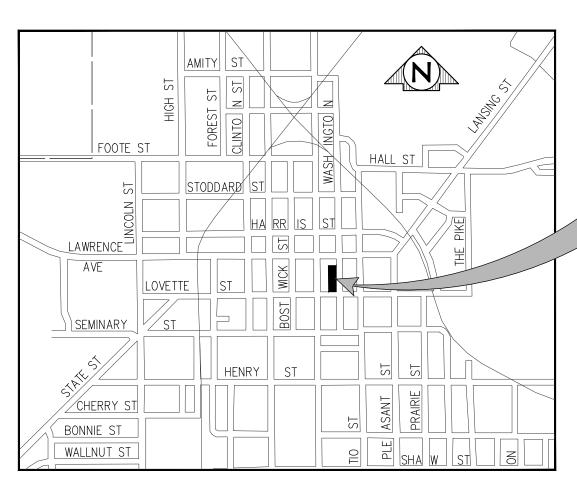
# CONSTRUCTION PLANS FOR

# CITY OF CHARLOTTE PARKING LOTS 4 & 10 RECONSTRUCTION

SECTION 13, CARMEL TOWNSHIP EATON COUNTY, MICHIGAN

### PLAN SUBMITTAL LOG

| _  |   |           |                |
|----|---|-----------|----------------|
|    | AGENCY  | UTILITY   | SUBMITTAL DATE |
| 1. | CITY OF CHARLOTTE DEPARTMENT OF PUBLIC WORKS 111 EAST LAWRENCE AVENUE CHARLOTTE, MI 48813 MS. AMY GILSON (517) 543–8858 | D.P.W.    | -              |
| 2. | CONSUMERS ENERGY<br>530 WEST WILLOW STREET<br>LANSING, MI 48909<br>MR. TOM BARNHILL<br>(517) 374–2031                   | GAS       | -              |
| 3. | CONSUMERS ENERGY<br>530 WEST WILLOW STREET<br>LANSING, MI 48909<br>MR. DANIEL SMITH<br>(517) 374–2259                   | ELECTRIC  | -              |
| 4. | WOW: CABLE<br>380 WRIGHT INDUSTRIAL PARKWAY<br>POTTERVILLE, MI 48813<br>MR. JAMES SCOTT<br>(517) 204-4910               | CABLE     | -              |
| 5. | AT&T 337 ABBOT ROAD, ROOM 201 EAST LANSING, MI 48823 MS. HEATHER VALLEE-KNOBLAUCH (517) 337-3668                        | TELEPHONE | -              |



**LOCATION MAP** 

### PROJECT DECSRIPTION

THIS PROJECT INCLUDES THE COMPLETE RECONSTRUCTION OF PARKING LOT NUMBERS FOUR AND TEN FOR THE CITY OF CHARLOTTE WHICH ARE LOCATED ON THE WEST SIDE OF S. WASHINGTON STREET AND THE NORTH SIDE OF LOVETT

# M.D.O.T. TRAFFIC AND SAFETY PLANS

THE FOLLOWING MICHIGAN DEPARTMENT OF TRANSPORTATION (M.D.O.T.) TRAFFIC AND SAFETY PLANS ARE REFERENCED IN THIS PROJECT. COPIES OF THE M.D.O.T. STANDARD PLANS ARE INCLUDED IN THE CONTRACT DOCUMENTS.

TABLES FOR "L", "D" AND "B" VALUES

M0040a TYPICAL ADVANCE SIGNING TREATMENT FOR LONG, INTERMEDIATE AND SHORT TERM STATIONARY WORK ZONE

OPERATIONS OF LESS THAN TWO MILES IN LENGTH WHERE TRAFFIC CONTROL DEVICES MAY REMAIN AT END OF WORK DAY ON AN UNDIVIDED TWO-WAY ROADWAY

2 NOT

DATE:

**PROFESSIONAL** 

COMPANY

SERVICES

CHARLOTTE 10 RECONSTRUCTION

8 ₽ 8

CITY LOTS

TYPICAL TEMPORARY TRAFFIC CONTROL FOR A TWO-LANE M0140a TWO-LANE ROADWAY WHERE ONE LANE IS CLOSED UTILIZING

TRAFFIC REGULATORS, NO SPEED REDUCTION

W7D-100-A GROUND DRIVEN SIGN SUPPORTS FOR TEMPORARY SIGNS

WZD-125-E TEMPORARY TRAFFIC CONTROL DEVICES

### M.D.O.T. STANDARD ROAD PLANS

THE FOLLOWING MICHIGAN DEPARTMENT OF TRANSPORTATION (M.D.O.T.) STANDARD ROAD PLANS ARE REFERENCED IN THIS PROJECT. COPIES OF THE M.D.O.T. STANDARD PLANS ARE INCLUDED IN THE CONTRACT DOCUMENTS.

| R-7-F  | COVER | В |
|--------|-------|---|
| R-9-D  | COVER | D |
| R-12-E | COVER | G |
| R-15-F | COVER | K |
| R-18-F | COVER | Q |
|        |       |   |

**PROJECT** 

**LOCATION** 

R-29-I DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALKS

R-30-G CONCRETE CURB AND CONCRETE CURB AND GUTTER

R-83-B UTILITY TRENCHES

SOIL EROSION & SEDIMENTATION CONTROL MEASURES

# SHEET INDEX

- COVER SHEET
- LEGEND SHEETNOTES AND QUANTITY SHEET
- DETAIL SHEET 1 - DETAIL SHEET 2
- 6 FXISTING SURVEY SHEET
- REMOVAL SHEET 8 - SITE PLAN, LANDSCAPING & SURVEY CONTROL SHEET



Know what's **below** Call before you dig.

ARKING REVISIONS REV: NO. DATE DESCRIPTION SHT# 1 OF 8JOB No: 15C0139

OWNER INFORMATION

CITY OF CHARLOTTE 111 EAST LAWRENCE AVENUE

# STRUCTURE SYMBOLS

- EXISTING CATCH BASIN IN CURB LINE
- PROPOSED CATCH BASIN IN CURB LINE
- EXISTING CATCH BASIN IN GREEN SPACE
- PROPOSED CATCH BASIN IN GREEN SPACE
- EXISTING STORM MANHOLE
- PROPOSED STORM MANHOLE
- PROPOSED CULVERT END SECTION
- EXISTING HEADWALL
- PROPOSED HEADWALL
- EXISTING GATE VALVE AND BOX (SERVICE VALVE)
- PROPOSED GATE VALVE AND BOX (SERVICE VALVE)
- EXISTING WATER SHUTOFF (STOP BOX)
- PROPOSED WATER SHUTOFF (STOP BOX)
- EXISTING GATE VALVE AND WELL
- PROPOSED GATE VALVE AND WELL
- EXISTING SPRINKLER HEAD
- EXISTING WATER WELL
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT

### PROPOSED WATER MAIN FITTINGS

- PROPOSED WATER MAIN CAP
- EXISTING CLEAN OUT
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER MANHOLE
- EXISTING MONITORING WELL

### **EXISTING TOPOGRAPHICAL SYMBOLS**

- STREET SIGN
- END OF PIPE
- SWAMP OR WETLAND
- DECIDUOUS TREE
- CONIFEROUS TREE
- TREE STUMP
- MAIL BOX
- SOIL BORING
- ROCK
- METAL POST
- BUMPER BLOCK

### UTILITY SYMBOLS

- UTILITY POLE
- GUY ANCHOR CABLE
- LIGHT POLE / ORNAMENTAL LIGHT
- POWER LIGHT POLE
- TELEPHONE MANHOLE
- UNDERGROUND GAS LINE MARKER
- GAS RISER
- GAS VENT
- GAS VALVE
- $\oplus$ RAILROAD SIGNAL
- METAL LIGHT POLE
- OUTLET
- CIRCUIT BREAKER PANEL
- ELECTRICAL TRANSFORMER PAD
- $\boxtimes$ ELECTRICAL TRANSFORMER RISER
- ELECTRIC METER
- TELEPHONE PEDESTAL / RISER
- TRAFFIC SIGNAL ON POLE
- PHONE BOTH / PAY PHONE

### SURVEY SYMBOLS

- MONUMENT
- BENCHMARK
- TRAVERSE POINT
- SECTION CORNER
- FOUND SURVEY MONUMENTATION

### MISCELLANEOUS SYMBOLS

- EX 2754
- EXISTING STORM STRUCTURE NUMBER
- H PROPOSED STORM STRUCTURE NUMBER
- EX 4071 EXISTING SANITARY STRUCTURE NUMBER
- (A)PROPOSED SANITARY STRUCTURE NUMBER
- FLOW DIRECTION ~~
- EXISTING RIP-RAP
- PROPOSED RIP-RAP

### **CAUTION SYMBOLS**



USED WITH UNDERGROUND GAS & ELECTRICAL LINES

••CAUTION•• FIBER OPTIC

USED WITH FIBER OPTICS LINES

# PLAN VIEW LINE TYPES

PROPOSED SANITARY SEWER

| 12 318              | EXISTING STORM SEWER    |
|---------------------|-------------------------|
| ====:12" CONC:===== | EXISTING CULVERT        |
|                     | PROPOSED STORM SEWER    |
|                     | EXISTING SANITARY SEWER |

- EXISTING WATER MAIN
- PROPOSED WATER MAIN SECTION LINE
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPOSED EASEMENT EXISTING CENTER LINE DITCH
- PROPOSED DITCH CENTERLINE EXISTING CENTER LINE ROADWAY
  - PARCEL LINE / LOT LINE
  - EXISTING OVERHEAD UTILITIES UNDERGROUND ELECTRICAL LINE
  - GAS LINE OR PETROLEUM PIPELINE
  - UNDERGROUND TELEPHONE LINE UNDERGROUND CABLE TV LINE
  - UNDERGROUND FIBER OPTIC 11+00
  - TREE LINE
  - **EXISTING FENCE** — x — PROPOSED FENCE
  - ···· EXISTING GUARD RAIL PROPOSED SLOPE STAKE LINE

  - \*\*\*\*\* REMOVE UTILITY

# **TOPOGRAPHY**

PROJECT CONTROL LINE



## PARCEL INFORMATION

PARCEL/TAX IDENTIFICATION NUMBER 401-069

#5324 ADDRESS/BUSINESS NAME

| PAVEMENT IDENTIFICATION                               |  |
|---|--|
| <br>EXISTING CURB AND GUTTER PROPOSED CURB AND GUTTER |  |
| EXISTING PAVEMENT                                     |  |
| HATCHING LEGEND                                       |  |
| REMOVE PAVEMENT                                       |  |
| REMOVE SIDEWALK                                       |  |

REMOVE CURB AND GUTTER

REMOVE GRAVEL

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DATE

PLAN

ROWE PROFESSIONAL

COMPANY

SERVICES

CHARLOTTE 10 RECONSTRUCTION

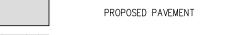
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OF 4 8

CITY LOTS

SKEET

(810) 3 (810) 3



 $\times$   $\times$   $\times$   $\times$   $\times$ 

PROPOSED SIDEWALK

PROPOSED SIDEWALK LEVEL LANDING

PROPOSED DETECTABLE WARNING

PROPOSED CONCRETE DRIVEWAY

DECORATIVE STAMPED CONCRETE

# PROPOSED CALLOUTS

TOPO CALLOUTS PLAN VIEW ADJ-K (ADJ-K) ADJUST STRUCTURE W/ NEW CASTING ADJ (ADJ) ADJUST STRUCTURE (ADJ-B/O) ADJUST STRUCTURE BY OTHERS ADJ-B/O

(REC) RECONSTRUCT STRUCTURE REC (REL) RELOCATE

RELOCATE BY OTHERS REL-B/0 (REL-B/O)

 $\mathbb{R}$ 

(R&R) R&R REMOVE AND REPLACE

> (SALV) SALVAGE SALV (S) SAVE

REM

 $\bigcirc$ ABANDON

B BULKHEAD SIDEWALK RAMP TYPE SR-R

REMOVE

6 SOIL EROSION CONTROL MEASURE SEE MDOT STANDARD PLAN R-96



|             |    | REVISIONS   |      |     |  |  |  |  |  |  |
|-------------|----|-------------|------|-----|--|--|--|--|--|--|
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### **GENERAL CONSTRUCTION NOTES**

### EMERGENCY CONTACTS

BEFORE BEGINNING WORK ON THE PROJECT, THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH THE NAMES AND TELEPHONE NUMBERS OF EMERGENCY CONTACTS AT LEAST ONE PERSON REPRESENTING THE CONTRACTOR SHALL BE AVAILABLE TO RESPOND TO EMERGENCIES THROUGHOUT THE LIFE OF THE PROJECT, 24 HOURS A DAY, 7 DAYS A WEEK.

### UNDERGROUND UTILITY IDENTIFICATION AND LOCATION

THE CONTRACTOR SHALL CALL MISS DIG (1-800-482-7171) A MINIMUM OF THREE WORK DAYS IN ADVANCE OF BEGINNING EXCAVATION. THE CONTRACTOR IS RESPONSIBLE TO IDENTIFY AND NOTIFY UTILITY AGENCIES WITHIN THE PROJECT AREA WHICH DO NOT PARTICIPATE IN THE MISS DIG NOTIFICATION PROGRAM.

### PUBLIC UTILITIES

EXISTING UTILITIES ARE SHOWN BASED UPON RECORDS AND LOCATIONS PROVIDED BY UTILITY AGENCIES. THE INFORMATION SHOWN IS CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR.
UNLESS THE PLANS SPECIFICALLY SHOW THAT EXISTING UTILITIES ARE TO BE MOVED, THE CONTRACTOR
IS RESPONSIBLE TO PROTECT AND MAINTAIN EXISTING UTILITIES.

### VERIFICATION OF UNDERGROUND UTILITIES

THE CONTRACTOR SHALL EXCAVATE AND LOCATE ALL EXISTING UTILITIES IN THE PROJECT AREA IN ADVANCE OF CONSTRUCTION TO VERIFY THEIR ACTUAL LOCATION. POTENTIAL CONFLICTS SHALL BE REPORTED TO THE ENGINEER. THE CONTRACTOR SHALL MAKE SLICH CHANGES TO GRADE AND ALIGNMENT OF PROPOSED WORK AS DIRECTED BY THE ENGINEER TO AVOID CONFLICTS, AT NO INCREASE

### UTILITY SERVICE

UNLESS SPECIFICALLY PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS, ALL EXISTING UTILITIES ARE TO REMAIN IN SERVICE DURING THE PROJECT.

### MAINTAINING TRAFFIC

MAINTAINING TRAFFIC AND LANE CLOSURES ON S. WASHINGTON STREET SHALL BE IN ACCORDANCE WITH THE SPECIFICATION FOR MAINTAINING TRAFFIC.

LOCAL AND EMERGENCY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL NOTIFY EMERGENCY RESPONSE AGENCIES 48 HOURS MINIMUM IN ADVANCE OF LANE CLOSURES.

WHEN EXCAVATION, FRESH CONCRETE, OR OTHER CONSTRUCTION WORK WILL RESULT IN THE CLOSURE OF A STREET OR DRIVEWAY FOR A PERIOD OF TIME, THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL AFFECTED BUSINESSES 48 HOURS MINIMUM IN ADVANCE.

THE CONTRACTOR SHALL COMPLETE ALL WORK IN AN EXPEDITIOUS MANNER AND SHALL NOT STOP WORK ON THE PROJECT ONCE BEGUN.

### ALIGNMENT

ALIGNMENT AND GRADES FOR CURB AND GUTTER (INCLUDING THROUGH RAMPS AND DRIVEWAY DENINGS, SHOWN ON THE PLANS ARE FOR THE TOP, BACK OF CURB, UNLESS SPECIFICALLY SHOWN OTHERWISE ON THE PLANS.

THE HORIZONTAL ALIGNMENT SHOWN ON THE DRAWINGS FOR DRAINAGE STRUCTURES LOCATED IN THE CURB LINE IS TO THE CENTER OF THE CASTING.

THE HORIZONTAL ALIGNMENT SHOWN ON THE DRAWINGS FOR DRAINAGE STRUCTURES WHICH ARE NOT IN THE CURB LINE AND FOR MANHOLES IS TO THE CENTER OF THE STRUCTURE.

WHERE RIM ELEVATIONS ARE PROVIDED ON THE PLANS FOR MANHOLE CASTINGS, THE ELEVATION  $\left( \frac{1}{2} \right)$ 

WHERE RIM ELEVATIONS ARE PROVIDED FOR INLET TYPE CASTINGS, THE ELEVATIONS ARE PROVIDED AS

- FOLLOWS:

  CURB INLETS THE ELEVATION OF THE TOP OF CURB

  ALL OTHER INLETS THE ELEVATION OF THE FLOW LINE

WHERE RIM ELEVATIONS ARE PROVIDED ON THE PLANS FOR INLETS OR MANHOLE CASTINGS, THE ELEVATIONS PROVIDED ARE CONSIDERED PRELIMINARY. THE CONTRACTOR SHALL MAKE THE FINAL ADJUSTMENT FOLLOWING THE ESTABLISHMENT OF ACTUAL GRADING AND PAVEMENT ELEVATIONS.

### CONSTRUCTION STAKING

WHEN CONSTRUCTION STAKING IS TO BE PROVIDED BY THE ENGINEER OR OWNER, THE CONTRACTOR SHALL REQUEST STAKING AT LEAST THREE WORKING DAYS IN ADVANCE.

WHEN CONSTRUCTION STAKING IS TO BE PROVIDED BY THE ENGINEER OR OWNER. STAKING WILL BE PROVIDED ONE TIME. THE CONTRACTOR SHALL PROTECT AND PRESERVE SURVEY CONTROL AND STAKING. RE-STAKING WILL BE AT THE CONTRACTOR'S EXPENSE.

### SURVEY CORNERS, BENCHMARKS, AND CONTROL POINTS

THE CONTRACTOR SHALL PRESERVE ALL GOVERNMENT CORNERS, PROPERTY CORNERS, BENCHMARKS, SURVEY CONTROL POINTS AND OTHER SURVEY POINTS WITHIN THE PROJECT AREA. WHERE CORNERS, BENCHMARKS, OR SURVEY POINTS ARE ENCOUNTERED WHICH WILL BE DISTURBED BY THE CONTRACTOR'S ACTIVITIES; A LICENSED SURVEYOR SHALL WINESS THE POINT BEFORE DISTURBANCE AND SHALL RE-SET THE POINT FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL PAY THE SURVEYOR TO WITNESS AND TO RE-SET THE POINTS.

### PROTECTION OF TREES, SHRUBS, AND LANDSCAPING

ALL TREES, SHRIUBS, AND LANDSCAPING WITHIN THE CONSTRUCTION AREA WHICH ARE NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED TREES, SHRUBS, AND LANDSCAPING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

### CONSTRUCTION SIGNING AND BARRICADING

THE CONTRACTOR SHALL PROTECT HAZARDOUS AREAS WITH BARRICADES. BARRICADES LEFT IN PLACE

THE CONTRACTOR SHALL PROVIDE SUITABLE SANDBAGS OR OTHER SUITABLE MEASURES FOR ANCHORING OF TEMPORARY SIGNS AND BARRICADES, TO PREVENT THEIR TIPPING OR DISPLACEMENT BY WIND OR AIR FLOW FROM VEHICLES.

THE CONTRACTOR SHALL PROVIDE SIGNING, BARRICADES, FLAGGERS, CONES, AND OTHER TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCY HAVING JURISDICTION OVER STREETS OR ROADS IN THE PROJECT AREA, THE CURRENT MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR SHALL COVER OR REMOVE TEMPORARY SIGNS DURING PERIODS WHEN THEY ARE NOT

### TURF ESTABLISHMENT

ALL DISTURBED AREAS WHICH ARE NOT TO BE SURFACED WITH PAVEMENT, AGGREGATE OR OTHER APPROVED SURFACES SHALL BE ESTABLISHED WITH TURF.

TURF AREAS SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE.

DISTURBED AREAS SHALL BE SURFACED WITH THREE INCHES OF SCREENED TOPSOIL.

THE CONTRACTOR IS RESPONSIBLE TO ESTABLISH TURE WHICH IS SUBSTANTIALLY FREE OF BARE SPOTS AND FREE OF WEEDS. THE GROUND SURFACE IN TURF AREAS SHALL BE SMOOTH AND PROVIDE NATURAL TRANSITION TO ADJACENT, UNDISTURBED AREAS.

THE CONTRACTOR IS RESPONSIBLE TO PROVIDE WATERING, WEEDING, RESEEDING, AND REWORKING AS NECESSARY TO ESTABLISH TURF AREAS TO THE REQUIRED STANDARD.

### ADA COMPLIANCE

ALL PROPOSED CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA), AND APPLICABLE GUIDELINES OR STANDARDS. WHERE EXISTING CONDITIONS AND/OR THE REQUIREMENTS OF THE PLANS WILL RESULT IN FINISHED CONDITIONS THAT DO NOT MEET AND/OF THE REQUIREMENTS OF THE PLANS THE RESULT IN TRINSFEE DOMINIONS INTO YOUR MEET THE ADA REQUIREMENTS, GUIDELINES, OR STANDARDS; THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REMOVE AND REPLACE WORK DETERMINED TO BE NOT IN ACCORDANCE WITH APPLICABLE REQUIREMENTS, GUIDELINES,

### BACKFILL AND EMBANKMENT

BACKFILL OF AN EXCAVATION UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OF PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE, SHALL BE SAND, METING THE REQUIREMENTS OF GRANULAR MATERIAL CLASS II AS DESCRIBED IN THE 2012 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE SAND BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

BACKFILL OF AN EXCAVATION WHICH IS NOT UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OR PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE MAY BE SUITABLE EXCAVATED MATERIAL OR OTHER SOIL, WHICH IS FREE OF ORGANIC MATTER, STONES AND ROCKS, ROOTS, BROKEN CONCRETE, FROZEN MATERIAL, OR DEBRIS. THE BACKFILL SHALL BE COMPACTED TO AT LEAST 90% OF ITS MAXIMUM UNIT WEIGHT.

THE CONTRACTOR SHALL INDICATE THE SOURCE OF SAND USED FOR BACKFILL TO THE ENGINEER. AND PROVIDE THE ENGINEER WITH THE RESULTS OF A GRADATION TEST PERFORMED ON A SAMPLE OF THE SAND. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN ADVANCE OF USING SAND FROM OTHER

EMBANKMENT USED TO BUILD THE SUBGRADE TO REQUIRED ELEVATION SHALL BE SUITABLE SOIL EXCAVATED FROM THE PROJECT SITE, OR FURNISHED BY THE CONTRACTOR FROM OTHER SOURCES. SUITABLE SOIL IS FREE FROM ORGANIC MATTER, ROCKS AND STONES, FROZEN MATERIAL, BROKEN

EMBANKMENT CONSTRUCTED OF GRANULAR SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 10 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

EMBANKMENT CONSTRUCTED OF COHESIVE SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 10 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

THE MAXIMUM UNIT WEIGHT OF SAND AND OTHER GRANULAR SOILS WILL BE DETERMINED BY THE ONE POINT CONE TEST, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION DENSITY TESTING AND INSPECTION MANUAL, EXCEPT WHEN ANOTHER TEST METHOD IS SPECIFIED.

THE MAXIMUM UNIT WEIGHT OF COHESIVE SOILS WILL BE DETERMINED BY THE ONE POINT PROCTOR TEST, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION DENSITY TESTING AND INSPECTION MANUAL, EXCEPT WHEN ANOTHER TEST METHOD IS SPECIFIED.

### WORK HOURS

UNLESS PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS OR LIMITED BY LOCAL ORDINANCE, THE CONTRACTOR SHALL WORK WITHIN OF THE FOLLOWING TIMES, UNLESS OTHERWISE APPROVED BY THE

MONDAY THROUGH FRIDAY 7 A.M. TO 8 P.M. SATURDAY 8 A.M. TO 6 P.M.

THE CONTRACTOR SHALL NOT WORK ON SUNDAYS OR HOLIDAYS, UNLESS OTHERWISE APPROVED BY THE

### DRAINAGE

THE CONTRACTOR SHALL MAINTAIN DRAINAGE OF THE PROJECT AREA AND ADJACENT AREAS. WHERE EXISTING DRAINAGE FACILITIES ARE DISTURBED OR BLOCKED BY CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY PROVISIONS FOR DRAINAGE.

WHERE CONSTRUCTION HAS DISTURBED EXISTING DITCHES, SWALES, OR OTHER DRAINAGE FACILITIES; THE CONTRACTOR SHALL RESTORE THEM TO THEIR GRADES AND DIMENSIONS WHICH EXISTED PRIOR TO THE BEGINNING OF CONSTRUCTION, UNLESS DIRECTED OTHERWISE.

DRAINAGE SHALL NOT BE REROUTED ONTO ADJACENT PROPERTIES NOR ALLOWED TO DRAIN ONTO ADJACENT PROPERTIES AT AN INCREASED RATE, AS A RESULT OF THE CONTRACTOR'S WORK.

### ROAD AND PARKING LOTS

### ADJUSTING STRUCTURES

WHERE CASTINGS FOR MANHOLES, CATCH BASINS, INLETS, VALVE BOXES, AND MONUMENT BOXES ARE TO BE ADJUSTED TO MEET A NEW PAYEMENT SURFACE ELEVATION, THE FINAL ADJUSTMENT SHALL NOT BE COMPLETED UNTIL ALL PAVEMENT COURSES HAVE BEEN PLACED EXCEPT THE FINAL COURSE. THE FINAL ADJUSTMENT SHALL BE COMPLETED JUST PRIOR TO PLACEMENT OF THE FINAL COURSE OF

THE MATERIALS AND PROCEDURES FOR ADJUSTING STRUCTURES SHALL MEET THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION OVER THE ROAD AND UTILITIES.

TOPSOIL, PEAT, AND ORGANIC MATERIAL SHALL BE EXCAVATED AND REMOVED.

SOFT AND YIELDING SOILS SHALL BE REMOVED OR DRIED IF THE RESULT OF EXCESSIVE MOISTURE

PRIOR TO CONSTRUCTING FILLS, SUBBASE, OR PAVEMENT ON A SUBGRADE; THE SUBGRADE SHALL BE PROOF-ROLLED TO DETERMINE THE SUITABILITY OF THE SUBGRADE. THE CONTRACTOR SHALL DRIVE A HEAVY PIECE OF WHEELED CONSTRUCTION EQUIPMENT OVER THE SUBGRADE WHILE THE ENGINEER IS OBSERVING. THE CONSTRUCTION OF FILLS, SUBBASE, OR PAVEMENTS SHALL NOT PROCEED UNTIL THE SUBGRADE HAS BEEN DEMONSTRATED TO BE FREE OF SOFT AREAS.

THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE MOISTURE CONTENT OF SUBGRADE SOILS WITHIN A SUITABLE RANGE TO ALLOW FOR COMPACTION TO THE REQUIRED DENSITY. WHEN THE SOIL IS TOO DRY, THE CONTRACTOR SHALL ADD WATER. WHEN THE SOIL IS TOO WET, THE CONTRACTOR SHALL PROVIDE DRAINAGE OR AFRATE THE SOIL.

THE SURFACE OF THE SUBGRADE SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT, PRIOR TO CONSTRUCTING FILLS, SUBBASE, OR PAVEMENTS

### CURB AND GUTTERS

THE CONTRACTOR SHALL DETERMINE THE LOCATION AND DIMENSIONS OF CURB OPENINGS FOR DRIVEWAYS, RAMPS, AND DRAINAGE STRUCTURES.

### HOT MIX ASPHALT (HMA) PAVING

PAVEMENTS WHICH ARE TO BE OVERLAID WITH A NEW PAVEMENT COURSE SHALL BE SWEPT TO REMOVE

A BITUMINOUS BOND COAT SHALL BE APPLIED TO PAVEMENTS WHICH ARE TO BE OVERLAID WITH A NEW PAVEMENT COURSE AND ALLOWED TO CURE PRIOR TO CONSTRUCTING THE NEW PAVEMENT COURSE.

HMA PAVEMENT SHALL NOT BE PLACED WHEN THE SURFACE BEING OVERLAID IS WET, OR WHEN RAIN IS FORECAST OR THREATENING.

### **DRIVEWAY CONSTRUCTION**

DRIVEWAY SLOPES SHALL NOT EXCEED 10%, EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE ON THE

THE CONTRACTOR SHALL PROVIDE PROPERTY OWNERS WITH SUITABLE NOTICE BEFORE REMOVING AND REPLACING AN EXISTING DRIVEWAY.

### SIDEWALK CONSTRUCTION

SIDEWALKS SHALL BE CONSTRUCTED TO PROVIDE POSITIVE DRAINAGE OF THE SIDEWALK AND ADJACENT

EXCEPT WHERE NECESSARY TO PROVIDE POSITIVE DRAINAGE OR MEET EXISTING SURFACES, SIDEWALK SHALL BE CONSTRUCTED WITH A CROSS SLOPE SLOPED TOWARD THE STREET.

SIDEWALK CROSS SLOPES SHALL NOT EXCEED 2%.

IN TURF AREAS, THE SURFACE OF THE SIDEWALK SHALL BE ABOUT 1/4 INCH HIGHER THAN THE ADJACENT GROUND SURFACES, EXCEPT WHERE NECESSARY TO PROVIDE POSITIVE DRAINAGE OR MEET EXISTING SIDEWALKS, CURBS, OR PAVEMENTS.

SIDEWALK SHALL BE CONSTRUCTED ON A GRANULAR MATERIAL CLASS II AS DESCRIBED IN THE 2012 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE SAND BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT

THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN SIDEWALK FORMS HAVE BEEN SET AND THE SAND BASE PREPARED. CONCRETE SHALL NOT BE PLACED UNTIL THE ENGINEER HAS OBSERVED THE FORMS. CONCRETE DELIVERY SHALL BE SCHEDULED TO ALLOW SUFFICIENT TIME FOR ADJUSTMENT OF THE

THE CONTRACTOR SHALL PROTECT FRESH CONCRETE FROM DAMAGE BY THE WEATHER, TRAFFIC, OR VANDALISM. DAMAGED CONCRETE SHALL BE REPLACED BY THE CONTRACTOR'S EXPENSE

### SOIL EROSION & SEDIMENTATION CONTROL

SOIL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE UTILIZED ON THIS PROJECT TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND SEDIMENTATION.

ANTICIPATED CONTROL MEASURES ARE: 3 14 26 29

SEE M.D.O.T. STANDARD ROAD PLAN R-96-E IN THE CONTRACT DOCUMENTS FOR SYMBOL DETAILS.

THE CONTRACTOR SHALL OBTAIN A SOIL EROSION AND SEDIMENTATION CONTROL PERMIT FROM THE CITY OF CHARLOTTE AND PAY ALL PERMIT FEES.

A N.P.D.E.S. PERMIT IS NOT REQUIRED FOR THIS PROJECT.

TIMING AND SEQUENCING OF EROSION CONTROL DEVICES FOR THE MAJOR ITEMS OF WORK SHALL BE IDENTIFIED AND SUBMITTED TO THE CONSTRUCTION ENGINEER AT THE PRE-CONSTRUCTION MEETING.

PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES AND DITCHES OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 5 CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED.

CLEANUP WILL BE DONE IN A MANNER TO ENSURE THAT EROSION CONTROL MEASURES ARE NOT

THE PROJECT WILL CONTINUALLY BE INSPECTED FOR SOIL EROSION AND SEDIMENTATION CONTROL COMPLIANCE. DEFICIENCIES WILL BE CORRECTED BY THE CONTRACTOR WITHIN 24 HOURS.

TEMPORARY EROSION CONTROL MEASURES SHALL BE COMPLETELY REMOVED BY THE CONTRACTOR UPON ESTABLISHMENT OF PERMANENT CONTROL MEASURES.

SOIL EROSION MEASURES SHALL BE PER THE PLANS. THE 2012 M.D.O.T. STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE SPECIFICATION FOR SOIL EROSION AND SEDIMENTATION CONTROL.

STREET SWEEPING SHALL BE COMPLETED DAILY AND GRAVEL ACCESS APPROACHES SHALL BE INSTALLED AND MAINTAINED TO PREVENT SOIL TRACKING OFF THE SITE

### SESC CONSTRUCTION SEQUENCE

- EXCAVATION AND STOCKPILING (IF REQUIRED) OF SOIL.
- MPLEMENTATION OF TEMPORARY EROSION CONTROL MEASURES; SELECTIVE GRADING, DIVERSIONS AS REQUIRED IN FIELD, PROTECTION OF STORM SEWER FACILITIES.

  PERIODIC MAINTENANCE OF AFFECTED EROSION CONTROL MEASURES.
- PERMANENT MEASURES: FINAL GRADING, SEEDING AND MULCHING

| SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE          |  |  |  |  |  |             |          |             |  |     |  |  |
|---|--|--|--|--|--|-------------|----------|-------------|--|-----|--|--|
| CONSTRUCTION SEQUENCE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV [ |  |  |  |  |  |             |          |             |  | DEC |  |  |
| STRIP & STOCKPILE TOPSOIL   |  |  |  |  |  | $\times$    |          |             |  |     |  |  |
| ROUGH GRADE SEDIMENT CONTROL  |  |  |  |  |  | $\times$    |          |             |  |     |  |  |
| TEMP. CONTROL MEASURES  |  |  |  |  |  | $\times$    |          |             |  |     |  |  |
| STORM FACILITIES  |  |  |  |  |  |             | $\times$ |             |  |     |  |  |
| TEMP. CONSTRUCTION ROADS  |  |  |  |  |  | $\times$    |          |             |  |     |  |  |
| SITE CONSTRUCTION   |  |  |  |  |  | ${}^{\sim}$ | $\times$ | $\times$    |  |     |  |  |
| PERM. CONTROL MEASURES  |  |  |  |  |  |             |          | $\boxtimes$ |  |     |  |  |
| FINISH GRADING  |  |  |  |  |  |             |          | $\boxtimes$ |  |     |  |  |

### LANDSCAPING

THE LANDSCAPING CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO THE OWNER'S REPRESENTATIVE

THE CONTRACTOR SHALL GUARANTEE ALL PLANTS TO BE IN A HEALTHY VIGOROUS CONDITION FOR A PERIOD OF ONE YEAR FOLLOWING ACCEPTANCE. THE CONTRACTOR SHALL REPLACE WITHOUT COST TO OWNER, ANY DEAD OR UNACCEPTABLE PLANTS, AS DETERMINED BY THE OWNER'S REPRESENTATIVE

WHERE A DISCREPANCY IS FOUND BETWEEN EXISTING FIELD CONDITIONS AND/OR REQUIRED LANDSCAPING WORK, NOTIFY THE OWNER'S REPRESENTATIVE FOR CLARIFICATION IMMEDIATELY.

ALL LANDSCAPING IS TO BE STAKED BY THE CONTRACTOR FOR APPROVAL BY THE OWNER OR THEIR

ALL EXCESS EXCAVATED MATERIALS AND DEBRIS, WHICH ARE NOT ACCEPTED FOR DISPOSAL ON SITE BY THE OWNER SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF LEGALLY

ANY DAMAGE TO EXISTING LANDSCAPING NOT SCHEDULED FOR REMOVAL SHALL BE REPAIRED AT THE

ALL LANDSCAPE AREAS SHALL HAVE PROPER DRAINAGE THAT PREVENTS EXCESS WATER FROM STANDING ON LAWN AREAS OR AROUND TREES & SHRUBS.

THE OWNER OR THEIR REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL.

# PROJECT QUANTITIES



REVISIONS REV: NO. DATE DESCRIPTION SHT#3 OF 8JOB No: 15C0139

CHARLOTTE 10 RECONSTRUCTION

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DATE

PLAN

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SCALE

341-7500 341-7573

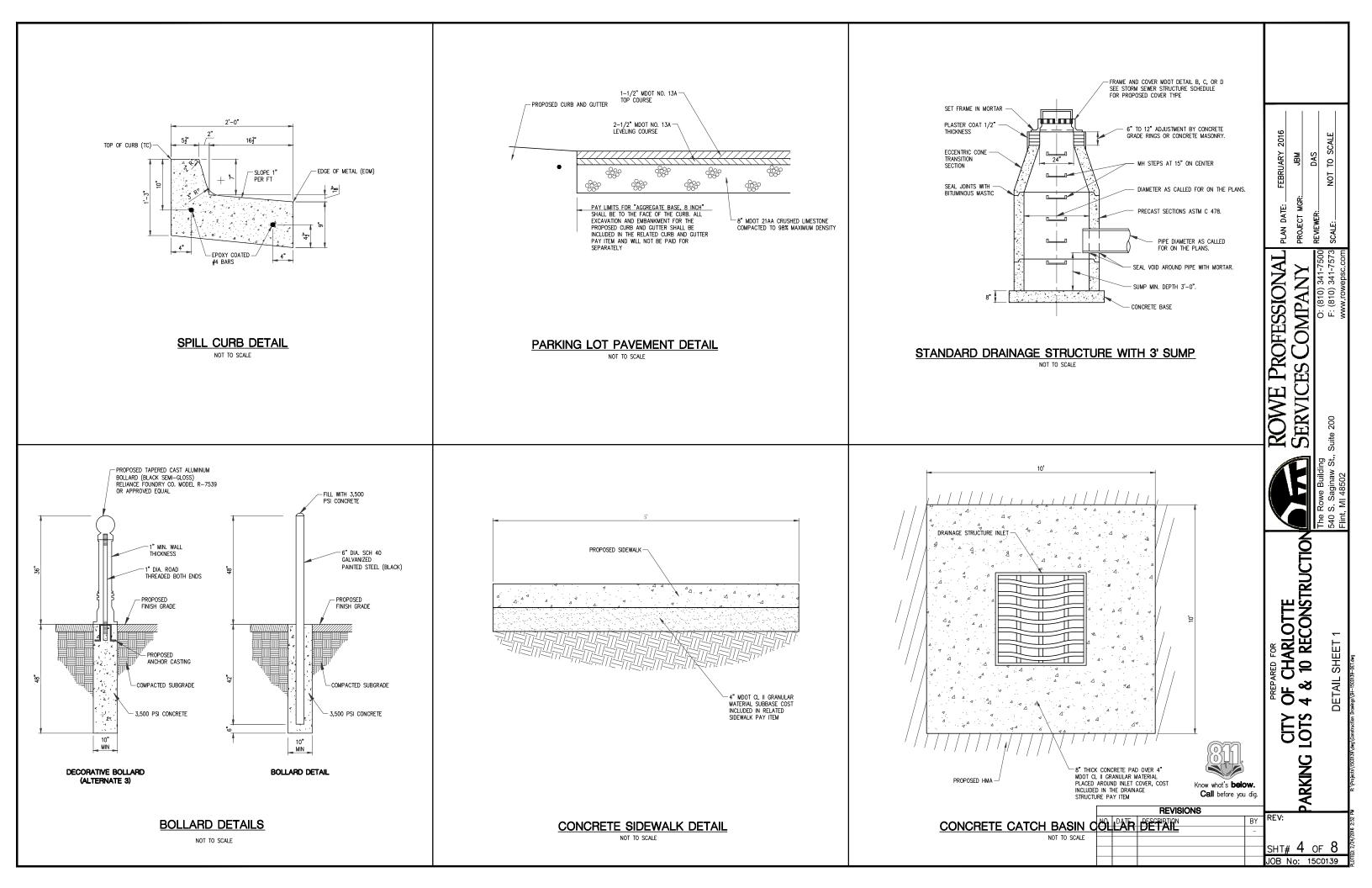
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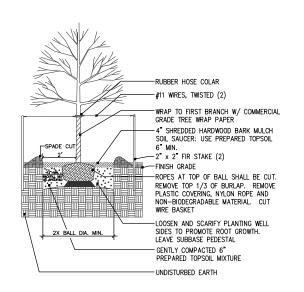
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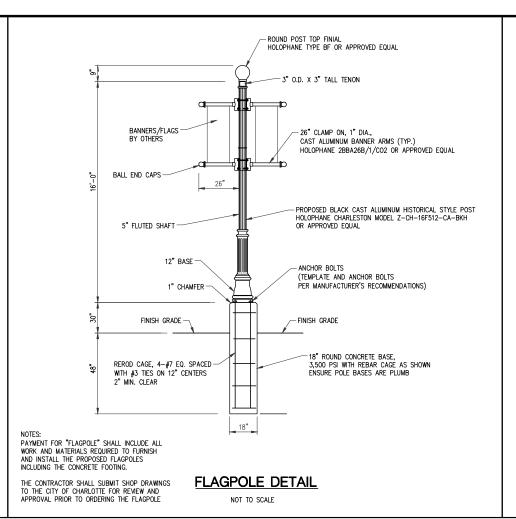
QUANTITY AND CITY LOTS NOTES

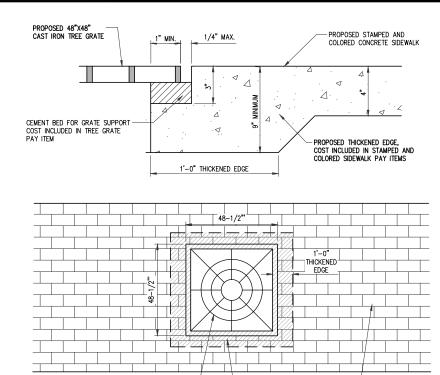
ARKING











# PROPOSED TREE GRATE DETAILS

PROPOSED 48"X48" CAST IRON TREE -GRATE WITH 18" DIAMETER TREE OPENING EJIW 8671 OR APPROVED EQUAL PAID FOR AS TREE GRATE

PROPOSED STAMPED — AND COLORED CONCRETE SIDEWALK

PROPOSED THICKENED EDGE

COST INCLUDED IN STAMPED AND COLORED SIDEWALK PAY ITEMS

NOT TO SCALE



EPARED FOR

CHARLOTTE

10 RECONSTRUCTION

NOT TO SCALE

COMPANY O: (810) 341-75500 F: (810) 341-7573

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DATE PROJECT | PLAN

ROWE PROFESSIONAL

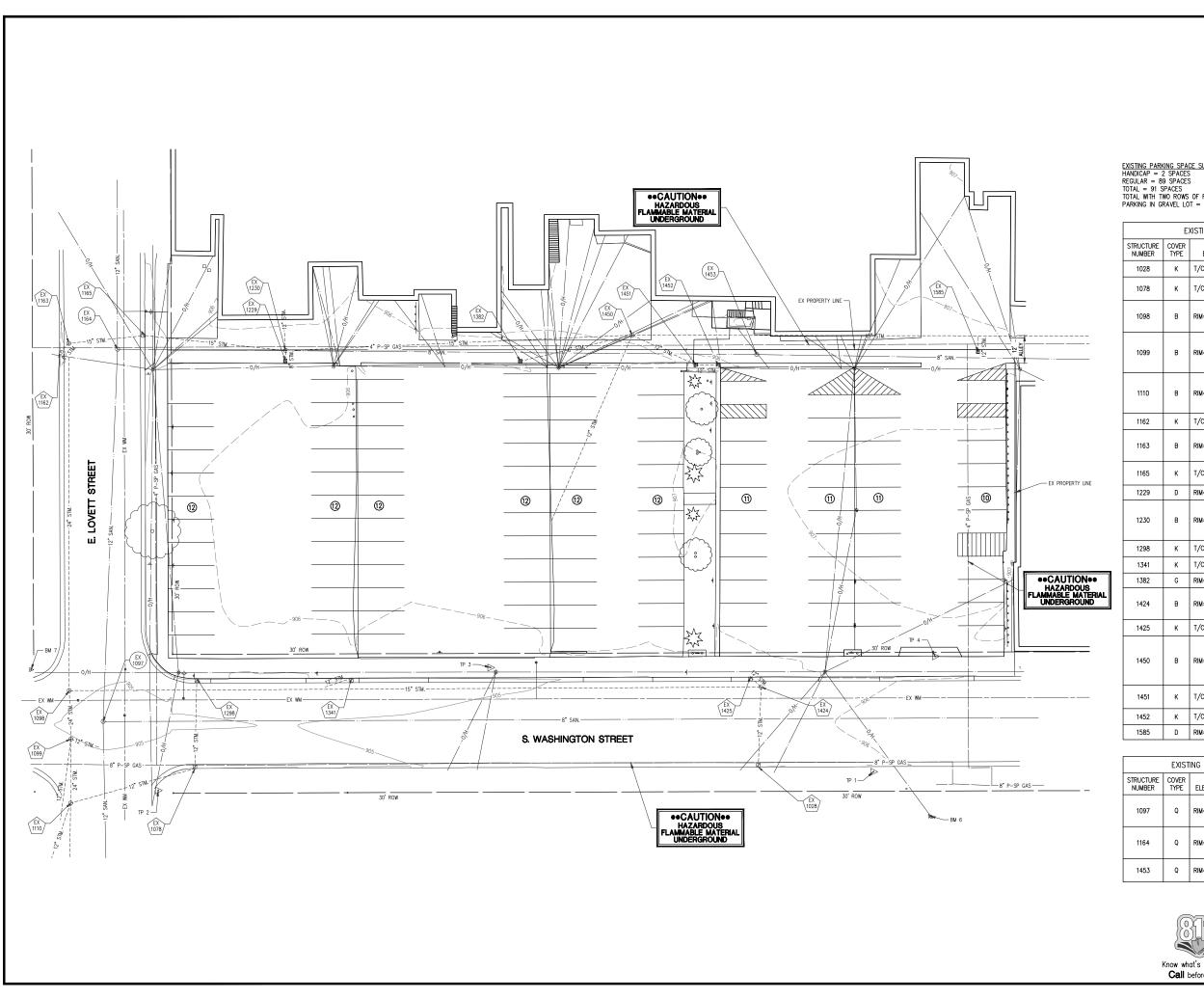
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SHEET A 4 8 8 CITY LOTS

Call before you dig.

ARKING REVISIONS REV: NO. DATE DESCRIPTION SHT# 5 OF 8 JOB No: 15C0139

Know what's **below.** 





EXISTING PARKING SPACE SUMMARY
HANDICAP = 2 SPACES
REGULAR = 89 SPACES
TOTAL = 91 SPACES
TOTAL WITH TWO ROWS OF REGULAR
PARKING IN GRAVEL LOT = 115 SPACES

| EXISTING STORM SEWER STRUCTURE SCHEDULE |               |                  |   |             |               |  |  |
|---|---------------|------------------|---|-------------|---------------|--|--|
| STRUCTURE<br>NUMBER                     | COVER<br>TYPE | RIM<br>ELEVATION | INVERT  | NORTHING    | EASTING       |  |  |
| 1028                                    | к             | T/C=905.54       | 12" 902.54 W  | 387791.5210 | 12997317.4830 |  |  |
| 1078                                    | к             | T/C=904.49       | 12" 901.69 W<br>12" 901.44 S  | 387547.9820 | 12997318.1200 |  |  |
| 1098                                    | В             | RIM=904.74       | 15" 900.59 N<br>24" 899.69 E<br>24" 899.69 W                                  | 387493.7090 | 12997284.4530 |  |  |
| 1099                                    | В             | RIM=904.76       | 24" 898.91 E<br>24" 899.36 W<br>12" 900.66 N<br>12" 901.56 E                  | 387494.4210 | 12997305.3170 |  |  |
| 1110                                    | В             | RIM=904.64       | 12" 900.94 N<br>24" 899.19 W<br>24" 899.19 E<br>12" 900.84 E                  | 387494.2920 | 12997333.0470 |  |  |
| 1162                                    | к             | T/C=903.89       | 8" 901.29 NW  | 387489.5070 | 12997138.4060 |  |  |
| 1163                                    | В             | RIM=904.00       | 24" 899.90 E<br>8" 901.30 SE<br>15" 899.75 N                                  | 387493.4620 | 12997134.3920 |  |  |
| 1165                                    | к             | T/C=904.08       | 15" 900.18 S<br>15" 900.23 N  | 387526.4460 | 12997131.0090 |  |  |
| 1229                                    | D             | RIM=905.35       | 8" 903.85 W   | 387587.1650 | 12997141.9410 |  |  |
| 1230                                    | В             | RIM=905.63       | 15" 900.84 S<br>12" 901.58 W<br>15" 900.84 N<br>8" 903.83 E                   | 387587.1830 | 12997137.5090 |  |  |
| 1298                                    | к             | T/C=904.94       | 12" 901.74 E  | 387548.8240 | 12997279.2080 |  |  |
| 1341                                    | К             | T/C=904.62       | 12" 901.32 S  | 387615.6450 | 12997279.0720 |  |  |
| 1382                                    | G             | RIM=905.32       | 6" 903.82 N   | 387688.6670 | 12997142.0710 |  |  |
| 1424                                    | В             | RIM=905.50       | 12" 901.80 E<br>12" 901.50 SW<br>15" 901.40 S                                 | 387792.6940 | 12997282.8800 |  |  |
| 1425                                    | К             | T/C=905.34       | 12" 901.54 NE   | 387788.0710 | 12997278.5360 |  |  |
| 1450                                    | В             | RIM=906.26       | 6" 902.59 S<br>12" 901.56 NE<br>12" 902.61 SE<br>15" 901.16 N<br>15" 901.06 S | 387736.9840 | 12997130.8240 |  |  |
| 1451                                    | к             | T/C=905.92       | 12" 902.02 SW<br>12" 902.22 N   | 387764.5420 | 12997143.7320 |  |  |
| 1452                                    | К             | T/C=905.72       | 12" 902.52 S  | 387774.1770 | 12997143.7550 |  |  |
| 1585                                    | D             | RIM=906.16       | 12" 903.51 W  | 387886.5750 | 12997138.0330 |  |  |

| EXISTING SANITARY SEWER STRUCTURE SCHEDULE |               |                  |   |             |               |  |  |
|--|---------------|------------------|---|-------------|---------------|--|--|
| STRUCTURE<br>NUMBER                        | COVER<br>TYPE | RIM<br>ELEVATION | INVERT                                      | NORTHING    | EASTING       |  |  |
| 1097                                       | Q             | RIM=905.14       | 8" 895.49 N<br>12" 893.44 E<br>12" 893.39 W | 387508.3410 | 12997297.8390 |  |  |
| 1164                                       | Q             | RIM=904.58       | 12" 892.63 E<br>8" 895.18 N<br>12" 892.58 W | 387514.5430 | 12997136.9450 |  |  |
| 1453                                       | Q             | RIM=906.39       | 8" 896.34 S<br>8" 896.39 N                  | 387790.7910 | 12997139.2180 |  |  |

| Know what's <b>below. Call</b> before you dig. |
|--|

|             |    |               |             |     | 58 W | 892.         |
|-------------|----|---------------|-------------|-----|------|--------------|
|             |    | 12997139.2180 | 387790.7910 |     |      | 96.3<br>96.3 |
| ARKING      |    |               |             |     |      |              |
|             |    | IONS          | REVIS       |     |      |              |
| REV:        | BY |               | SCRIPTION   | ] [ | DATE | 10.          |
|             | -  |               |             |     | -    | -            |
| CUT# 6 OF   |    |               |             |     |      |              |
| SHT# 6 OF   |    |               |             |     |      |              |
| JOB No: 150 |    |               |             |     |      |              |
|             |    |               |             |     |      |              |

ROWE PROFESSIONAL SERVICES COMPANY

O: (810) 341-7500

Suite 200

E: (810) 341-7573

www.rowepsc.com

OF CHARLOTTE
4 & 10 RECONSTRUCTION

EXISTING SURVEY SHEET

CITY LOTS

1" = 20'

DAS BM

PLAN DATE:

