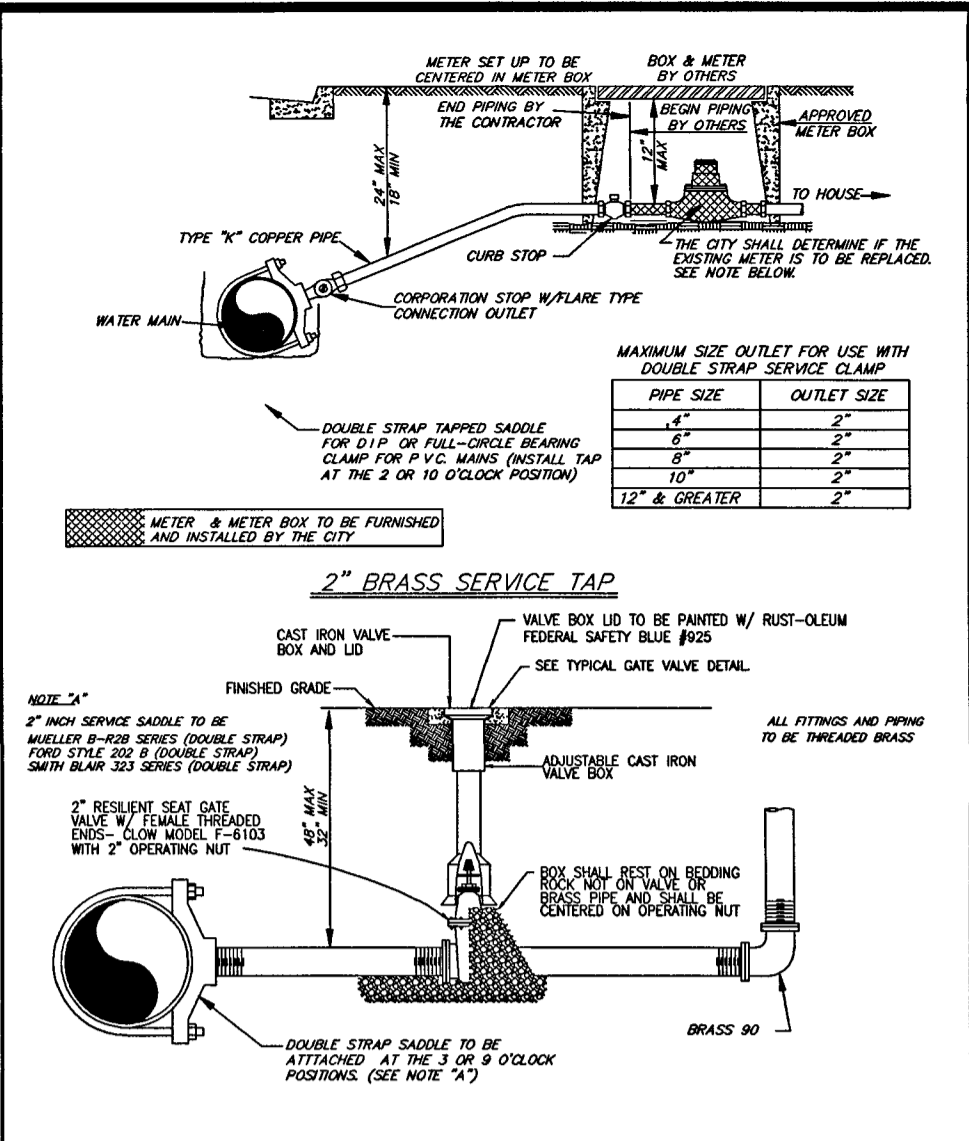
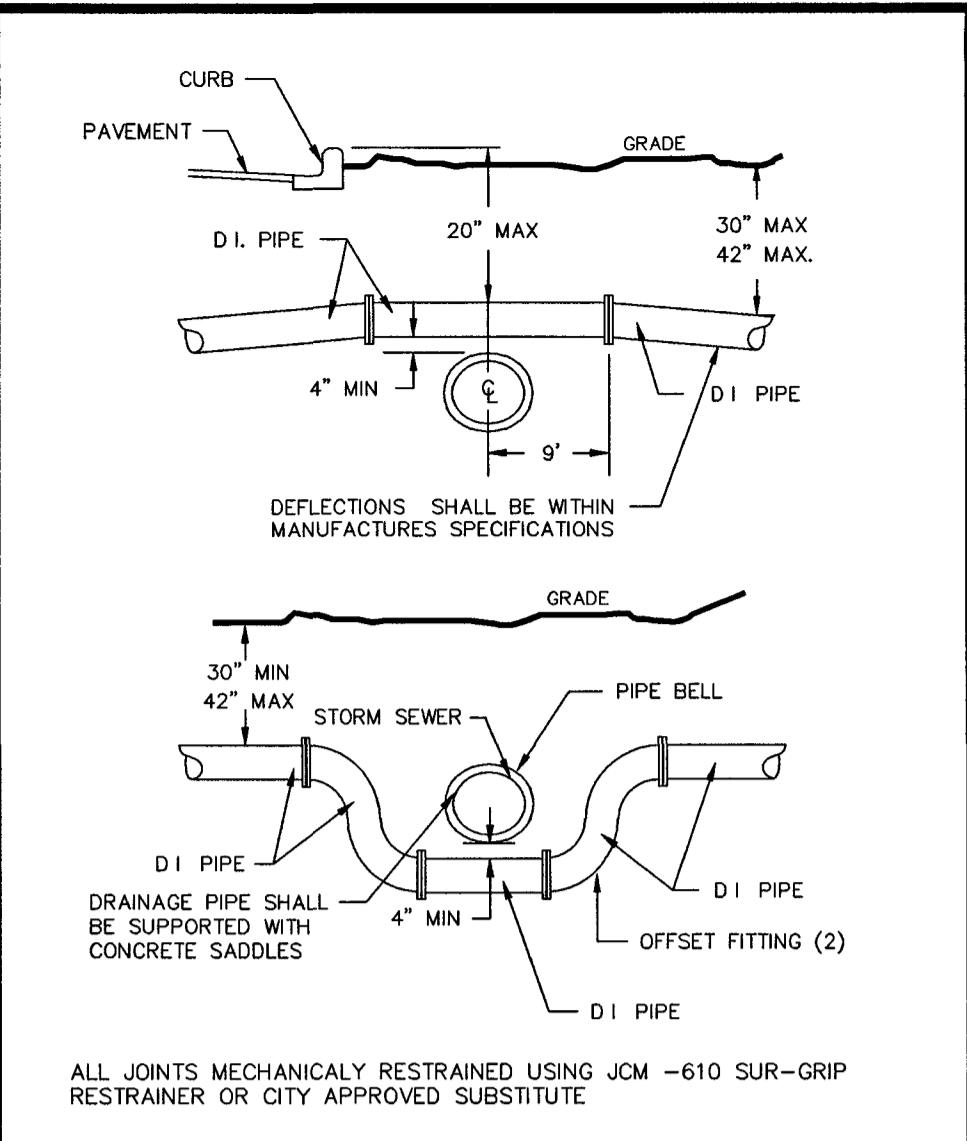
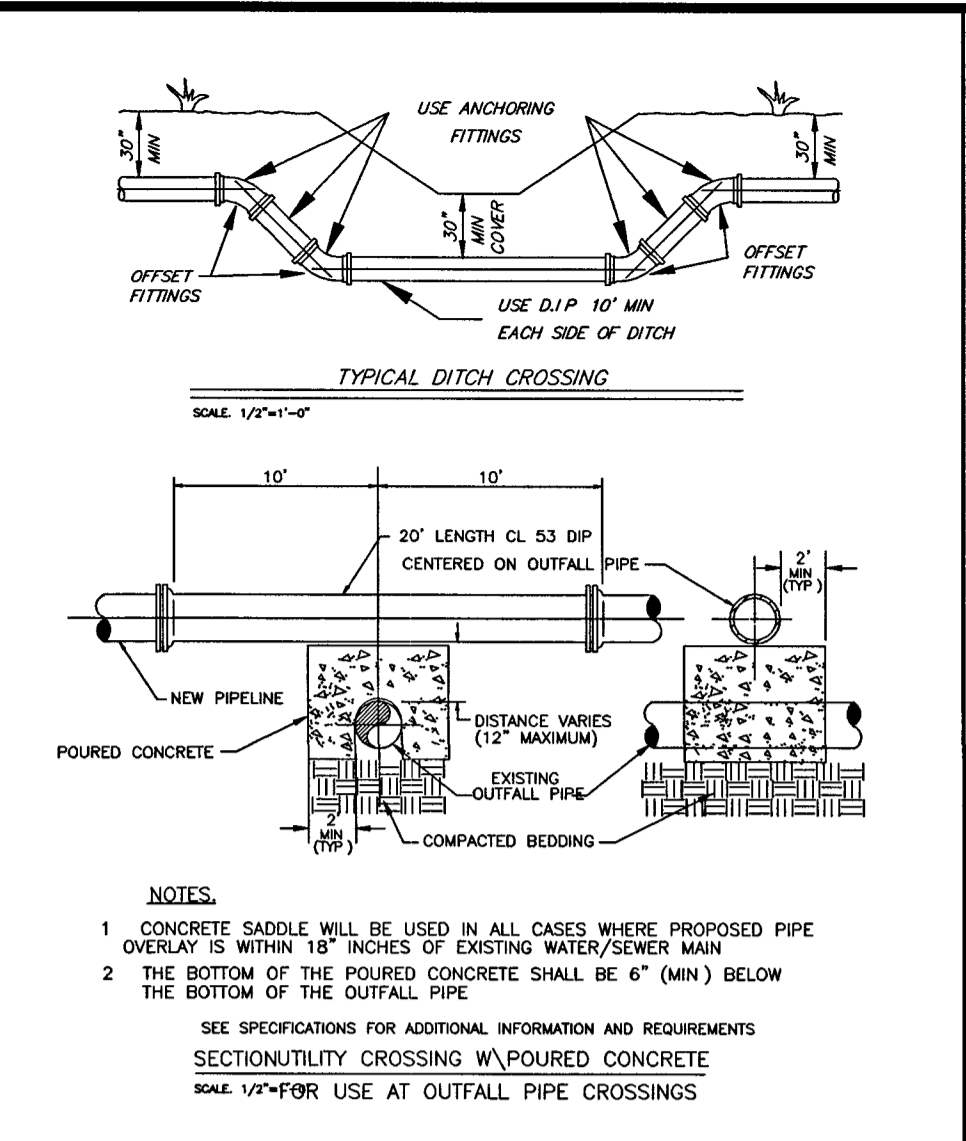
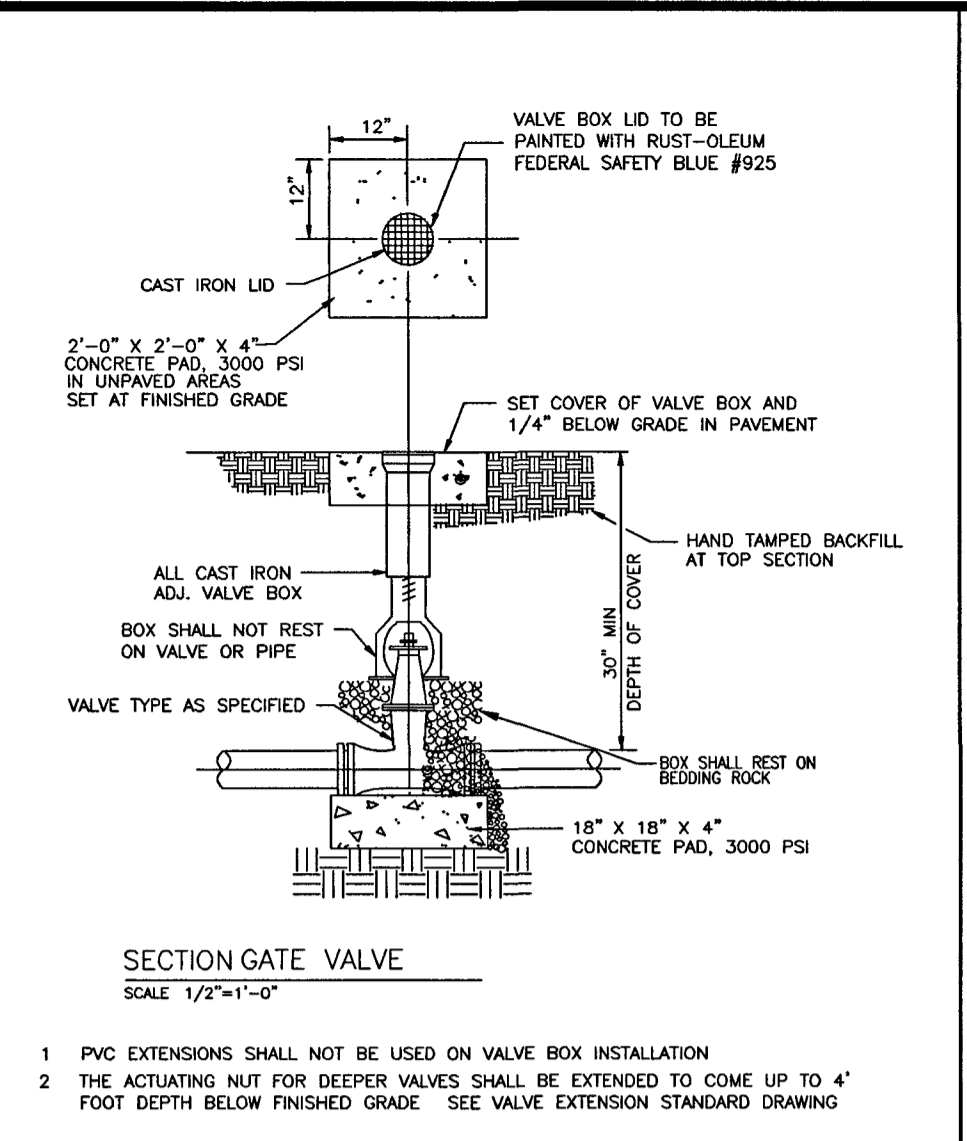
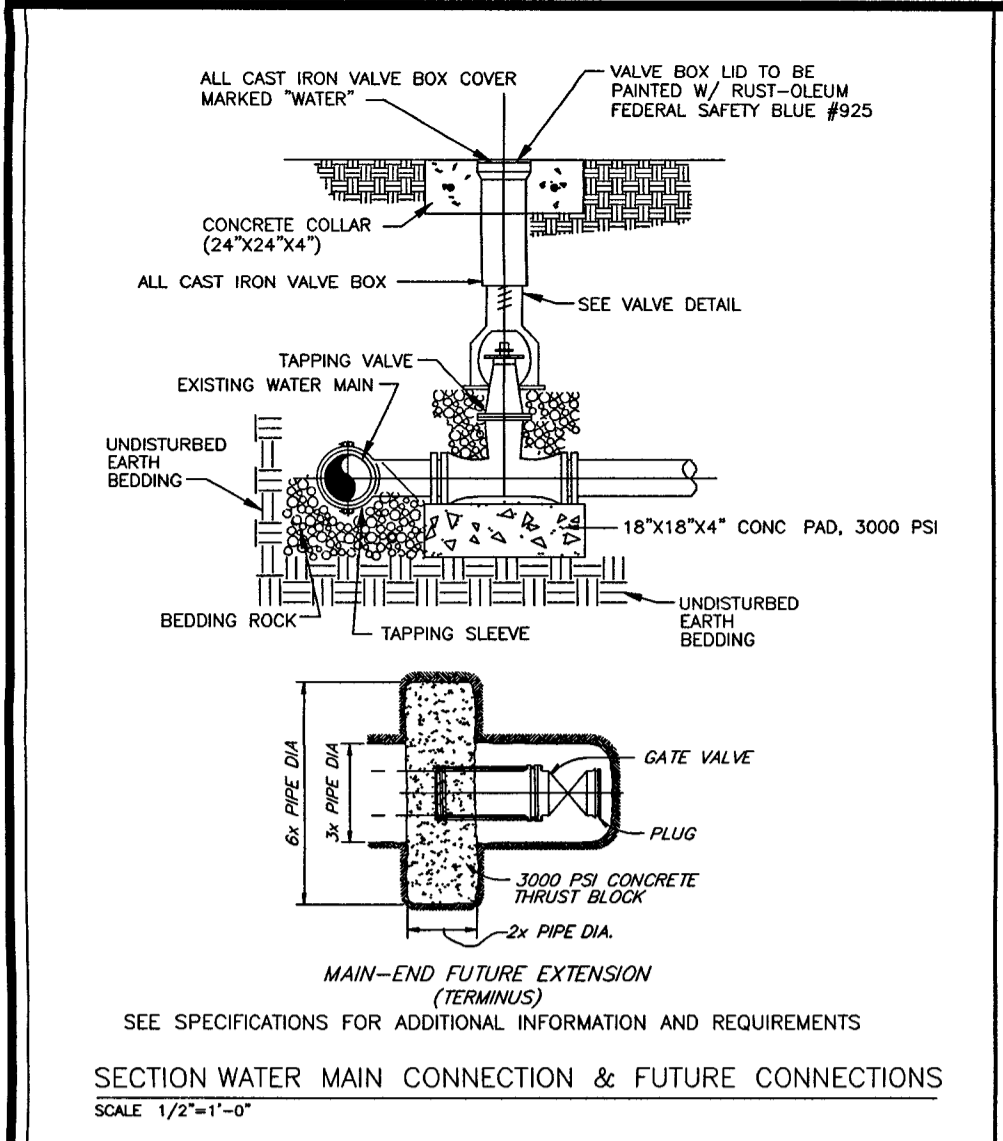
**DR. KUMAR MEDICAL OFFICE**  
MELBOURNE, FL  
DRAWING TITLE  
**DETAILS**

ERIN L. JACKSON  
LICENSE  
No. 66976  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER

JUN 21 2011

DATE	3-17-11
SCALE	NTS
PROJ NO	110025
DESIGNED BY	ELJ
DRAWN BY	NCW
CHECKED BY	ELJ
DRAWING NO	C-6





REV	DATE	BY	CHKD	DESCRIPTION
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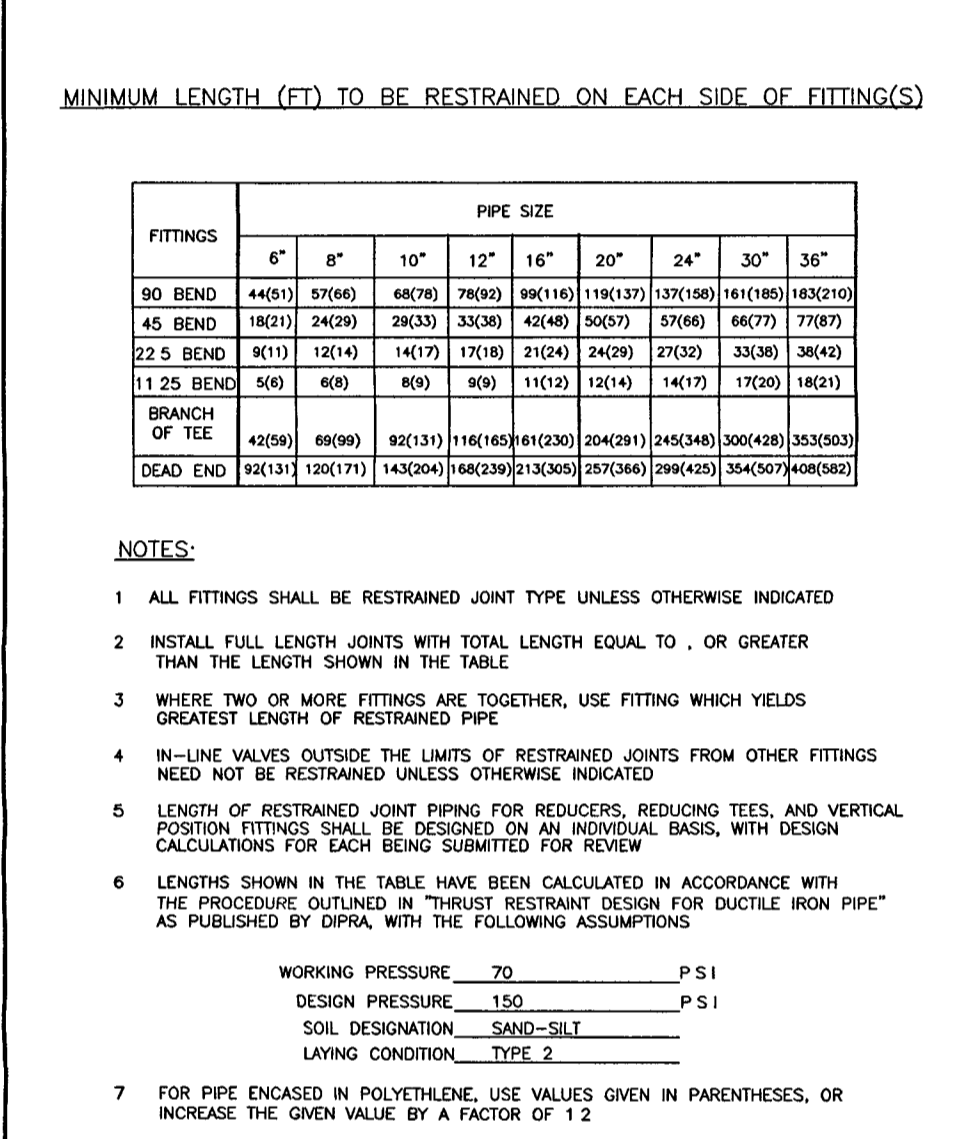
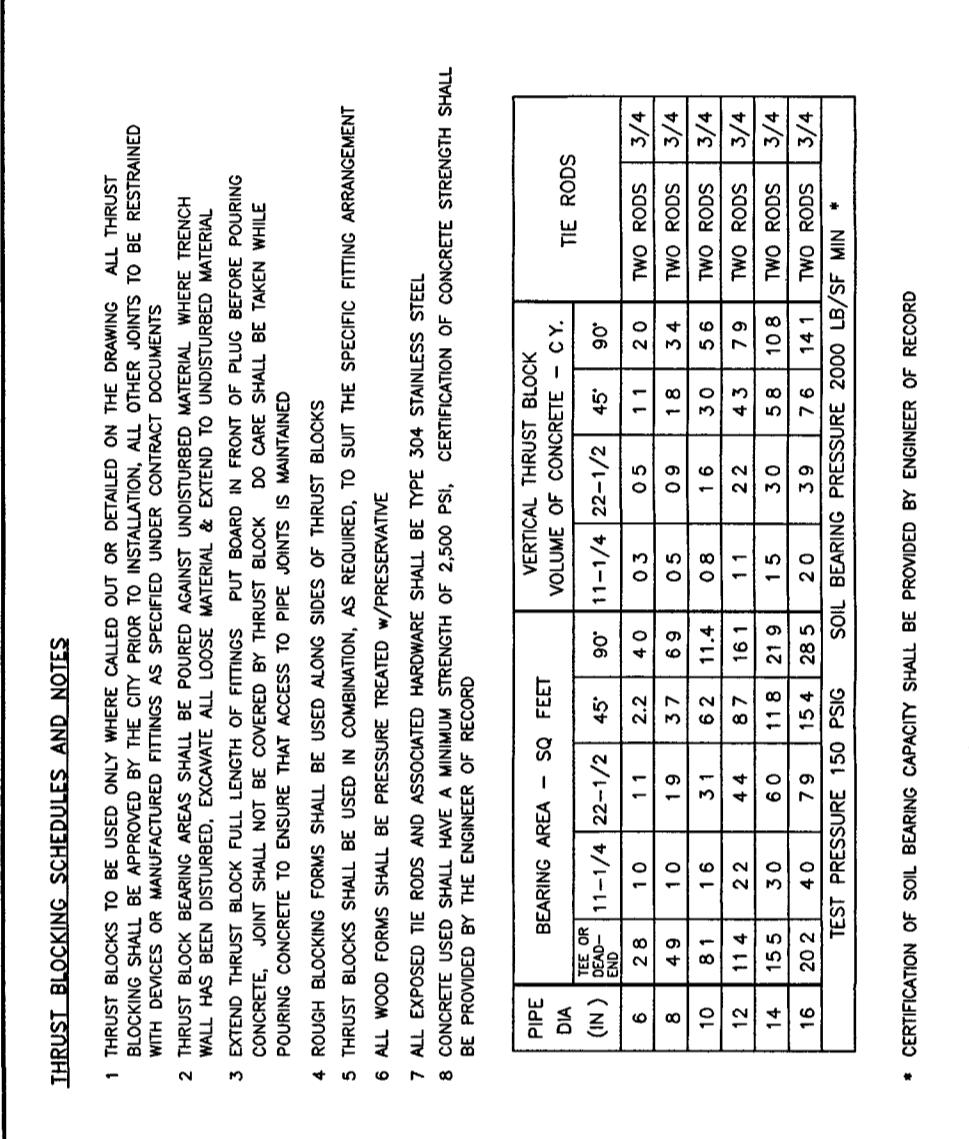
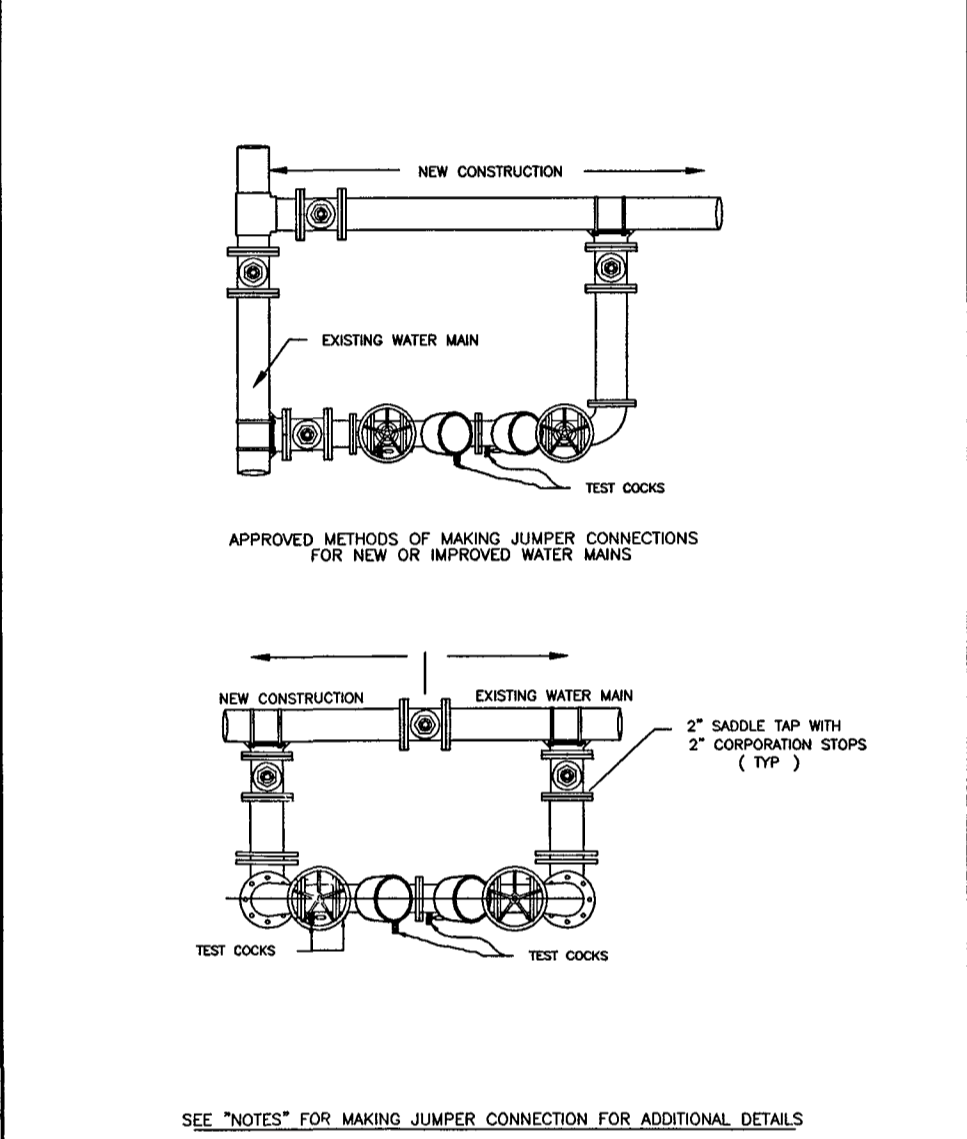
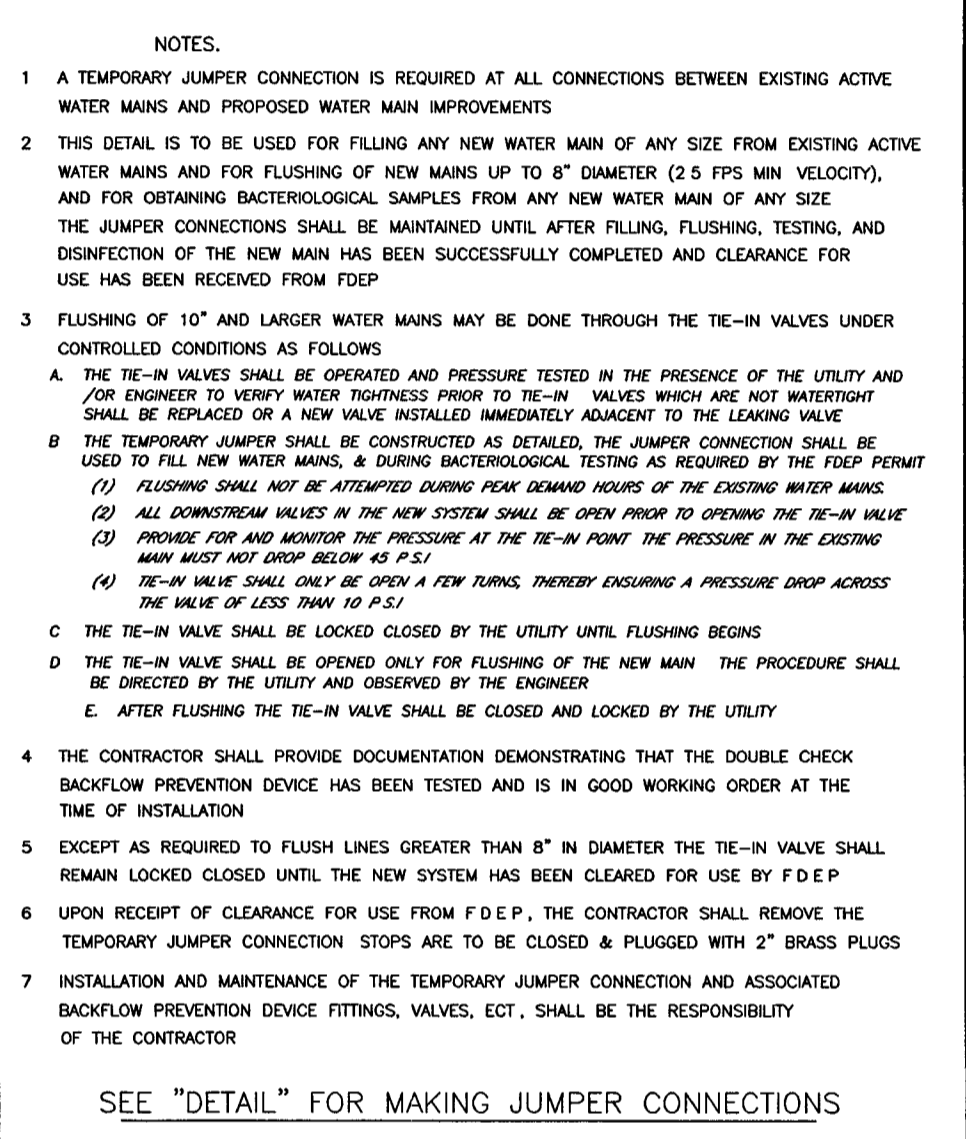
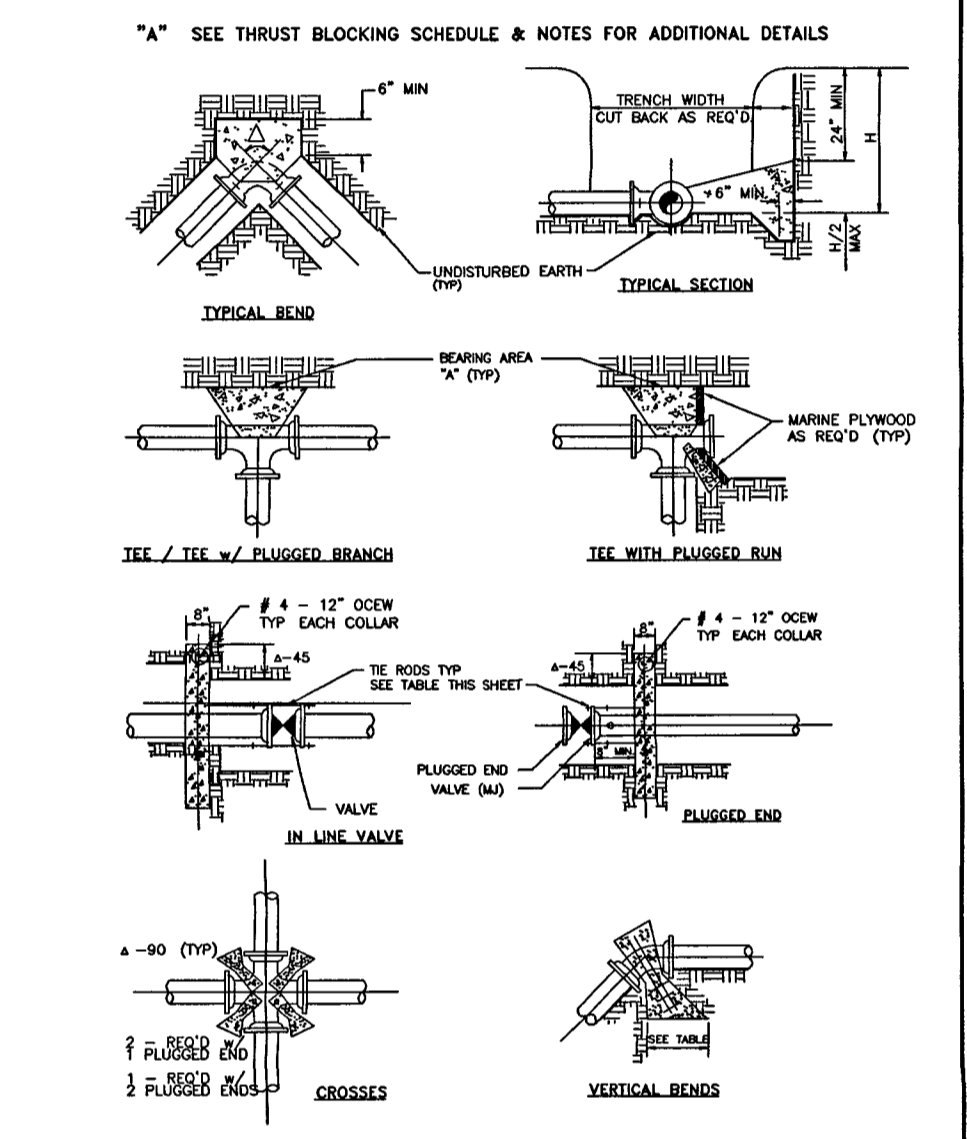
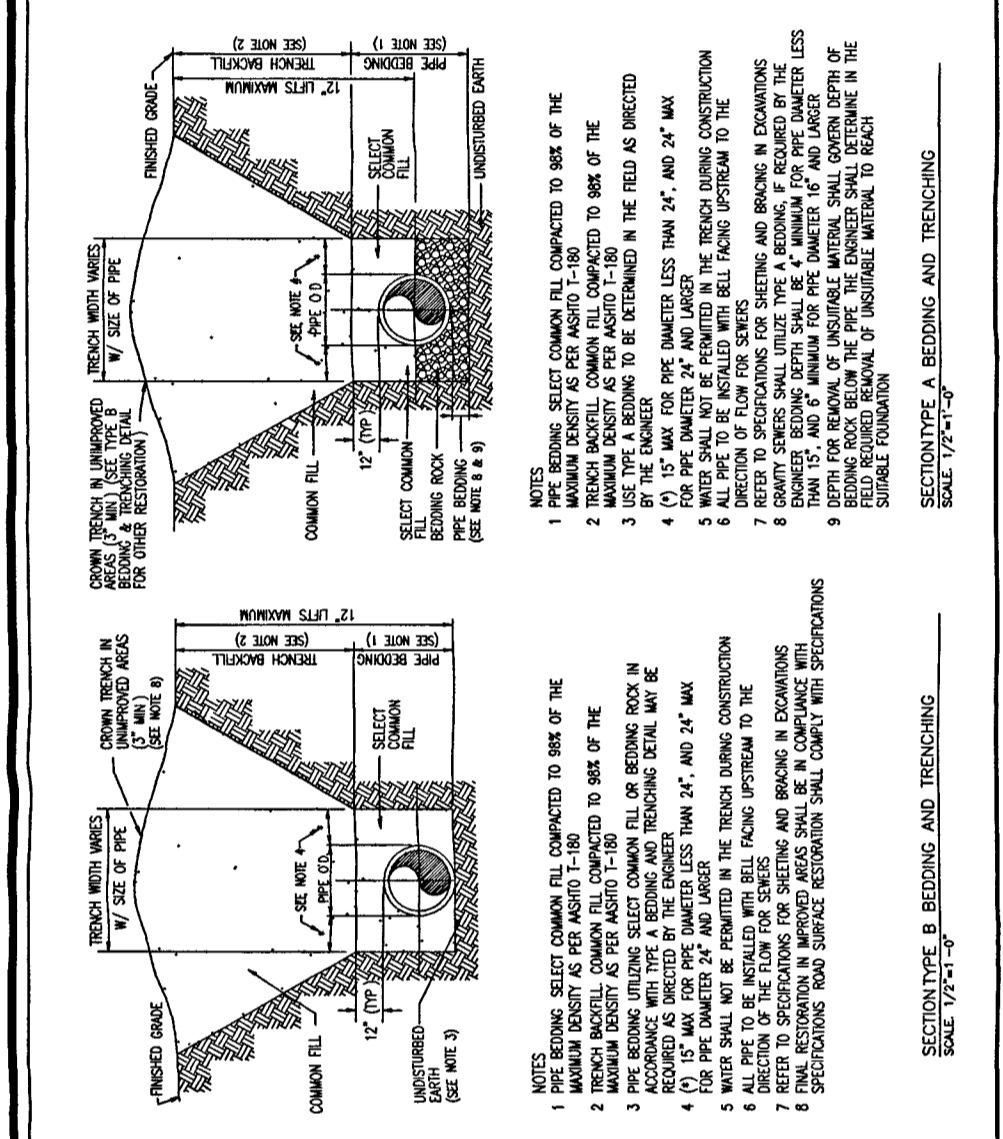
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01	FEB 98	N.D.W.	T.H.	CITY OF MELBOURNE UTILITIES ADMINISTRATION

REV	DATE	BY	CHKD	DESCRIPTION
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REV	DATE	BY	CHKD	DESCRIPTION
01	FEB 98	N.D.W.	T.H.	CITY OF MELBOURNE UTILITIES ADMINISTRATION

REV	DATE	BY	CHKD	DESCRIPTION
01	FEB 98	N.D.W.	T.H.	CITY OF MELBOURNE UTILITIES ADMINISTRATION



REV	DATE	BY	CHKD	DESCRIPTION
01	FEB 98	N.D.W.	T.H.	CITY OF MELBOURNE UTILITIES ADMINISTRATION

REV	DATE	BY	CHKD	DESCRIPTION
01	FEB 98	N.D.W.	T.H.	CITY OF MELBOURNE UTILITIES ADMINISTRATION

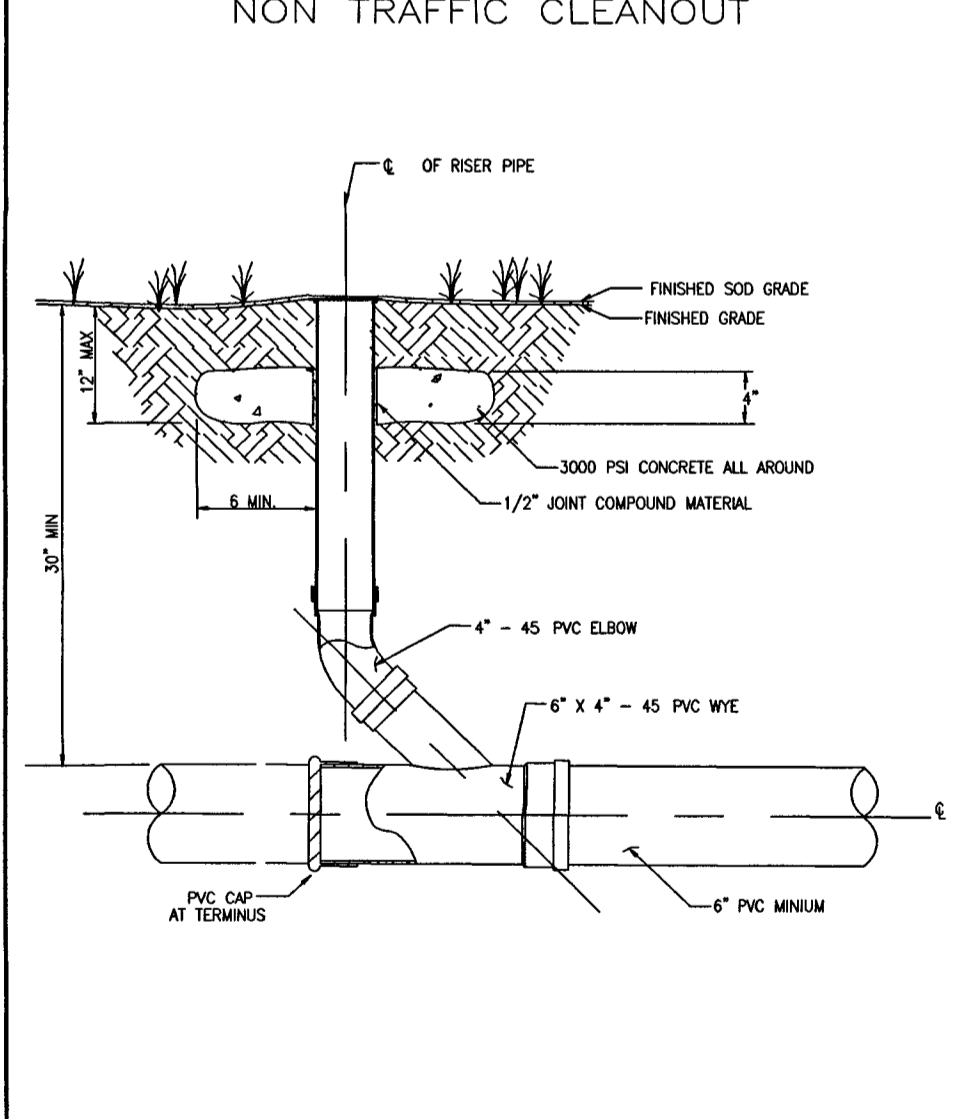
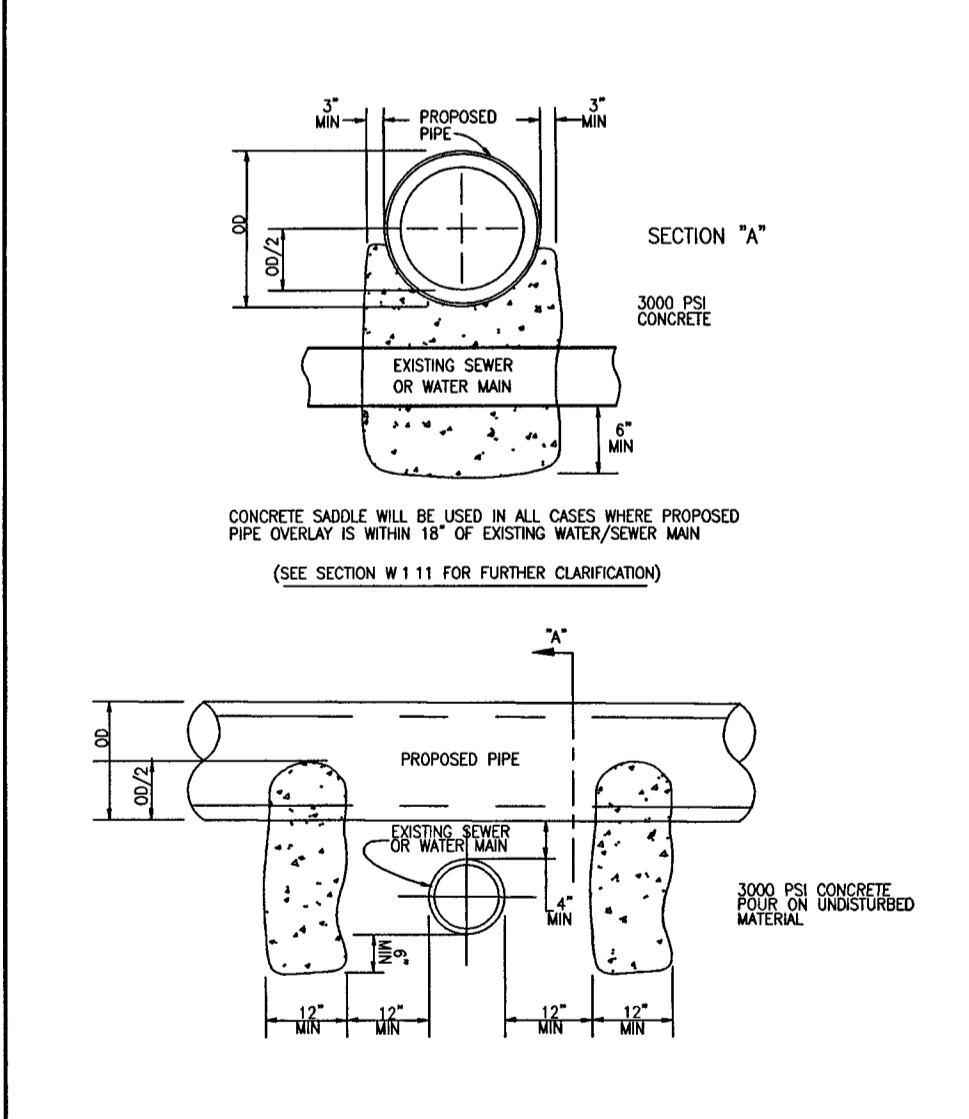
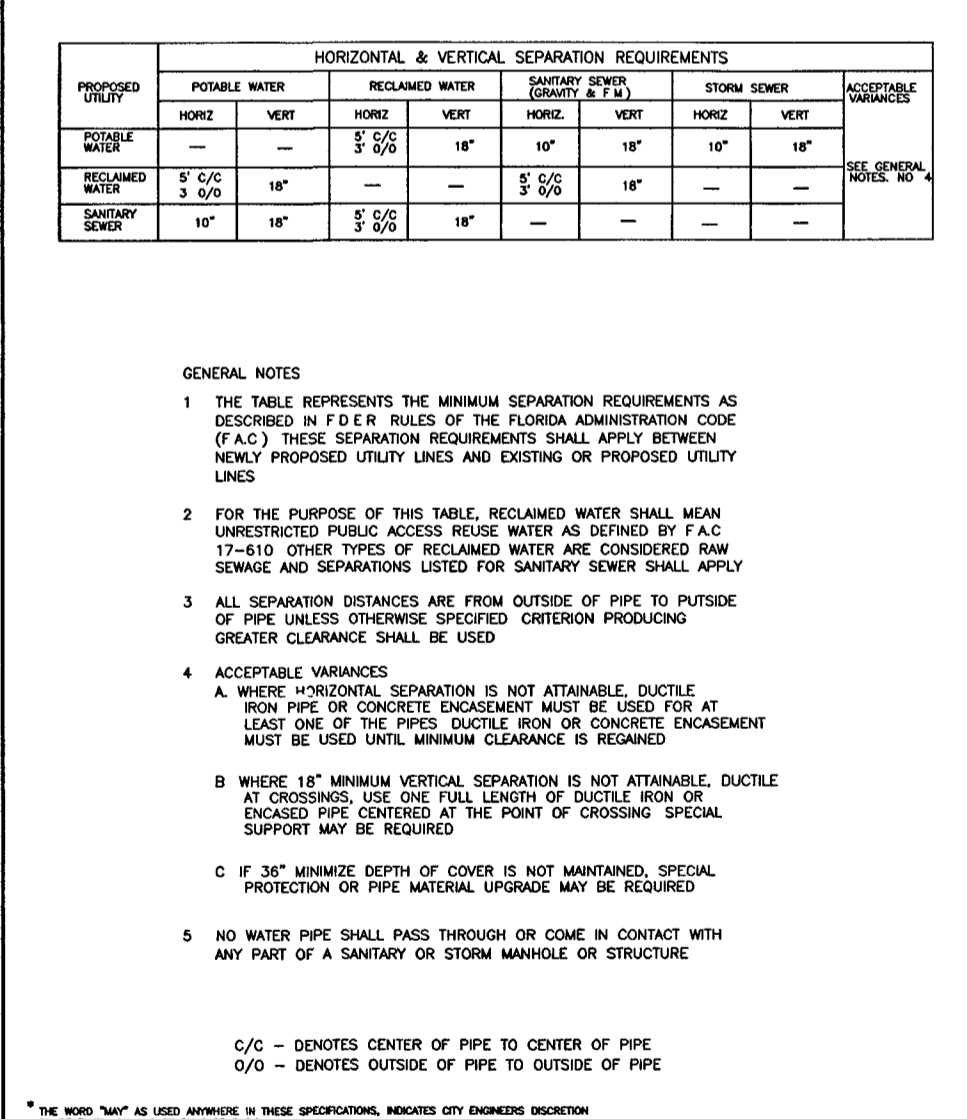
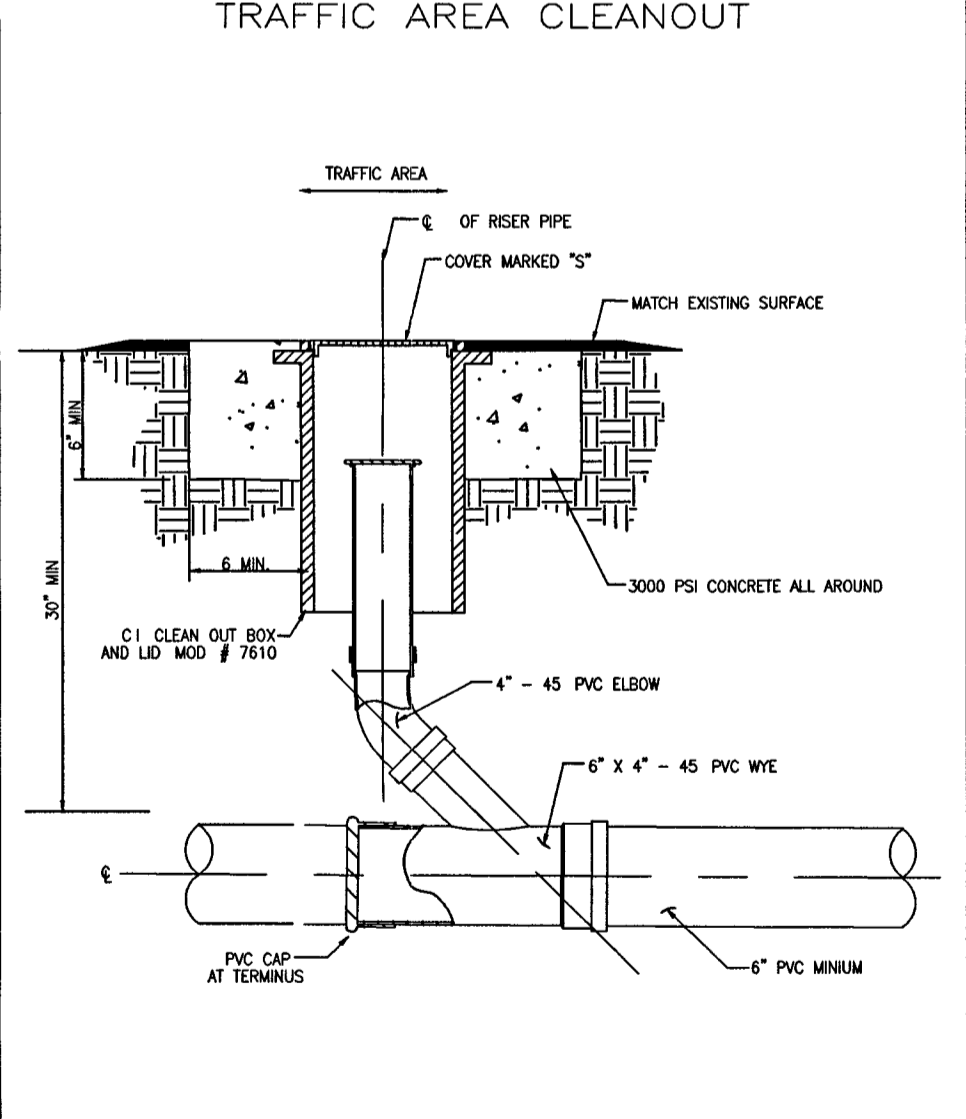
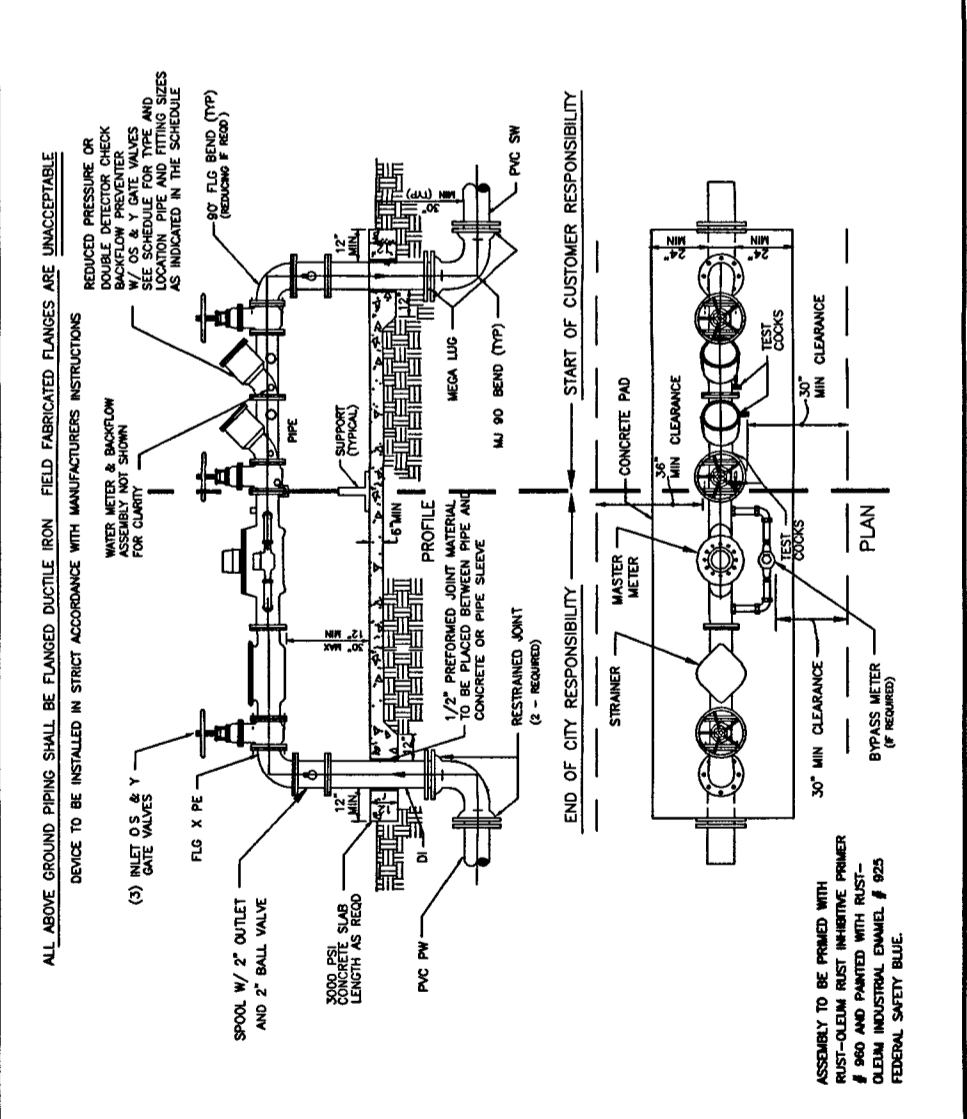
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PROPOSED UTILITY	HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS		ACCEPTABLE VARIANCES	
	POTABLE WATER	RECLAIMED WATER	SANITARY SEWER	STORM SEWER
POTABLE WATER	18"	18"	18"	18"
RECLAIMED WATER	18"	18"	18"	18"
SANITARY SEWER	18"	18"	18"	18"



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REVISION

DATE

REVIEW

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license #000897

**CONSTRUCTION ENGINEERING GROUP**  
consulting engineers

**DR. KUMAR**  
MEDICAL OFFICE

MELBOURNE, FL  
DRAWING TITLE  
DETAILS

STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
LICENSE # 86576  
JUN 9 2011

DATE: 3-17-11

SCALE: NTS

PROJ NO: 110025

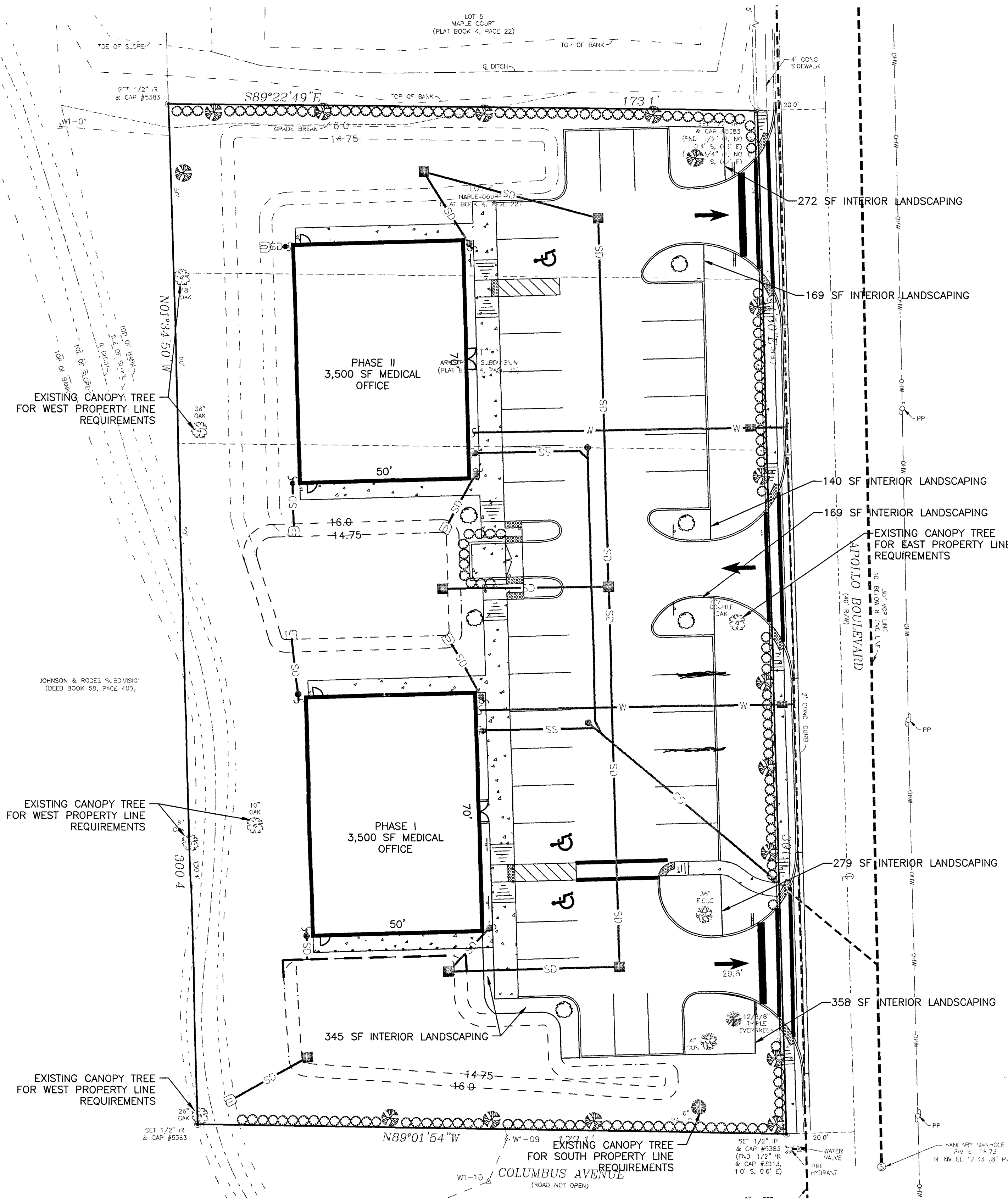
DESIGNED BY: ELJ

DRAWN BY: NCW

CHECKED BY: ELJ

DRAWING NO: C-7





**LANDSCAPE PLAN**  
1"=20'

**PLANT SCHEDULE:**

LEGEND	QUANTITY	SPECIFICATIONS	COMMON NAME
	16*	35 GAL (10' HT, 2" DBH)	LIVE OAK
	6	35 GAL (10' HT, 2" DBH)	HOLLY
	1,368 SF (152 PLANTS) Δ	3 GAL (3' MIN. HT.) PLANT 3' O.C.	PODOCARPUS

\*TREES ALONG APOLLO BOULEVARD RIGHT-OF-WAY SHALL BE 65 GALLON - 4 TOTAL

**LANDSCAPING CALCULATIONS:**

\*TREE REQUIREMENT ALONG PROPERTY LINES:  
 174 LF ALONG NORTH PROPERTY LINE, 174 FEET/50 FEET PER TREE = 4 TREES  
 174 LF ALONG SOUTH PROPERTY LINE, 174 FEET/50 FEET PER TREE = 4 TREES  
 300 LF ALONG WEST PROPERTY LINE, 300 FEET/50 FEET PER TREE = 6 TREES  
 200 LF (MINUS DRIVE) ALONG EAST PROPERTY LINE, 200 FEET/50 FEET PER TREE = 4 TREES  
 SCENIC CORRIDOR (APOLLO BLVD) 200 LF ALONG EAST PROPERTY LINE, 200 FEET/50 FEET PER TREE = 4 TREES

INTERIOR LANDSCAPING:  
 18 PARKING SPACES = 50 SF PER SPACE = 900 SF REQUIRED INTERIOR LANDSCAPING  
 PROVIDED INTERIOR LANDSCAPING = 1,732 SF

TOTAL PERIMETER TREE CALCULATIONS = 18  
 TOTAL INTERIOR TREE CALCULATIONS = 8  
 TOTAL EXISTING TREES REMOVED = 24  
 TOTAL EXISTING TREES SAVED ON-SITE = 10  
 TOTAL NEW TREES REQUIRED ON-SITE = 20 CANOPY TREES  
 TOTAL ON-SITE NEW TREES PROVIDED = 22 TREES (SEE PLANT SCHEDULE ABOVE)  
 \*ALL TREES ON-SITE ARE ENTIRELY OF THE SPECIES LISTED IN SECTION 9.273(c)(2)g, THEREFORE 1 TREE/50 FEET IS USED.

LANDSCAPE BUFFERS:  
 BUFFER ALONG APOLLO BOULEVARD AND COLUMBUS AVENUE = 15 LF AVERAGE

**LANDSCAPING NOTES:**

- SPACING FOR ALL LARGE TREES (MIN. 10' HEIGHT) SHALL BE MAX. 50' O.C. PER THIS PLAN.
- ALL ON-SITE AREAS NOT IDENTIFIED FOR LANDSCAPING SHALL BE SODDED WITH ST. AUGUSTINE SOD.
- LANDSCAPE PLANTS AND PLANTING METHODS SHALL MEET OR EXCEED ALL REQUIREMENTS HEREIN AND ALL CITY OF MELBOURNE LAND DEVELOPMENT CODE REQUIREMENTS.
- AUTOMATIC SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED BY IRRIGATION CONTRACTOR FOR ALL PAVEMENT AREAS ON-SITE. IRRIGATION CONTRACTOR SHALL COORDINATE ELECTRICAL SERVICE AS NEEDED. PROVIDE A WELL FOR IRRIGATION SOURCE.
- ALL SODDED AREAS OFF-SITE SHALL BE BAHIA TYPE.
- SEE TREE PROTECTION DETAIL FOR TREES THAT SHALL REMAIN. GRADE AROUND TREES SO AS NOT TO DISTURB THEIR ROOT SYSTEMS.

**LANDSCAPE SPECIFICATIONS:**

- WHETHER PRESERVED OR NEWLY PLANTED, ALL PLANT MATERIALS UTILIZED TO SATISFY THE LANDSCAPING REQUIREMENTS HEREIN SHALL CONFORM TO THE STANDARDS FOR FLORIDA NO. 1 PLANTS, AS SPECIFIED IN GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I AND II, 1973, PUBLISHED BY THE STATE OF FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, OR THEIR EQUIVALENT.
- THE LOCATION OF VEGETATION OR TREE(S) SHALL NOT INTERFERE WITH UTILITY SERVICES OR CREATE AN UNSAFE VISUAL CLEARANCE OR OTHER SAFETY HAZARD TO THE EXTENT THAT CORRECTION CANNOT BE REMEDIED BY TRIMMING.
- UPON FINAL INSPECTION, ANY PLANT THAT APPEARS TO BE DAMAGED OR IN SHOCK SO THAT IT IS NO LONGER FLORIDA GRADE #1 WILL BE REMOVED AND REPLACED WITH A HEALTHY PLANT OF THE SAME SPECIFIED TYPE AND SIZE.
- NEW PLANTS AND NEW BEDS ARE TO HAVE A 3" LAYER OF GRADE A PINE BARK MULCH, UNLESS OTHERWISE SHOWN TO HAVE RIVER ROCK MULCH. ALL TREES IN SOD AREAS ARE TO HAVE A 4" DIAMETER RING OF PINE BARK MULCH. INSTALL PINE BARK MULCH IN ALL UTILITY/EQUIPMENT AREAS. INSTALL WEED CONTROL FABRIC UNDER ALL PINE BARK AND RIVER ROCK MULCH.
- ALL PLANTS ARE TO BE INSTALLED IN HOLES WHICH ARE TWICE THE WIDTH OF THE ROOT BALL. REMOVE EXTRANEOUS DEBRIS AND BACKFILL PLANTS WITH LOOSE, EXCAVATED SOIL.
- INSTALL ALL PLANTS WITH PROPER SPACING AS INDICATED ON THE PLANT LIST. DO NOT INSTALL PLANTS IN LOCATIONS THAT ARE TOO CLOSE TO EQUIPMENT, PAVEMENT, CONCRETE, FENCES OVERHEAD WIRES, UTILITY STRUCTURES, LIGHTS, SPRINKLER HEADS OR VALVES. MAKE FIELD ADJUSTMENTS TO AVOID SUCH CONFLICTS CONSIDERING FUTURE GROWTH OF PLANTS. SPACING OF SHRUBS AND PLANTS FROM EDGE OF SOD OR EDGE OF CONCRETE IS TO BE A MINIMUM OF 2/3 OF THE SPECIFIED O.C. SPACING. INSTALL PLANTS LOCATED AT THE END OF PARKING SPACES 4' OFF BACK OF CURB OR WHEEL STOP.
- THE LANDSCAPE CONTRACTOR SHALL PROTECT ALL MATERIALS AND WORK AGAINST INJURY FROM ANY CAUSES, AND SHALL PROVIDE AND MAINTAIN ALL NECESSARY SAFEGUARDS FOR THE PROTECTION OF THE PUBLIC. HE SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSONS OR PROPERTY WHICH MAY OCCUR AS A RESULT OF HIS NEGLIGENCE IN THE PROTECTION OF THE WORK.
- SHOULD ANY OBJECTIONABLE MATERIALS SUCH AS OLD CONCRETE, BRICKS, OR OTHER DEBRIS BE ENCOUNTERED DURING PLANTING OPERATIONS, THEY SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH ALL OTHER PARTIES INVOLVED WITH THE JOB IN ORDER TO ELIMINATE UNNECESSARY COMPLICATION DURING THE INSTALLATION OF HIS WORK.
- ALL NEW PLANT MATERIALS, EXCEPT SOD, SHALL BE GUARANTEED FOR ONE YEAR FROM THE TIME OF FINAL INSPECTION AND INTERIM ACCEPTANCE, AND SHALL BE ALIVE AND IN SATISFACTORY GROWTH FOR EACH SPECIFIC KIND OF PLANT AT THE END OF THE GUARANTEE PERIOD. SOD SHALL BE GUARANTEED FOR A PERIOD OF 60 DAYS AND SEED FOR A PERIOD OF 90 DAYS FROM THE DATE FINAL REVIEW AND INTERIM ACCEPTANCE.
- DURING THE GUARANTEE PERIOD, ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR NOT IN SATISFACTORY GROWTH, AS DETERMINED BY THE PROJECT REPRESENTATIVE SHALL BE REMOVED. REPLACEMENTS SHALL BE MADE WITHIN TEN DAYS OF NOTICE TO THE LANDSCAPE CONTRACTOR.
- SPECIFICALLY EXCLUDED FROM THE GUARANTEE ARE DAMAGES RESULTING FROM NATURAL CAUSES SUCH AS FLOOD, LIGHTNING STRIKES, FREEZING RAINS OR WINDS OVER 60 MPH, DAMAGES FROM ACTS OF NEGLIGENCE ON THE PART OF THE PART OF THE OWNER OR OTHERS OCCUPYING THE SITE, FIRES, VANDALISM AND HERBIVOROUS ANIMALS.
- THE SOD SHALL BE OF FIRM, TOUGH TEXTURE HAVING A COMPACT GROWTH OF GRASS WITH GOOD ROOT DEVELOPMENT. IT SHALL CONTAIN NO WEEDS, OR ANY OTHER OBJECTIONABLE VEGETATION. THE SOIL EMBEDDED IN THE SOD SHALL BE GOOD CLEAN EARTH, FREE FROM STONES AND DEBRIS. THE SOD SHALL BE FREE FROM FUNGUS, VERMIN AND OTHER DISEASES. SOD SHALL BE AS SPECIFIED ON PLANS.
- GRASS SEED SHALL BE ARGENTINE BAHIA WITH A MINIMUM PURITY OF 85%, MINIMUM GERMINATION OF 80% AND WEED CONTENT NOT TO EXCEED ONE-HALF PERCENT (1/2%). A COVER GRASS SHALL BE MIXED WITH THE BAHIA SEED AS FOLLOWS:  
 1. MARCH - OCTOBER: 2/3 BAHIA AND 1/3 BROWN TOP MILLET.  
 2. NOVEMBER - FEBRUARY: 2/3 BAHIA AND 1/3 WINTER RYE.
- STAKES AND GUYS: PROVIDE STAKES AND DEADEN OF SOUND NEW HARDWOOD, TREATED SOFTWOOD, OR REDWOOD, FREE OF KNOT HOLES AND OTHER DEFECTS. PROVIDE WIRE TIRES AND GUYS OF 2-STRAND, TWISTED, PLIABLE GALVANIZED IRON WIRE NOT LIGHTER THAN 12 GA WITH ZINC COATED TURNBUCKLES. PROVIDE NOT LESS THAN 1/2" DIAMETER RUBBER OR PLASTIC HOSE, CUT TO REQUIRED LENGTHS AND OF UNIFORM COLOR, MATERIAL AND SIZE TO PROTECT TREE TRUNKS FROM DAMAGE BY WIRE.
- ALL PLANTS EXCEPT AS OTHERWISE SPECIFIED, SHALL BE CENTERED IN PITS AND SET ON COMPACTED TOP SOIL TO SUCH A DEPTH THAT THE FINISHED GRADE LEVEL AT THE PLANT AFTER SETTLEMENT WILL BE THE SAME AS THAT AT WHICH THE PLANT WAS GROWN. NO BURLAP SHALL BE PULLED OUT FROM UNDER BALLS. ROOTS SHALL BE SPREAD IN THEIR NORMAL POSITION. ALL BROKEN OR FRAVED ROOTS SHALL BE CUT OFF CLEANLY. SOIL SHALL BE PLACED AND COMPACTED THOROUGHLY, AVOIDING INJURY AND SHALL BE SETTLED BY WATERING. NO FILLING ROUND TRUNKS WILL BE PERMITTED.
- NEW PLANTING SHALL BE SO SET THAT THE FINAL LEVEL OF GROUND AROUND THE PLANTS SHALL CONFORM TO SURROUNDING GRADES, OR AS OTHERWISE SPECIFIED.
- SOLID SOD SHALL BE LAID WITH CLOSELY ADJUTING JOINTS WITH A TAMPERED OR ROLLED EVEN SURFACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BRING THE SOD EDGE IN A NEAT-CLEAN MANNER TO THE EDGE OF ALL PAVING AND SHRUB AREAS. AFTER THE SOD IS LAID, A TOP DRESSING OF CLEAN SAND SHALL BE EVENLY APPLIED OVER THE ENTIRE SURFACE AND THOROUGHLY WASHED, IF DETERMINED NECESSARY BY ENGINEER. NOTE: SAND WILL NOT BE REQUIRED ON PROPERLY LAID SOD.
- SUBMIT TYPED INSTRUCTIONS RECOMMENDING PROCEDURES TO BE ESTABLISHED BY OWNER FOR MAINTENANCE OF LANDSCAPE WORK FOR ONE FULL YEAR. SUBMIT PRIOR TO EXPIRATION OF REQUIRED MAINTENANCE PERIOD.

REVISION	REVISION	COMMENTS
1	05/09/11	CITY OF MELBOURNE

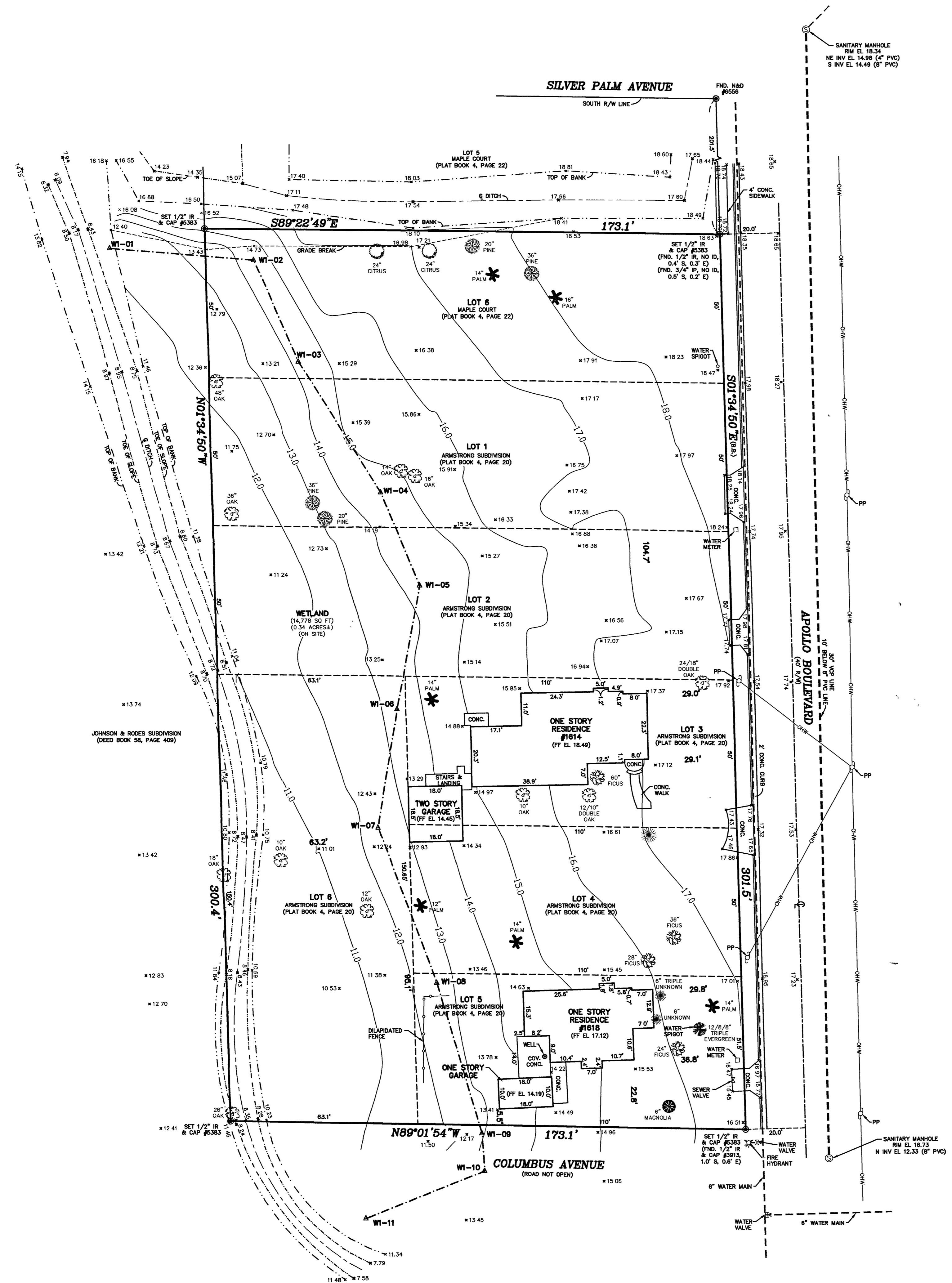
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license #100897

**CONSTRUCTION ENGINEERING GROUP**  
consulting engineers

**DR. KUMAR MEDICAL OFFICE**  
MELBOURNE, FL  
DRAWING TITLE  
**LANDSCAPE PLAN**

DATE: 3-17-11  
SCALE: 1"=20'  
PROJ NO: 110025  
DESIGNED BY: ELJ  
DRAWN BY: NCW  
CHECKED BY: ELJ  
DRAWING NO: L-1

MASTER PLAN REVISIONS



BOUNDARY SURVEY PREPARED FOR:  
 NK SOUL, LLC  
 REGIONS BANK  
 ALLIANCE TITLE INSURANCE AGENCY, INC.  
 STEWART TITLE GUARANTY COMPANY

DESCRIPTION: LOTS 1-6, ARMSTRONG SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 4, PAGE 20, AND LOT 6, MAPLE COURT, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 4, PAGE 22, ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

<b>AAL LAND SURVEYING SERVICES, INC.</b>	
ACCORDING TO F.L.R.M. #2009C 0028 E, DATED APRIL 3, 1989, THIS PROPERTY IS LOCATED WITHIN FLOOD ZONE X.	<b>NOTES:</b> 1. THIS SURVEY AND DRAWING HAVE BEEN PREPARED TO CONFORM WITH APPLICABLE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 61G17-6, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES. 2. THIS SURVEY IS FOR THE SOLE BENEFIT OF THE PARTIES NAMED HEREIN AND FOR THE SPECIFIC PURPOSE NOTED, AND SHOULD NOT BE RELIED UPON BY ANY OTHER ENTITY AND IS NOT TRANSFERABLE UNDER ANY CIRCUMSTANCES. 3. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF THE FLORIDA LICENSED SURVEYOR AND REPRODUCTION OF THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE SURVEYOR IS HEREBY FORBIDDEN. 4. NO OPINION OF TITLE OR OWNERSHIP IS HEREBY EXPRESSED OR IMPLIED BY THE SURVEYOR. 5. THIS SURVEY WAS PREPARED FROM INFORMATION FURNISHED TO THE SURVEYOR BY THE CLIENT, AND MAY BE SUBJECT TO EASEMENTS OR LIMITATIONS EITHER RECORDED OR IMPLIED. 6. BEARINGS ARE BASED ON ASSUMED DATUM AND ON THE LINE SHOWN AS BEING THE BASIS OF BEARINGS. 7. NO UNDERGROUND IMPROVEMENTS HAVE BEEN LOCATED UNLESS OTHERWISE NOTED. 8. ELEVATIONS, IF SHOWN, ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929, UNLESS OTHERWISE NOTED.
<b>BOUNDARY SURVEY</b>  SCALE: 1" = 20'  JOB # 24531  REVISION: WETLAND LOCATION 01-05-11 REVISION: 392028MK, SEE A UTILITIES 23-28 FIELD SURVEY DATE: 04-06-09 SECTION 3, TOWNSHIP 28 S, RANGE 37 E	<b>LEGEND</b> (C) - PLAT (M) - MEASURED (O) - BEED FND. - FOUND IS - IRON ROD J.P. - IRON PIPE C.M. - CONCRETE MONUMENT S - CENTERLINE R - RIGHT OF WAY P - PUBLIC U - UTILITY D - DRAINAGE E - EASEMENT FT - FINISH FLOOR EL - ELEVATION B - BELTA R - RADIUS L - ARC LENGTH (B.B.) - BASIS OF BEARING (N.S.) - NON RADIAL N&D - NAIL AND DISK CONC. - CONCRETE ASPHL - ASPHALT P.O.L. - POINT ON LINE PRM - PERMANENT REFERENCE MARKER
PHONE: (321)768-8110 FAX: (321)952-9771 E-MAIL: aal@survey@aol.com ANDREW W. POWSHOK P.L.S. No. 5383	<b>L.B. #6623</b>