

1. PAVING

(FOR H.C. PUBLIC R.O.W. ONLY)

| DESIGN THICKNESS OF PAVING | STABILIZED SUBGRADE DEPTH | DESIGN STRENGTH OF CONCRETE | STEEL SPACING |
|----------------------------|---------------------------|-----------------------------|-------------------|
| LONG | TRANS. | LONG | TRANS. |
| X" (IN.) | X" (IN.) | XXXX (PSI) | X" (IN.) X" (IN.) |
| X" | X" | XXXX | X" X" |
| X" | X" | XXXX | X" X" |

DRIVEWAYS (in H.C. ROW only)

| DRWY | WIDTH | MATERIAL | CULVERT? | CULVERT LENGTH | NEAREST X-STREET | DIST. TO X-STREET |
|------|-------|----------|----------|----------------|------------------|-------------------|
| 1 | XX' | XXXX | XXXX | XXXX | XXXX | XXXX |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |

FIRE APPARATUS ACCESS ROAD

I. HARRIS COUNTY STANDARD DRIVEWAY DETAIL APPEARS ON SHEET _____

II. REQUIRED AND SHOWN ON SHEET(S) _____

III. STANDARD 6" CURBING PROPOSED

IV. ISLANDS AND MEDIANS REQUIRE STANDARD 6" CURBING

TRAFFIC CONSIDERATIONS

I. MEDIAN CUTS

II. LEFT / RIGHT TURN LANE

III. TRAFFIC CONTROL PLAN

IV. TRAFFIC SIGNAL

V. TRAFFIC IMPACT ANALYSIS

7. FLOOD CONTROL DISTRICT CRITERIA

I. DETENTION SUMMARY

| RAINFALL EVENT PROBABILITY | PRE-DEVELOPED PEAK RUNOFF (CFS) | POST-DEVELOPED PEAK RUNOFF (CFS) | DETENTION BASIN PEAK OUTFLOW (CFS) | MAXIMUM WATER SURFACE ELEVATION (AC-FT) | PEAK STORAGE VOLUME (AC-FT) | STORAGE RATE (AC-FT PER AC) |
|----------------------------|---------------------------------|----------------------------------|------------------------------------|---|-----------------------------|-----------------------------|
| 10% EXCEEDANCE (10-YEAR) | XXXX | XXXX | XXXX | XXXX | XXXX | XXXX |
| 1% EXCEEDANCE (100-YEAR) | XXXX | XXXX | XXXX | XXXX | XXXX | XXXX |

STORMWATER DETENTION BASIN ROUTING TABLE

| DETENTION BASIN DRAINAGE AREA = _____ ACRES | MAX BASIN DRAIN TIME (100-YR EVENT) = _____ HOURS |
|---|---|
| 10% EXCEEDANCE (10-YEAR) | XXXX |
| 1% EXCEEDANCE (100-YEAR) | XXXX |

STORMWATER DRAINAGE DESIGN REPORT

REPORT TITLE: XXXXXXXXXXXXXXXXXXXXXXXX

REPORT DATE: XXXXXXXXX

DATE OF ACCEPTANCE BY HCFCO OR FLOODPLAIN ADMINISTRATOR: XXXXXXXXX

NOTES

I. COMPLETE ONLY IF HCFCO OR HARRIS COUNTY IS REQUIRING DETENTION.

II. COMPLETE ONLY IF PROJECT HAS WITHIN IT OR IS IMMEDIATELY ADJACENT TO AN EXISTING OR PROPOSED HCFCO MAINTAINED CHANNEL OR DETENTION BASIN.

III. COMPLETE ONLY IF PROJECT INCLUDES NEW OUTFALL, BACKSLOPE INTERCEPTOR OR OTHER RELATED WORK WITHIN AN EXISTING OR PROPOSED HCFCO MAINTAINED CHANNEL OR DETENTION BASIN.

IV. COMPLETE ONLY IF PROJECT HAS WITHIN OR IMMEDIATELY ADJACENT TO IT AN EXISTING OR PROPOSED PUBLIC DRAINAGE CHANNEL OR DETENTION BASIN.

2. RESIDENTIAL / SUBDIVISION DRAINAGE

I. PROPOSED DRAINAGE SYSTEM TYPE

II. DESIGN METHOD USED

III. DRAINAGE SYSTEM OUTFALLS DIRECTLY TO EXISTING

IV. H.C. OUTFALL CALCULATIONS

OFFSITE SHEET FLOW: (100 YEAR)

OFFSITE SHEET FLOW MAPPING, TOTAL DISCHARGE CALCULATIONS, AND DESIGN ACCOMMODATIONS ARE SHOWN ON SHEET _____ OR, AS PRESENTED IN THE APPROVED DRAINAGE STUDY ENTITLED _____

V. DETENTION PROVIDED BY

DETENTION BASIN IS PART OF THIS PLAN SET. SERVICE AREA MAP IS ON SHEET _____

8. FLOOD PLAIN STATUS

I. GENERAL INFORMATION

II. FLOODPLAIN STORAGE SUMMARY

III. FLOODPLAIN STORAGE SUMMARY

IV. OLMR REQUIRED

OLMR REQUIRED

FOR PROJECTS LOCATED IN FLOODPLAINS

Development constructed or altered in accordance with these plans shall comply with all provisions of the Regulations of Harris County, Texas for Floodplain Management.

NOTES

I. COMPLETE ONLY IF PROJECT IS ADJACENT TO 100-YEAR FLOOD PLAIN

II. COMPLETE ONLY IF PROJECT IS ADJACENT TO 100-YEAR FLOOD PLAIN

3. COMMERCIAL / OTHER SITE DRAINAGE

I. PROPOSED DRAINAGE AREA

II. DETENTION VOLUME

III. OUTFALL

IV. PUMPED DETENTION FACILITIES

V. FLOW RESTRICTOR SIZE

OUTFALL PIPE SIZE: XXX

RESTRICTOR PIPE SIZE: XXX

VI. FLOOD PLAIN STATUS

I. GENERAL INFORMATION

II. USACE ENVIRONMENTAL PERMIT

WORK IN HCFCO RIGHT-OF-WAY

I. TYPE OF WORK TO BE PERFORMED IN CHANNEL

II. USACE ENVIRONMENTAL PERMIT

III. REFERENCE / BASIS OF DETERMINATION

ENVIRONMENTAL CONSULTANT REPORT

NOTES

I. - IS REQUIRED ON PROJECTS WITH WORK IN A HCFCO CHANNEL

II. - IS REQUIRED ON PROJECTS WITH WORK IN A HCFCO CHANNEL

IV. OLMR REQUIRED

OLMR REQUIRED

NOTES

I. COMPLETE ONLY IF PROJECT IS ADJACENT TO 100-YEAR FLOOD PLAIN

II. COMPLETE ONLY IF PROJECT IS ADJACENT TO 100-YEAR FLOOD PLAIN

4. WATER AND WASTEWATER

I. COMMERCIAL PROJECTS

II. SUBDIVISION PROJECTS

H.C. WASTE WATER REVIEWER APPROVAL

NAME & DATE: _____

REVIEWER COMMENTS: _____

NOTE: ALL EXISTING AND PROPOSED UTILITIES MUST BE ACCURATELY SHOWN & LABELED ON THE SITE PLANS.

NOTE: A COPY OF TCEQ APPROVAL FOR PRIVATE WATER & WASTE WATER SYSTEMS IS REQUIRED FOR PLAN APPROVAL.

5. DESCRIPTION OF PROPERTY

I. LEGAL DESCRIPTION

II. PLATING

III. JURISDICTIONS

IV. HCAD ACCOUNT NOS. (ALL)

H.C. PLAT NUMBER: F.C. 601121

PLAT NAME: CUTTEN PARK

V. UNOBSTRUCTED VISIBILITY EASEMENT (U.V.E.)

REQUIRED AND SHOWN ON SHEET(S) _____

NOTE: ALL APPROVED FINAL PLATS AND ASSOCIATED CIP/CI FORMS MUST BE INCLUDED WITH PLAN SUBMITTAL.

10. PERMITS REQUIRED

TO BE FILLED OUT BY HARRIS COUNTY

STORM WATER QUALITY

WORK IN HARRIS COUNTY R.O.W.

UTILITY WORK SANITARY SEWER & WATER LINE

NOTES

I. - IS REQUIRED ON PROJECTS WITH WORK IN A HCFCO CHANNEL

II. - IS REQUIRED ON PROJECTS WITH WORK IN A HCFCO CHANNEL

11. CURB RAMPS

ARE CURB RAMPS THAT CONNECT TO PUBLIC STREETS PROPOSED IN THIS SET OF PLANS? YES NO

12. LANDSCAPING

REQUIRED AND SHOWN ON SHEET(S) _____

6. STORM WATER QUALITY

I. CONSTRUCTION PROTECTIVE MEASURES (must be completed on all projects)

II. APPLICABILITY FOR PERMANENT FEATURES (must be completed on all projects)

EXEMPT NEW DEVELOPMENT

PROJECT IS ON A PARCEL LESS THAN 5 ACRES. (must be verified with plat)

EXEMPT REVISION DEVELOPMENT

PROJECT IS ON A PARCEL LARGER THAN 5 ACRES AND THE NET INCREASE OF IMPERVIOUS SURFACE SINCE OCT. 2001 (INCLUDING THIS PRJ.) IS LESS THAN 1 ACRE.

HCED SIGNATURE BLOCK

PROJECT NAME: PROPOSED WATER LINE & SANITARY SEWER TO SERVE CUTTEN PARK

ADDRESS: 12734 CUTTEN ROAD HOUSTON, TX 77066

ENGINEERING DIVISION

INTERPOSE NO OBJECTION

HARRIS COUNTY FLOOD CONTROL DISTRICT

INTERPOSE NO OBJECTION

ENGINEER'S CERTIFICATION

I, PATRICK CARRIGAN, A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THE INFORMATION PRESENTED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND THAT I AM NOT VIOLATING ANY PROVISION OF THE CURRENT TEXAS ENGINEERING PRACTICE ACT AND RULES CONCERNING THE PRACTICE OF ENGINEERING AND PROFESSIONAL ENGINEERING LICENSURE.

REVISIONS

NOTE: REVISION BLOCK IS TO BE USED ONLY FOR CHANGES MADE AFTER PLANS HAVE BEEN APPROVED BY HARRIS COUNTY.

| DATE | SHEET NO. | DESCRIPTION | P.E. INITIAL | H.C. APPROVED DATE |
|---------|-----------|--|--------------|--------------------|
| 9-21-16 | 2-9 | SANITARY SEWER ALONG COCKRUM WAS REDIRECTED SOUTH JUST PAST EXISTING STORAGE BUILDING. SANITARY SEWER EASEMENTS WERE PROPOSED ON THE SOUTH SIDE OF COCKRUM. WATER LINE FLUSHING VALVES ON THE SOUTH SIDE OF COCKRUM WERE MOVED TO THE NORTH, AND WATERLINE CROSSING CUTTEN WAS REVISED TO BE PERPENDICULAR TO THE R.O.W. | PLC | |

